

Racism discussions on Twitter after George Floyd during Covid-19: A space to address systematic and institutionalized racism?

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Racism became a major global issue during the Covid-19 pandemic following the killing of George Floyd and international Black Lives Matter protests and reactions. This article investigates earlier English-language Covid-19-related discussions of racism on Twitter to assess whether they affected the strength of the George Floyd protests. There were three main prior phases of racism discussions: right wing “Chinese virus” comments; Donald Trump’s “Chinese virus” comments; and discussions of high ethnic minority Covid-19 death rates. Tweets about these issues increased at the start of the George Floyd protests, suggesting that they fed into them. Despite the huge increase in tweeting about racism after George Floyd, only 12% of tweets mentioned him or Black Lives Matter, with the remainder often making more general anti-racism statements. Thus, the killing of George Floyd seems to have opened a large-scale social media space for public generalizations about systematic and institutionalized racism.

Introduction

Social media sharing of videos showing the killing of George Floyd in Minneapolis on May 25, 2020 led to widespread national and international protests. Whilst there have been many previous demonstrations against police treatment of African Americans and other racial injustices, some of which have spread internationally (Knowles, Griffiths Berger, et al., 2020), the spread and depth of the protests was unprecedented (Putnam, Chenoweth & Pressman, 2020). The raised international profile of racism was evidenced in many ways, such as Black authors topping the fiction (Girl, woman, other) and non-fiction (Why I’m no longer talking to White people about race) bestseller lists in the UK (Flood, 2020). Although the major causes of the protests were presumably the brutality of the events and ongoing racial injustice in the USA and elsewhere, they took place during an also unprecedented period of social and economic turmoil during the Covid-19 pandemic, which may have affected the outcome.

This article investigates whether racism-related events during the pandemic influenced the strength of reaction the killing of George Floyd and the nature of racism discussions afterwards. It uses English-language Twitter as evidence for the racism-related themes discussed during the pandemic and word association thematic analysis to identify these themes. This article also serves to document racism discussions on Twitter during this period.

Both news media and social web sites can be used to identify the issues discussed in the past, but Twitter is used here since racism may not be fairly covered by the mainstream media. Moreover, since Twitter is extensively used to discuss political issues, racism-related comments on Twitter seem to be a reasonable proxy for racism-related topics of interest, at least in countries with a substantial body of people tweeting in English.

Resistance to racism in the USA

Both racism and resistance have a long history. During the barbaric Atlantic slave trade, acts of resistance included Nat Turner's Rebellion in Virginia in 1831 and the slave uprising in Haiti 1791-1804 that permanently abolished slavery and founded the new independent state of Haiti. After the 1865 abolition of slavery in the USA, it was replaced with legalised separation

in the Southern states, the Jim Crow laws, leading to organised opposition from, amongst others, the National Association for the Advancement of Colored People (NAACP) with W. E. B. Du Bois. Individual acts of police brutality sometimes attracted national attention, such as the beating and blinding of uniformed World War 2 veteran Isaac Woodard in 1948, with the officer in charge being acquitted. Racism at the time was also encouraged by mainstream academics and educators in the USA (Yacovone, 2018). Legal segregation in the USA was mainly outlawed between 1964 (Civil Rights Act) and 1968 (Fair Housing Act) after over a decade of protests by the American civil rights movement, including Rosa Parks, Martin Luther King, Malcolm X and many others.

Resistance to racism continued after the mid-1960s through organisations such as the Black Panther Party (1966-82), which attempted to protect the black community from police and had a wider social justice programme. Jesse Jackson's multi-issue, membership-based Rainbow/PUSH (1971/1996-) and Reverend Al Sharpton's National Action Network (1991-) have continued the civil rights protest tradition. In parallel, single cause groups have emerged, such as to protest the 1971 Wilmington Ten miscarriage of justice (Janke, 2015), as well as charitable educational organisations (e.g., Harries, Byrne, Garratt, & Smith, 2020). Press coverage of anti-racism protests has been unhelpful (Hodges, 2015; Loyd, 2012), but seems to have become more sympathetic over time, moving away from focusing on conflict to a more human-interest approach (Wan, Mortensen, Zhu, & Li, 2018).

Anti-racism movements in the USA have tended to be led by African Americans with some participation by others. This is presumably because African Americans are disproportionately likely to suffer from racism and to believe that it could be an explanation for inequalities or injustice (e.g., Gabbidon, & Jordan, 2013; see also: Blackmon & Thomas, 2015). Anti-racism movements often align with other liberation-based causes, such as feminism and LGBTQ+ rights, presumably gaining strength from mutual support and experience (Bhattacharyya, Virdee & Winter, 2020). Nevertheless, left-wing anti-racist organisations in the USA have tended to keep separate from left wing parties, in response to them not addressing racism effectively, despite their broad support for black liberation goals (Dawson, 2013). The need for Black-led organisations has theoretical support from Marxist theories that embed racism as a central part of capitalism (Fraser, 2016) and from the recognition that African Americans have suffered disproportionately from neoliberalism and before (e.g., Hill, 2017).

The issues of racism and police brutality are closely connected, with police victims often being Black and injustices sometimes leading to organised or spontaneous reactions. For example, the 1965 Watts (Los Angeles) riots were in response to a relatively minor police arrest in the context of extreme segregation and poverty (Clark, 2000). Riots also followed the 1992 acquittal of the police that beat Rodney King, despite a video showing extended beating (Chaney & Robertson, 2014; Fukurai, Krooth, & Butler, 1994). Some African American parents tutor their children in how to respond to encounters with the police in order to minimise the likelihood that they become victims (Thomas & Blackmon, 2015). Police violence against Native Americans is also common but largely ignored (Schroedel & Chin, 2020).

Contemporary anti-racism strategies

Modern societies have tended to address racism by arguing that it does not exist or is at most a minor problem despite the availability of evidence to the contrary. Under normal circumstances, under conditions of limited attention and knowledge, people tend to take shortcuts ("bounded rationality": Simon, 1955) when forming opinions, such as accepting the

beliefs of the majority, with the rational implicit assumption that others may have more information and so it is reasonable to conform to their beliefs rather than expend effort on making a separate decision. This conformity could be from a social circle, experts, leaders or the mass media, for example. Conformity may also be desired for other reasons, such as group identity (Cialdini & Goldstein, 2004; Fein, Goethals, & Kugler, 2007; Smith & Mackie, 2016). This can lead to widely held incorrect beliefs, such as that the police are never racist, that racism does not exist or that racism is a minor issue. As a result, anti-racist attitudes on these issues can be seen as deviant (Graham, 2020). In this context, anti-racists attempting to make social changes can be in the position of a minority attempting to influence the majority, despite racism being illegal and widely opposed in principle.

Many strategies have been proposed to tackle contemporary racism. An approach to combat systematic and institutional racism is to make White people aware of their relative advantages (i.e., privilege) on the basis that they will then be less likely to make microaggressions against Black people or, when in positions of power, to make racist decisions through ignorance (Mays, Johnson, Coles, Gellene, & Cochran, 2013). This strategy might also be effective at enlightening and informing potential allies (e.g., Collins, Kohfeldt, & Kornbluh, 2020), but has also been accused of creating divisive hierarchies of oppression (Aouragh, 2019) and masking underlying causes (Olaloku-Teriba, 2018). It can be counterproductive for people with a right-wing orientation (Brad, Spisz, & Tanega, 2019). A related strategy to educate about the history of racism, which seems to be effective (Bonam, Nair Das, Coleman, & Salter, 2019). In the UK, the need for better education about the history of colonialism has been highlighted, for example (Burdsey, 2020).

A mainly social media anti-racist strategy is to highlight instances of racism, sharing evidence through social media. For example, hashtags such as #LivingWhileBlack and #TravellingWhileBlack have been used to share the daily frustrations of racist ignorance (Dillette, Benjamin, & Carpenter, 2019). A related theme is photographs or videos of white people calling 911 to report African Americans performing everyday tasks (Gutsche, Cong, Pan, Sun, & DeLoach, 2020). The continual flow of these stories may serve to raise awareness and limit mainstream media agenda setting (McCombs & Shaw, 1972) and framing (Nelson, Clawson, & Oxley, 1997) from controlling the nature of the discussion about racism. In addition, their transparent evidence may help to undermine denials of the existence of racism from supporters of racist politicians (Konrad, 2018). Police videos may be particularly powerful at undermining the mainly positive narratives given about law enforcement in the mainstream media (Gauthier & Graziano, 2018). Although anti-racist messages can be expected to be shared primarily within supportive online communities (e.g., Vrikki & Malik, 2019), they also break out to the wider Internet (Welles & Jackson, 2019) and popularly shared videos can transition to mainstream media news reports.

Another strategy is to break subconscious associations between African American men and fear, as promulgated by news and other mass media (Torres, Cannito-Coville, & Rodriguez, 2017). This may reduce the number of incidents of disproportionately violent reactions.

Anti-racism in the USA seems to be gaining at an ideological level in the sense of decreasing overall support for racism and increasing support amongst a left leaning “woke” Whites for more radical solutions (Yglesias, 2019).

Black Lives Matter

The Black Lives Matter movement has been prominent in the George Floyd protests. There is both a formal Black Lives Matter organisation and decentralised Black Lives Matter movement. This movement formed in 2013 in response to the acquittal of George Zimmerman for the death of Trayvon Martin in February 2012. The Colin Kaepernick “take a knee” protests from 2016 have been a powerful symbol for the Black Lives Matter movement, seeming to inspire people to become active supporters (Towler, Crawford, & Bennett, 2020). Black Lives Matter organises both online and offline protests when the lives of African Americans are taken or put at risk. It seeks legal justice or wider social reforms and has spread internationally. It is a loose coalition, with local groups and founders having different perspectives and goals, such as whether to address poverty in general as part of the issue (Weddington, 2018), and the importance of LGBTQ+ issues (Szetela, 2020).

The Black Lives Matter movement has been steadily gaining support since its formation, including amongst a majority of Democrats (Cohn, & Quealy, 2020). It was created by African Americans but addresses issues relevant to other disadvantaged groups, such as Latinxs and women. It is an inclusive movement that actively seeks allies without allowing its core messages to be diluted (Wilkins, Livingstone, & Levine, 2019). White people actively supporting the Black Lives Matter movement may do so not just for its end goals but also to be consistent with their moral beliefs or as an end in itself, and in the belief that their own position is not threatened (Radke, Kutlaca, Siem, Wright, & Becker, 2020).

The Movement for Black Lives (M4BL) is a separate but closely related group. It has a programme of demands to achieve racial justice, including major economic demands such as a minimum wage and reparation for past injustices (Ray, 2020). This is much broader than the more narrowly focused demands of early Black Lives Matter campaigns. Its theoretical dimension includes the concept of racial capitalism, which emphasises the systematic oppression of ethnic minorities (Issar, 2020). Its 2016 platform is political, for example opposing “patriarchy, exploitative capitalism, militarism, and white supremacy” (<https://m4bl.org/policy-platforms/>). It is a “subaltern counterpublic” in the sense of a group that deliberates strategies and policies internally rather than primarily within a general audience (Fraser, 1990).

A paper similar to the current article has investigated #BlacklivesMatter on Twitter in response to the death of Michael Brown in Ferguson, Missouri in 2014 (Ray, Brown, Fraistat, & Summers, 2017). This study collected tweets mentioning Ferguson at four separate times over a year, finding the top hashtags in each period and applying thematic analyses to #BlacklivesMatter and #TCOT (Top Conservatives on Twitter, a right-wing hashtag associated with the Tea Party movement). The results showed that #TCOT operated as a counter-narrative to #BlackLivesMatter, for example focusing on justifiable homicide and the humanising police officers rather than Black people being killed with impunity and humanising victims of police brutality, indicating a polarised discussion.

The related #SayHerName hashtag is also used to highlight police brutality, but with a focus on Black women. The movement behind the hashtag on Twitter has enjoyed prominent leadership and participation from other marginalised communities, including LGBTQ+ Black women (Brown, Ray, Summers, & Fraistat, 2017; see also: Terriquez, 2015).

Methods

The research goal was to identify racism-related themes from Covid-19 tweets before and at the start of the George Floyd protests. Twitter is the most used public English language microblogging platform, allowing the largest sample size. Twitter users are not representative of the USA or any country because some demographics tend to avoid it, such as the very old and very young. In addition, the alt-right seems to have largely moved to Gab (Kalmar, Stevens, & Worby, 2018), potentially reducing their Twitter-based hate campaigns (e.g., Lawson, 2018). The focus in the current paper is on discussion of racism on Twitter rather than expressions of racism, such as derogatory comments and invalid assumptions, and so this is not a major limitation.

The current paper follows on from, and contrasts with, a previous paper (Ray, Brown, Fraistat, & Summers, 2017) by (a) analysing a topic almost six years later, (b) investigating within a broader topic (Covid-19), (c) using a different type of thematic analysis, (d) analysing racism and anti-racism rather than the collective identities of Black Lives Matter and its opponents, (e) focusing on factors affecting the strength of support for anti-racism issues rather than the discourses of the movement, (f) investigating consecutive rather than separate periods, (g) analysing all words rather than just hashtags, (h) restricting each user to one tweet to focus on typical people more than the most active users, and (i) adopting an international perspective.

Racism-related Covid-19 themes on Twitter were identified in three stages. First, a general set of Covid-19-related tweets was collected. Second, a subset of tweets about racism was generated. Third, a word association thematic analysis was used to identify themes discussed in the racism-related tweets that were absent from the remaining Covid-19 tweets.

Data: Covid-19 tweets and racism-related Covid-19 tweets

Covid-19 tweets were collected from 10 March to 5 June, 2020 from the free Twitter Search Applications Programming Interface (API) by submitting a set of queries periodically to harvest matching tweets. The following four queries were used, designed to capture posts referring to the virus: *coronavirus*; *“corona virus”*; *covid-19*; *covid19*. The English Twitter filter was selected to ensure that only English tweets were collected. Although other languages, and especially Spanish, are important in the USA the focus on English allows linguistic word association methods to be used to process the data.

The collection of Covid-19 tweets was processed to eliminate duplicate and near duplicate tweets, which were likely to be spam. Tweets were judged to be near duplicate if they were identical except for embedded usernames. In addition, each user was only allowed one tweet so that the results could not be dominated by a few prolific users. This produced a set of 9,969,656 tweets.

A tweet was judged to be racism-related if it contained one of the following terms: *racism*; *racist(s)*; *racial*; *#racism*; *#racist(s)*; *#racial*. These were chosen after inspection of the tweets suggested that they identified tweets about racism. Some related terms were considered but rejected as more specific (e.g., *blm*, *blacklivesmatter*, *#racismisavirus*, *anti-black*, *anti-Chinese*, *#fightracism*), more general (e.g., *bigot*), different (e.g., *xenophobe*, *xenophobia*, *xenophobic*), or ambiguous (e.g., *race [sports]*) so that the racism sample would be clearly defined.

Tweets were removed from the racism-related set if they contained the word “Loompa”. This word only occurred in the “This is for Rachel” meme that mentions racism but

is not about racism. The final set included 47,729 racism-related tweets, 0.5% of the original collection.

To systematically check for the origins of the tweeters in the racism set, they were arranged in random order using a random number generator and then their Twitter profile location and descriptions checked for country information, stopping after 250 locations had been found (after 428 profiles had been checked). The USA formed the majority (60%) of the 30 countries identified, with over five times more users than the next countries, UK (11%), Canada (7%), and Australia (3%), and India (3%). The remaining countries had 2% or fewer users. Thus, the results primarily reflect the USA. It is also possible to guess the geographic location of some tweeters from their profiles or tweets (Sloan, Morgan, Housley, et al., 2013), and this was done for a subsidiary graph of the USA alone.

Analysis: Racism-related themes

The racism-related tweets were first examined to identify periods likely to associate with different issues by graphing the proportion of racism-related tweets each day. This graph had two substantial peaks: March 17-23 and May 26 to June 5 (the end). Four sections therefore represent different levels of interest and so were analysed separately: March 10-16; March 17-23; March 24-May 25; May 26-June 5 (Figure 1).

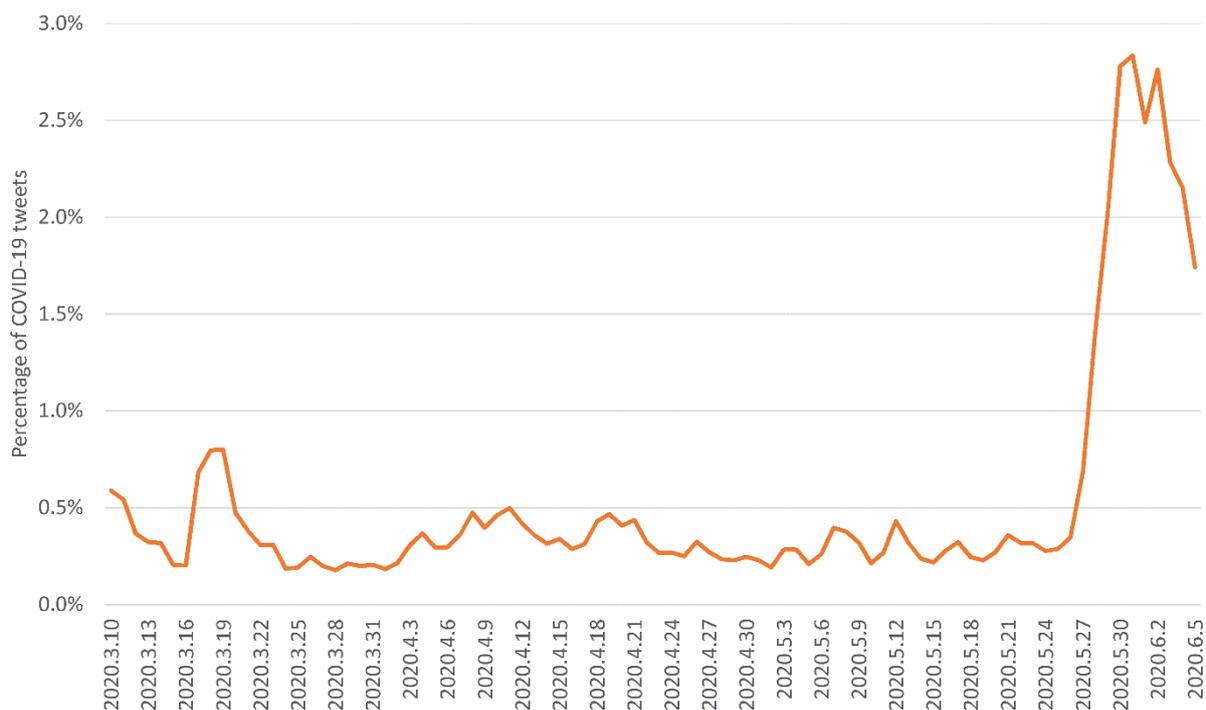


Figure 1. The daily percentage of racism tweets within the Covid-19 English tweets.

Word association thematic analysis (Thelwall & Thelwall, 2020) was applied to each of the four periods to identify the main racism-related themes discussed. This method is a variant of thematic analysis (Braun & Clarke, 2006) that focuses on individual words rather than on texts to allow comparisons between two sets and identify differences.

Stage 1: Words occurring disproportionately often in racism-related tweets than in other tweets from the same period were extracted. A chi-square test was used for each word to identify the probability that the discrepancy had occurred by chance (Thelwall & Thelwall, 2020). To avoid false positives from conducting multiple simultaneous tests, a Benjamini

Hochberg correction (Benjamini & Hochberg, 1995) was applied and terms rejected when they failed this more stringent test. Words passing the test were then listed in decreasing order of chi-squared value.

Stage 2: Starting from the top of the word list, each statistically significant term (e.g., Chinese, police, Floyd) was investigated to identify its typical context(s) in tweets by reading at least fifteen tweets containing it. This process was continued for each word until at least ten consecutive terms had been read without finding a new theme. This produced a list of tentative themes.

Stage 3: The list of tentative themes was re-examined by repeatedly comparing and merging similar themes and re-evaluating terms that did not fit a merged theme well. This process eventually produced a coherent set of themes, each of which included at least one statistically significant term. Each theme was therefore a racism-related issue within the context of Covid-19 within one of the four periods.

Results

The word association thematic analyses for each period produced the themes described below. The words in brackets are non-exhaustive examples of statistically significant words for the theme within the given period.

March 10-16: “Chinese virus” and anti-Asian racism

Chinese/Wuhan virus: the most common theme was arguments about whether the use of the phrases “Chinese virus” or “Wuhan virus” by republicans and others was racist (Chinese, calling, Wuhan, @gopleader, @ilhan, toward, originated, @jgreenblattadl).

Insult list: the term “racist” was often used within a list of insults directed at right wingers (xenophobic, sexist, bigot) and “racism” occurred in lists of allegations of bigoted behaviour (xenophobia, discrimination, bigot, sexism). These lists did not focus on racism since they contained many related terms, but racism seemed to be the driving context for them.

Anti-Asian racism: Many tweets challenged anti-Asian comments or behaviours triggered by Covid-19 (excuse, anti-Asian, slur). Some tweets attacked Alexandria Ocasio-Cortez, NY Representative, for suggesting that avoiding Asian restaurants out of Covid-19 fears might be racist (AOC, Ocasio-Cortez). Some tweets attacked K-pop superstars BTS.

March 17-23: Trump’s “Chinese virus” comments

Trump’s “Chinese virus” comments: this period was dominated by extensive arguments about whether Donald Trump calling Covid-19 the “Chinese virus” was racist (Chinese, calling, Asian, @realdonaldtrump, name, called, xenophobia, trump, refer) and an incitement to racism (anti-Asian) or whether it was reasonable in terms of other disease names (Wuhan, origin, Spanish, Ebola, Nile, flu).

March 24-May 25: Ethnic disparities in death rates

Ethnic disparities in Covid-19 deaths: Many tweets commented on the reported higher death rates amongst ethnic minorities, apparently referring to the USA and UK (disparities, disparity, ethnic, color, minorities, BAME [a UK term meaning Black, Asian and Minority Ethnic], AOC). Tweets also discussed the potential causes of this difference (structural, systemic, inequalities, inequality, inequity, injustice). Some tweets mentioned that the upcoming

Californian compensation for eugenic sterilization legislation would help to address racial injustices exacerbated by Covid-19 (#ab3052).

Profiling African Americans: African Americans expressed reluctance to wear masks in public to protect against Covid-19 due to the risk of racial profiling (profiling).

Discrimination against Black people in China: Some tweets expressed outrage following news reports of African workers in a Chinese city being singled out for additional quarantine measures after a Covid-19 diagnosis (discrimination, African).

Vegetarianism: There was some discussion about a New York Times opinion article, "If you care about the working poor, about racial justice, and about climate change, you have to stop eating animals" from 21 May 2020 (justice).

Anti-Asian racism: As above. This also included specific US (Asian-American) and Australian (Asian-Australian) terms.

Insult list: As above.

Chinese/Wuhan virus: As above.

May 26-June 5: George Floyd

The killing of George Floyd and police brutality: Many tweets protested against the killing of George Floyd and systematic police brutality or injustice (killing, Floyd, police, cops, #BlackLivesMatter).

Systemic racism and health inequalities: Police racism was connected to health inequalities leading to greater Covid-19 deaths for African Americans. This theme includes tweets echoing CNN news presenter Don Lemon's statement that two deadly viruses are killing Americans, "COVID-19 and racism" (Voytko, 2020) (systemic, black, injustice, viruses, deadly, two), or with explicit connections, such as "The COVID-19 pandemic and the murder of George Floyd are only exposing the depths of these existing inequities", or "With the death of George Floyd and continuing impacts of COVID-19, economic and social inequities are on full display".

Anti-Asian racism and Black Lives Matter: Many tweets criticised people for speaking up against one of these two issues but not the other or argued that supporting one but not the other was hypocritical or unfair.

Anti-Asian racism: As above

Insult list: As above.

Trump's "Chinese virus" comments: As above.

Overall trends

The themes detected above for one period may occur in other periods at a reduced level even if not detected by the thematic analysis method. Overall trends in the popularity of themes can be tracked to some extent from the prevalence of individual relevant sets of queries over time. Five key themes above were converted into queries that reflect some of the discussion around them, although in all cases some relevant discussions would not match the queries. Thus, the shapes of the graphs generated from the queries (Figure 2, Figure 3) is more relevant than their height, which is an underestimate of the total volume of discussion. For example, many tweets towards the end appeared to be about Black Lives Matter but did not mention it, for example discussing whether sports teams would punish taking a knee.

Overall (Figure 2), the issue of calling Covid-19 the "Chinese virus" dominated discussions of racism related to Covid-19 from the start and especially when Trump first used the expression but decreased in relative importance afterwards, without disappearing

entirely. The related issue of anti-Asian racism also persisted throughout the period, albeit at a lower level after about 6 April.

Two issues first become relevant on about 5 April 2020. Ethnic disparities in death rates were a consistently discussed after this date, decreasing in relative importance after about 27 May. In contrast, systemic or institutional racism appeared at the same time, as a potential explanation for the disparities, but the issue *increased* in relative prominence after 27 May, being cited as a factor in policing.

There was a quick and sustained increase in prominence of Black Lives Matter on the date of the killing of George Floyd. The graph confirms that the police and Black Lives Matter had received little previous attention on Twitter in the context of Covid-19 and racism. The slight increase on about April 28 seemed to be from reports of excessive police force against African Americans as well as generic claims of police racism.

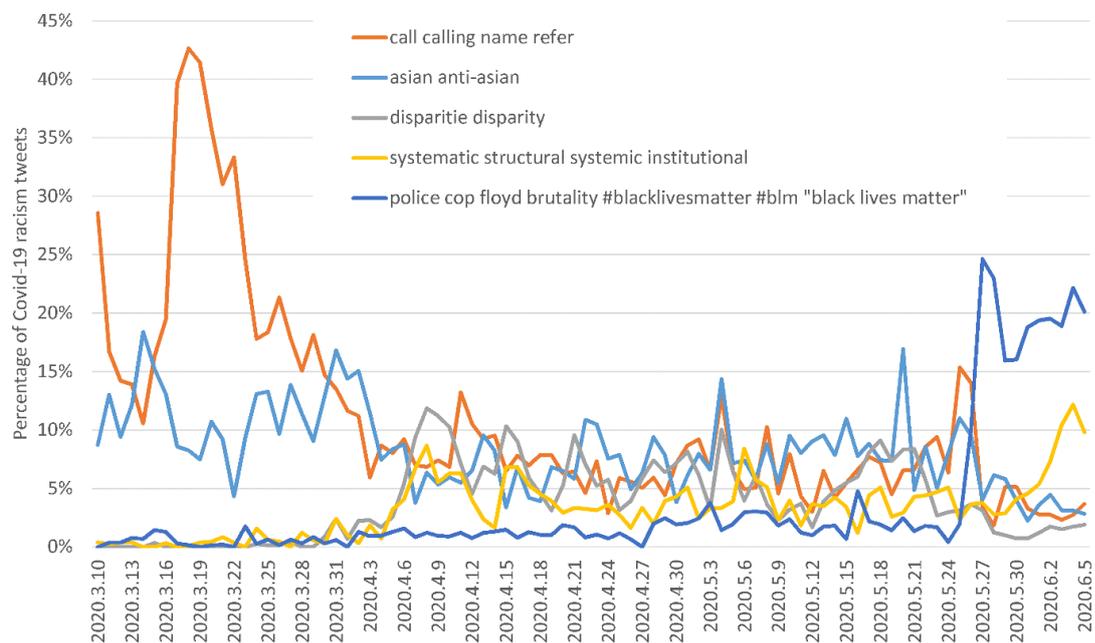


Figure 2. The daily percentage of tweets matching five queries within the Covid-19 racism tweets.

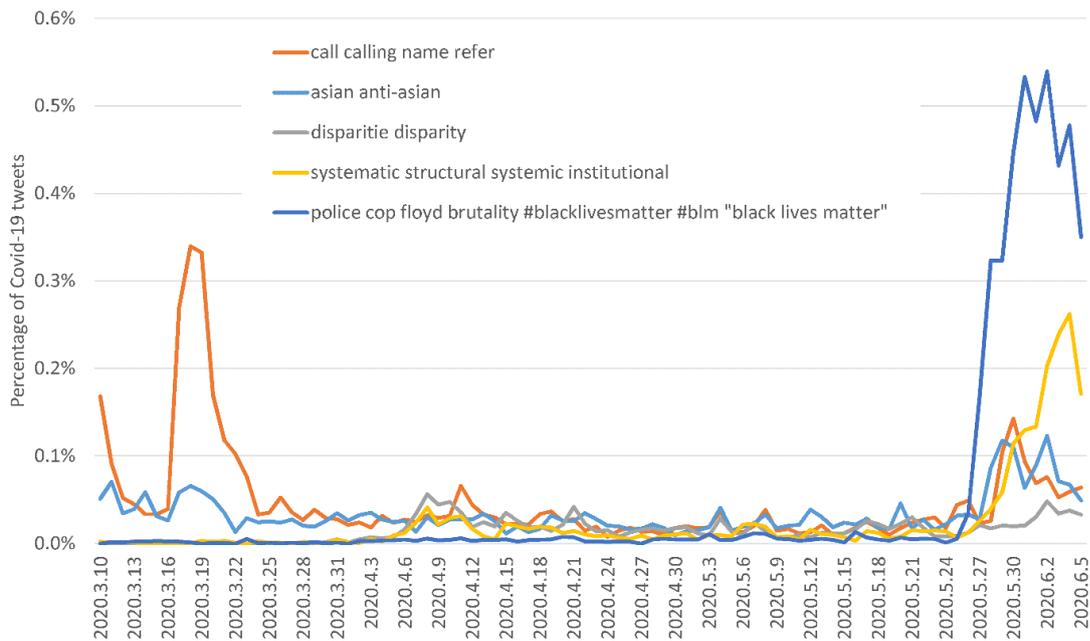


Figure 3. The daily percentage of tweets matching five queries within the Covid-19 tweets.

If only tweeters declaring a location in the USA are included, then the overall trends are similar except that the naming issue for COVID-19 and disparities are discussed more (Figure 4; identical design to Figure 2 except for USA tweeters only).

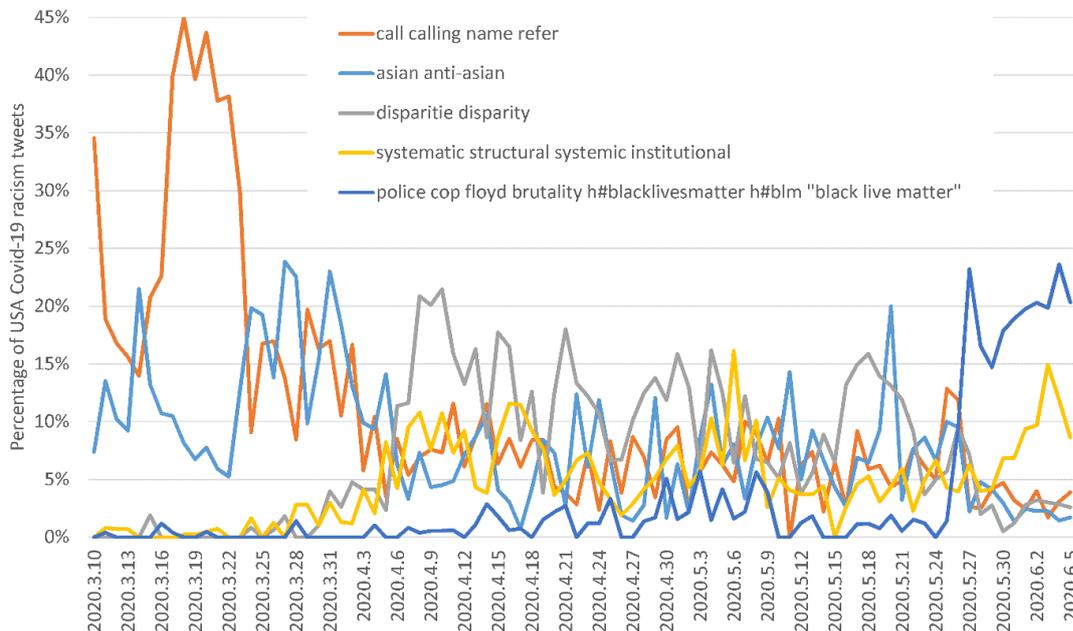


Figure 4. The daily percentage of tweets matching five queries within the Covid-19 racism tweets for tweeters from the USA only.

Hashtag trends

The five most common hashtags in each period align with themes in the thematic analysis (Table 1). Whilst #BlackLivesMatter was the most common hashtag in the fourth period, it occurred in only 6% of racism-related Covid-19 tweets in the period analysed (for reference,

it was in 1% of the Ferguson tweets of a previous study of the event that led to the creation of the hashtag: Ray, Brown, Fraistat, & Summers, 2017).

Despite the substantial increase in tweeting due to George Floyd, most tweets did not directly reference him or the movement: only 11.6% (1995) matched a query for the main relevant terms: floyd blacklivesmatter #blacklivesmatter #blm #justiceforgeorgefloyd #icantbreathe #black_lives_matter #georgefloydprotest #georgefloydwasmurdered #georgefloydmurder #blacklifematter #justiceforgeorge #ripgeorgefloyd "black lives matter". The remaining tweets discussed racism more generally, including many tweets making an anti-racism statement (e.g., "we've been fighting racism forever") or wishing for an end to racism or police brutality without explicitly mentioning the reason why they had tweeted at that time. Thus, either the killing of George Floyd created the space (or a focus on the issue) for anti-racists to speak out on Twitter, or it helped others to appreciate the importance of tackling racism. In either case, typical tweets did not attempt to signal that the tweeter was part of an organised movement, in the sense that mentioning #BlackLivesMatter might have.

Table 1. Most common hashtags in each period in the racism section, excluding Covid-19 hashtags. The number of tweets using the hashtag in the racism collection is in brackets.

1: 3242 tweets	2: 5097 tweets	3: 22196 tweets	4: 17206 tweets
#racism (71)	#ChineseVirus (86)	#racism (784)	#BlackLivesMatter (1066)
#racist (38)	#racist (66)	#racist (280)	#racism (909)
#WuhanVirus (34)	#racism (57)	#China (179)	#GeorgeFloyd (476)
#China (18)	#TrumpVirus (36)	#ChineseVirus (119)	#JusticeForGeorgeFloyd (213)
#xenophobia (10)	#Trump (29)	#Trump (68)	#ICantBreathe (172)

In contrast to Black Lives Matter for Ferguson in 2014/5 (Ray, Brown, Fraistat, & Summers, 2017), the hashtag #TCOT was almost irrelevant, occurring only twice, although the queries used to build the current dataset may not have matched #TCOT tweets. This low value seems to mirror a decline in the importance of this movement. For example, Google Trends (<https://trends.google.com/trends/explore?date=all&geo=US&q=tcot,%23tcot>) reports that the volume of TCOT queries peaked in November 2012 and in June 2020 was at 4% of its peak value.

Discussion

As a reminder of the key limitations of this study, the data includes Twitter users that have commented about racism in English in the context of Covid-19. This group is not representative of the wider society in any country. The results seem to be mostly relating to the USA, either from inside the USA (60%) or from people elsewhere commenting on US events. There are small UK-specific and Australia-specific elements within two themes in the data, however (terms: BAME and Asian-Australian).

Factors affecting the strength of public reaction to the killing of George Floyd

The killing of George Floyd triggered a period in which almost 3% of Covid-19 tweets mentioned racism (Figure 1) after aspects of racism had been previously discussed in 0.3% of tweets throughout the pandemic. Prior to George Floyd's killing, there had been at least three phases of racism discussions, in terms of overall volume: the "Chinese virus" naming controversy; Trump's participation in the naming controversy; and ethnic disparities in Covid-

19 fatalities. Thus, when people in the USA saw the George Floyd arrest video, if they followed political news then they would probably have been aware of apparently deliberate racist provocations by Donald Trump and others, as well as the disproportionately high impact of Covid-19 on African Americans in particular. They would presumably have also been aware of Black Lives Matter from previous protests (e.g., Szetela, 2020; Weddington, 2018) and social media users may have seen previous videos or reports of casual racism by white people (e.g., Dillette, Benjamin, & Carpenter, 2019) or excessive force by the police. Unless young, they would also have known that in several high-profile previous cases of unarmed black men being killed, the perpetrator(s) were not convicted of a crime (e.g., Chaney & Robertson, 2014). In this context, a strong reaction to the George Floyd video could have been expected because it was not an isolated incident.

It is impossible to quantify the relative contributions of the different factors influencing the George Floyd killing reaction because it is not possible to quantify the visceral impact of watching the video. A range of other racism-related issues not only continued during the protests but increased in volume (Figure 3), although at a low level in comparison to the George Floyd reactions (Figure 2). Thus, the George Floyd killing increased the reactions to previous issues, whether by amplifying existing injustices (Don Lemon's "two viruses"), connecting them to a single cause, such as structural inequalities, or by discussing the need to protest against all forms of racism. The continuation of the previous issues shows that they had not been forgotten and is indirect evidence that they contributed to the strength of reaction to the George Floyd killing.

Creating a social media space for generalisation

The killing of George Floyd amplified rather than submerged several other anti-racism issues, increasing the volume of tweeting about them. In addition, despite a huge increase in racism-related tweeting after the killing, only 11.6% was directly about George Floyd or Black Lives Matter. Part of the increase was due to discussions of other aspects of racism, including many general anti-racism statements.

Why did the killing of George Floyd create space on Twitter for generalisations about racism? This seems likely to be due to four converging factors. First, given that there are multiple political and other issues that people hold opinions about, not all opinions will be shared under normal situations. External triggers can therefore serve a *selection* function, making it topical and appropriate to share previously held or newly made opinions. Second, Twitter is a *suitable environment* for stating political opinions, because it is widely used for this already. Third, anti-racist tweets (or other anti-discrimination tweets) can also express *public solidarity* and support for friends and colleagues, giving an additional incentive to post them. Fourth, each social media user can post multiple tweets, giving them the opportunity to make generalisations to follow initial direct reaction posts.

Thus, the killing of George Floyd and the initial strong reactions to it seem to have created a space that encourages the sharing of general anti-racist statements on Twitter. This seems to be a uniquely social media phenomenon, at least in its public and visible format. For example, whilst protest placards on demonstrations might display generalisations (e.g., "This is a revolt against racism"), they are usually not as public and permanent as typical tweets.

Conclusions

From the perspective of Twitter and history, the strong public reaction to the killing of George Floyd was unsurprising and could be due in part to outrage at the "Chinese virus" naming

controversy and higher Covid-19 death rates amongst some ethnic minorities. Connections with these issues seem to have contributed to the creation of a *social media space for generalisation* that produced a relatively large minority of tweets mentioning structural or systemic factors during the start of the George Floyd protests, although these factors had been previously discussed in the Black Lives Matter movement and were part of the M4BL programme.

The strength or the public reaction to the killing of George Floyd does not guarantee that lasting changes will happen. Previous experience with mass shootings has shown that public attitude changes can be temporary and have little effect if there are powerful counter-lobbies (Birkland & Lawrence, 2009). The case with anti-racism is perhaps different, however, in that local level changes can be made which may keep attention focused on the issues in addition to making small improvements.

Although Black Lives Matter was rarely directly referenced by name for early discussions of racism within Covid-19, the movement was able to mobilise quickly for George Floyd protests. Its goals and organising power may have been helped by an apparently increased recognition of the need for structural changes before May 25, at least on Twitter. Although policy change processes are inherently conservative, episodes of enhanced public attention can be effective at increasing the speed of change, according to punctuated equilibrium theory (Baumgartner & Jones, 1993; True, Jones, & Baumgartner, 1999), and so it is possible the killing of George Floyd will result in some lasting positive changes, despite ongoing resistance to structural changes.

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