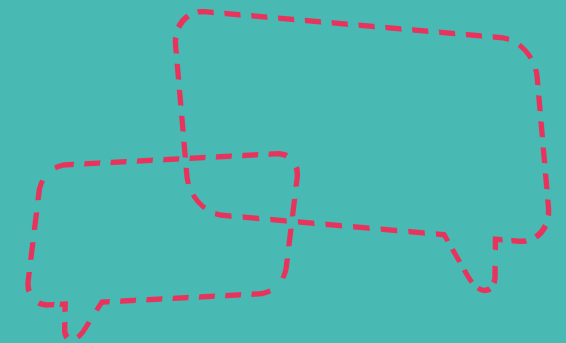




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# *Covid-19: What are the Drivers of the Islamophobic Infodemic Communications on Social Media?*

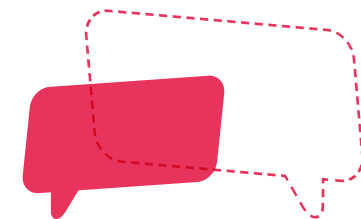
*Executive Summary and Recommendations*



Professor Imran Awan, Dr Pelham Carter,  
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# Executive Summary

- Online conditions, such as anonymity, on social media platforms like Twitter and YouTube have provided conditions that can drive and motivate Islamophobia and Covid-19 related misinformation.
- This research project consisted of four studies that examined language, sentiment, narratives, cases studies and the relationship between the online and offline Covid-19 misinformation theories and Islamophobia across Twitter and YouTube.
- Over 100,000 Tweets and over 100,000 YouTube comments were collected and analysed. Highly identifiable accounts (those with information about the users' name, location, age etc.) were engaged in Islamophobia and the spreading of misinformation, indicating the normalisation of hate during the Covid-19 pandemic.
- The YouTube Comments we collected revealed differences in how different countries, nationalism, and media sources framed issues around Muslims and Covid-19. For example, more Eurocentric videos tended to refer to Covid-19 concepts around Black, Asian and Minority Ethnic (BAME) groups, Whiteness and perceived issues around the legitimacy of Mosques and spreading the virus.
- A number of videos had increased misinformation comments around the role of Muslims supposedly spreading Covid-19 because of religious festivals such as Ramadan, and references made to the India/Pakistan conflict.
- Antisocial tweets indicated a level of enjoyment in the act of being Islamophobic or spreading related misinformation. Conversely greater anger, fear and disgust was present in prosocial tweets as these were aimed at those sharing Islamophobic content.
- A range of comments expressed joy at the suffering, death or suggested inequalities experienced by Muslims due to Covid-19 and Muslims are described as being super spreaders of the virus, receiving special treatment, whilst being unworthy of treatment.
- Nationalism was important. Some narratives made false claims about the vaccine being part of a larger Muslim plot to rule the world.
- Muslims are seen as poisonous. This depiction forms the basis of general blame in stating that Muslims are poisoning society through the spread of Islam. However, during the pandemic, it is clear how this portrayal has developed to describe them as poisonous by spreading the virus. This is evident within messages that make references to Muslims as poisonous creatures.
- A link was made between Islam and Covid-19. This theme underpins ideas that suggest that Covid-19 originated from the Quran.



# Introduction

The Covid-19 'infodemic' and misinformation has had real significant consequences when it comes to social cohesion across the world. One consequence of the pandemic has been the chilling effects of online and offline conspiracy theories that have manifested on social media and in the real world. As the internet can act as an echo chamber, the Covid-19 pandemic has led to a wave of conspiracy theories connecting British Muslims, Islam and the virus in various ways. Conspiracy theories are often formed because of latent stereotypes which often link trigger events such as terrorist attacks with Muslims. As this report will highlight a series of conspiracy theories and social media posts have used British Muslims as a scapegoat for the virus by viewing them as the spreaders of the virus and that Covid-19 is just another attempt to spread Islam in Britain and across the world. The themes presented in this report highlight how different forms of Islamophobia and anti-Muslim hatred found on social media reinforce negative views about Muslims. For example, conspiracy theories around Muslims and the religious festival of Ramadan that claim it is a point where the virus is likely to spread have been used to portray Muslims as the cause for Covid-19 and have entrenched perceptions that Muslims are responsible for Covid-19. Another example of how social media can act as an echo chamber for hate is through unfounded narratives that argue ethnic minorities, and particularly Muslims, are refusing to take the Covid-19 vaccine. As a result, Covid-19 has been weaponised by the far-right and those who sympathise with this ideology to peddle hate, with such narratives quickly being able to penetrate the mainstream and become normalised.



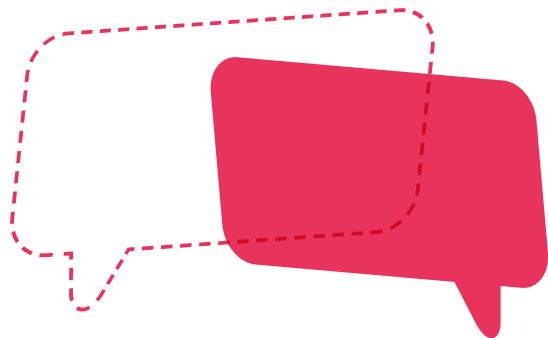
The Online Islamophobia Project was an 18 month research project that ran between June 2020 and December 2021 and examined the interaction between miscommunications and conspiracy theories in relation to key factors such as anonymity, membership length, peer groups and postage frequency, within the context of the current Covid-19 pandemic and Islamophobia on social media. The project was hosted at Birmingham City University and funded by the UKRI and Economic and Social Research Council (ESRC) under their Covid-19 rapid response call. The project explored irrational beliefs and thoughts that are disseminated on social media, covering important coverage of communications surrounding conspiracy theories online whilst paying attention to the content associated to racist 'infodemic' messages. The project also sought to provide insights into the drivers of Covid-19 narratives and consequences in fuelling existing extreme communications and Islamophobic language both online and offline.

## *Project aims*

The Islamophobia Online Project had the following key aims:

- To discover the impact of misinformation and the 'infodemic' pandemic on social media sites (for this project the social media sites included the platforms of Twitter and YouTube).
- To understand the drivers of conspiracy theories and the relationship between online and offline extremism in relation to Islamophobia;
- To provide recommendations on the ways to reduce Islamophobic hate speech on social media platforms.

To address these aims the project's approach was to provide a snapshot of key trends in relation to anti-Muslim hatred and Islamophobia that have been circulating on social media sites (Twitter and YouTube) in relation to Covid-19. The report objectives provided an overview of how these narratives are formed and the impact both online and offline. The project entailed four studies in relation to data collection. The four stages of this project considered the role of language, expression of emotion and sentiment, performed actions (pro-social and anti-social actions), Covid-19 miscommunication and misinformation related narratives, and links not only between these online elements of miscommunication but also offline impacts.





## *Drivers of Islamophobia and misinformation*

Existing research into online extremism has shown that psychological processes such as uncertainty, fear and perceptions of injustice (Fiske, 2013; Hogg & Adelman, 2013; Stollberg, Fritsche & Bäcker, 2015), along with online echo chambers contribute to vulnerability towards extremism. Related processes around the disinhibiting impact of being anonymous online (Suler, 2004), and the subsequent increased importance on online group identities that may be more extreme than an individual's normal position, can also drive online Islamophobia. We considered the following key aspects in our project in relation to Islamophobia and Covid-19:

- Anonymity
- Echo Chambers and time spent in online communities
- The negative impact of In-Group versus Out-Group comparisons online

# *Drivers of Islamophobia and misinformation*

## **Anonymity**

The lack of a real name policy means users can disseminate and access information without being identified (Peddinti, Ross, & Cappos, 2017). It has been suggested that being behind a computer compared to face to face communication provides individuals with a sense of security and anonymity, which can cause them to act differently (Peebles, 2014). This has important implications as we know that this can lead to deindividuation which is when individuals use anonymity to cause group members to fail to acknowledge themselves as individuals (Zimbardo, 1969). Research has also demonstrated that the level of extreme narrative disseminated online can be a product of a user's levels of anonymity (Zhou, Qin, Lai & Chen, 2007). The impact of anonymity was also noted by Awan, Sutch & Carter (2019), and Sutch and Carter (2019) when considering the general Islamophobic comments on Twitter. In all cases the impact of anonymity on behaviour is assumed to be explained by the Social Identity Deindividuation Effect model (Postmes, Spears & Lea, 1999). This states that not only does being anonymous carry with it a certain protection from retaliation and consequence that is disinhibiting (much like mob/riot behaviour) but that the importance of a chosen group identity starts to become more important than the individual identity. Being a good member of an online group and exhibiting ideal behaviour for that group (for acceptance) becomes more important than any personal morals or standards. This increases what is sometimes referred to as risky shift or polarisation. More extreme choices or behaviours are displayed in an attempt to take on these idealised group identities. In the case of online behaviour this could involve aggressive or discriminatory behaviour. Behaviour that would be less likely to manifest if the individual was clearly identifiable.

## **Time online and Echo Chambers**

The internet provides a space for individuals to interact with others of similar mindsets (Bliuc, Faulkner, Jakubowicz & McGarty, 2018). When reviewing cyber-racism Bliuc et al. (2018) found that extreme far-right groups provided a means for individuals to satisfy their need for belonging (Borum, 2014) through providing a transnational community online (Bliuc et al., 2018; De Koster & Houtman, 2008; Rogers & Carter, In Press). Forums provided a space for in-groups to validate extremist ideologies through facilitating interactions between individuals holding similar ideologies (Bliuc et al., 2014). Individuals are influenced by confirmation bias (Hogg et al., 2013) and gravitate towards online echo chambers (Bessi, 2016). These online, polarized communities provide content and feedback that corroborates the individual's attitudes and beliefs – in fact, incorrect information that supports a group's beliefs is likely to be accepted, whereas correct information that runs contrary to the group's beliefs is likely to be dismissed (Bessi, 2016; Borum 2014). The echo chamber effect can be exacerbated by characteristics of right-wing ideologies, specifically with respect to distrust of government (Costello, Hawdon, Ratliff & Grantham, 2016). Right-wing individuals tend to hold anti-government attitudes which can lead to increased likelihood of exposure to extremist material online as they seek out supportive attitudes, of which there is an abundance online (Costello et al., 2016). Grounded in social learning theory (Bandura & Walters, 1977), it is likely that individuals that hold anti-government sentiments inevitably gravitate towards each other, adopting and amplifying their ideologies and increasing the likelihood of further exposure to extremist material (Costello et al., 2016).



# *Drivers of Islamophobia and misinformation*

## **In-Group/Out-Group processes**

Psychological vulnerabilities associated with extremism include the need for meaning, the need for belonging, and a sense of perceived injustice (Borum, 2014). Fulfilling the need for meaning allows individuals to stabilise their sense of personal identity (Borum, 2014), and reduce feelings of uncertainty associated with the sense of self (Hogg & Adelman, 2013). The strong ideologies articulated by extremist groups can provide a resolution to this uncertainty and therefore be attractive to people experiencing this (Hogg et al., 2013). The need for belonging reflects the social nature of humans and the motivation to form and maintain social relationships (Baumeister, Brewer, Tice & Twenge, 2007). The fear of exclusion may motivate individuals to join extremist groups, not because of any affinity with the ideology, but in order to gain a sense of community (Borum, 2014; De Koster & Houtman, 2008). Therefore

the process of radicalisation may have its roots in social rather than ideological groundings (Borum, 2014). In an online context the attacking of a particular group online may increase the sense of belonging to their own ingroup. Indeed Awan, Sutch and Carter (2019) found evidence to suggest feelings of pride are often evoked in online messages towards the individuals group identity, but anger and disgust to out-groups. Relating to this Stankov (2018) outlined characteristics of an extremist mindset that included social attitudes such as religiosity. Religiosity reflects beliefs regarding the existence of divine entities, and the importance of religion in society (Stankov & Lee, 2016). Given that belief in certain system could be considered to be mutually exclusive to the belief in other this would lend itself to the creation of in-group and out-group definitions, with Islam forming the out-group for some users online.



# Method and data collection

## Data collection - YouTube data collection and sample

A total of 112,850 comments were collected from YouTube across 46 videos. Most of these videos were uploaded at least 12-24 months prior to the point of data collection. Collectively, all videos totalled to 355 minutes of playtime, thereby giving an average video length of 7.5 minutes. Video selection was based on the use of key search terms. A detailed summary of search terms, video title, uploader account, run time of each video, and number of comments per video can be found in Table 1.

Table 1: YouTube Video Details

Search term	YouTube account	Video Name	Video category	Video length	No of comments	Upload date
Britain Solidarity Muslims	Talk Radio	Brendan O'Neill: Lib Dems fasting in solidarity with Muslims is "really creepy"	Covid + Islam / Muslims / BAME (Europe)	09:09	588	27 Apr 2020
British Muslims Covid	Patriotic Populist	Matt HanCUCK Pandering To British Muslims During Covid-19 Pandemic		01:09	65	25 Apr 2020
BAME Vaccine	Guardian News	BAME celebrities call out vaccine misinformation		03:05	595	25 Jan 2021
Racism Covid	Channel 4 News	Inequality and structural racism increased Covid death risk among ethnic minorities, report says		07:27	152	19 Oct 2020
BAME Racism Covid	BBC	Covid-19 leaked report: BAME health racism factors 'horrifying', Lammy - The Andrew Marr Show - BBC		10:18	592	14 Jun 2020
Muslim London British	London Power	Londonistan is a more Islamic city than most cities in Muslim countries		05:57	474	29 Oct 2020
Covid 19 Muslim	Guardian News	Covid-19 is 'out of control' in London, says Sadiq Khan		01:33	1317	8 Jan 2021
Mosque Covid 19	Hindustan Times	They go after churches...': Donald Trump on mosque retweet amid Covid-19		02:56	2132	20 Apr 2020
Ramadan Covid	CBS Evening News	Muslims celebrate Ramadan amid coronavirus restrictions		02:01	499	26 Apr 2020
Ramadan Coronavirus	Sky News	Coronavirus: What will Ramadan in lockdown be like?		02:39	546	23 Apr 2020
BAME Vaccine	BBC News	Covid vaccine: Should BAME groups be prioritised? - BBC Newsnight		06:54	1270	28 Jan 2021
Islam Virus	New Delhi Times	Islamic Terrorism: The other Virus		14:50	630	24 Apr 2020
Muslim Coronavirus	Sky News	10 Muslim coronavirus victims buried alongside each other		02:31	1586	11 Apr 2020
Muslim Coronavirus	OnePath Network	A Muslim's Guide to Responding to Coronavirus		02:39	1195	13 Mar 2020
Muslim Coronavirus	Muslim Central	Important Advice on Coronavirus - Mufti Menk		04:39	279	20 Mar 2020



## Method and data collection

Table 1: YouTube Video Details

Search term	YouTube account	Video Name	Video category	Video length	No of comments	Upload date
Coronavirus Muslim	VOA News	Coronavirus Constrains Centuries Old Muslim Traditions	Covid + Islam / Muslims (India)	02:02	135	24 Apr 2020
Islam Coronavirus	Los Angeles Times	Coronavirus prompts Islamic Center to encourage hands-free greetings		02:54	55	7 Mar 2020
Coronavirus Ramadan	AJ+	How Coronavirus Changed Ramadan For Muslims		09:50	173	17 May 2020
Covid-19 Muslims	The Economic Times	Omar Abdullah on Covid-19 outbreak: Muslims should not be blamed for spread of virus		01:56	137	31 Mar 2020
Muslims India Coronavirus	Al Jazeera English	India Muslims targeted in attacks over coronavirus		03:02	858	2 May 2020
Muslims India Coronavirus	India Today	TikTok Videos Aimed At Misleading Indian Muslims Over Coronavirus Precautions		08:19	2517	3 Apr 2020
Islamophobia	Akkad Daily	The Proposed Definition of Islamophobia is Not Fit For Purpose	General Islam	11:58	1417	2 Oct 2019
Muslim Britain	TRT World	Muslims in Britain: Unheard voices   Focal Point		25:42	1107	30 Apr 2019
Islamophobia	Pat Condell	A Cure For "Islamophobia"		03:51	1412	9 Apr 2014
Muslim Islamophobia	Al Jazeera English	Islamophobia in Europe: Why won't Poland take in any Muslims?   UpFront		25:15	12019	8 Nov 2019
Muslim France	Global News	Muslim-majority countries protest against France over Prophet Muhammad cartoons		03:13	4624	28 Oct 2020
France Muslims	Al Jazeera English	Is France at war with its Muslims?   Inside Story		25:50	7006	21 Oct 2020
Muslim America	Associated Press	Biden snags support from Muslim American community		01:57	1498	20 Jul 2020
Covid-19 Conspiracy	CNBC	Why People Believe Covid-19 Conspiracies	Covid-19 Conspiracy	19:30	14177	19 Jul 2020
5G Conspiracy	BBC	Viral: The 5G Conspiracy Theory by @BBC Stories - BBC		23:31	3,409	14 Jul 2020
Coronavirus Fake News	BBC Newsnight	Coronavirus: The conspiracy theories spreading fake news - BBC Newsnight		10:37	8,002	5 Mar 2020

## Method and data collection

Table 1: YouTube Video Details

Search term	YouTube account	Video Name	Video category	Video length	No of comments	Upload date
Coronavirus Anti-Vaccination UK	Global News	Coronavirus: Anti-lockdown, anti-vaccination beliefs remain as UK rolls out its vaccine	Anti-Vaxx	03:50	798	7 Dec 2020
Anti-Vaxx	BBC	Coronavirus: 'We need to talk about misleading Anti-Vaxx claims' - BBC		08:46	609	20 Sept 2020
Anti-Vaxx UK	Sky News	Covid-19: Fauci fears UK Anti-Vaxxer backlash		11:21	2126	3 Dec 2020
Anti-Vaxx Pandemic	Sky News	There is no evidence of a pandemic' says Anti-Vaxxer		03:03	4614	7 Dec 2020
Anti-Vaxx UK	Sky News	Coronavirus Anti-Vaxxers react to Boris Johnson's 'nuts' jibe		02:51	774	24 Jul 2020
Anti-Vaxx UK	Sky News	Anti-Vaxx book sales surge as sellers urged to add warning tags		02:36	333	5 Mar 2021
UK Covid-19 Vaccine	The Sun	COVID-19: Anti-Vaxx myths debunked as vaccine rolled out across UK		01:55	2727	3 Dec 2020
Covid-19 Vaccine	Russell Brand	Covid Vaccine - Scepticism or Trust?		09:26	12036	3 Dec 2020
Covid-19 Britain Vaccine	Sky News	COVID-19: Half of Britons would not get a coronavirus vaccination		02:51	5133	9 Aug 2020
Anti-Vaccination Covid	BBC	Covid: Stop anti-vaccination fake news online with new law says Labour • @BBC News live - BBC		10:01	1429	15 Nov 2020
British Anti-Vaxx	NowThis News	British Anti-Vaxxers Spread Misinformation   NowThis		03:19	599	10 Dec 2020
Covid Vaccine WHO	BBC News	Oxford-AstraZeneca Covid vaccine not linked to blood clots, WHO says - BBC News		02:32	1750	12 Mar 2021
Covid-19 Vaccine	Sky News	Covid-19: Ireland suspends AstraZeneca vaccine		02:17	725	14 Mar 2021
Vaccine Safety	Dr. John Campbell	International vaccine safety concerns		27:24	2448	15 Mar 2021
Vaccine Passports	BBC News	UK considers "vaccine passports" to prove Covid protection - BBC News		05:23	6283	23 Feb 2021

## Method and data collection

All videos were then categorised into five categories based on the general focus and area of the content. They were: Covid + Islam / Muslims / BAME (Europe), Covid + Islam / Muslims (India), General Islam, Covid-19 Conspiracy, and Anti-Vaxx. The category of each video can be found in Table 1, while a more detailed summary of what each category focused on can be found in Table 2.

Table 2: Video Categories

Video category	Category details
Covid +, Islam / Muslims / BAME (Europe)	Videos which focused on Covid-19 in relation to Muslims / Islam / BAME within the European geographical context
Covid +, Islam / Muslims (India)	Videos which focused on Covid-19 in relation to Muslims and Islam within India
General Islam	Videos which focused mainly on the religion of Islam or the behaviour of Muslims
Covid-19 Conspiracy	Videos which focused on Covid-19 conspiracies, such as 5G and fake news
Anti-Vaxx	Videos which focused on the Covid-19 vaccine



Using data scraping methodologies, corresponding comments for each selected video were extracted using a YouTube API open-source software called YouTube Comment Suite (version 1.4.5), developed by GitHub user Mattwright324. The software enables users to download all comments for a selected video, as well as other key data metrics, such as number of comments, and video likes and dislikes.

## Method and data collection

### Twitter Data Collection and Sample

When employing corpus linguistic techniques there is not an agreed upon corpus size (Hiltunen, McVeigh, & Säily, 2017), although Haber (2015) suggests that when employing these methods on Twitter 200 tweets per users is generally recommended as a minimum. To identify the users that Tweets would be collected from, a word list containing 19 extreme words/phrases such as banislam and islamistheproblem was generated (see Appendix A). This word list was based on previous work (Awan, Sutch & Carter, 2019; Sutch & Carter, 2019) and past used had generated a large volume and range of user accounts to then collect general tweets from. Once user accounts were identified a selection of the most recent tweets could be collected. In order to collect the original tweet data Twitter archiving google sheet (TAGS) was used as it performs automated collection for search results from Twitter based on search terms, hashtags and even use profiles. Through this process a total of 100 Twitter accounts and 100,545 tweets were examined for the corpus linguistic analysis.





# Data analysis

## Corpus Linguistics

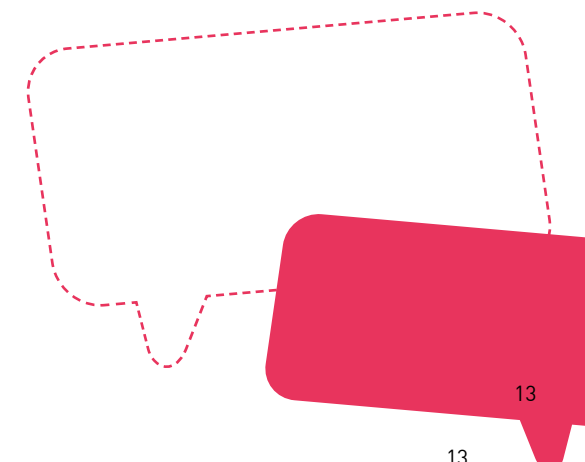
Corpus Linguistics is a text/word level approach that considers the relative frequencies of word occurrences, patterns of word/phrase usage, pairings of words within a data set, or between data sets (Biber, Conrad & Reppen, 2000; McEnrey & Hardie, 2011). These data sets, or corpora, are collections of text that can number in the millions of words, and in turn represent (or are a sample of a larger collection). It is possible to compare corpora and determine whether certain words, phrases or word pairs are occurring statistically more frequently in one corpus than another.

It is possible to determine whether certain words are more key or important within a text (used more than would be expected by chance alone) and which words are paired together (or share a certain linguistic space or distance - collocates) again beyond that expected by chance. Practically this allows for the comparisons of difference sources of text to determine if language is used differently and how it's used differently. Generally, it has been used to compare author or publication styles, to investigate language around sexuality (Baker, 2018), political discourse (Orpin 2005) and has even found some forensic use.

Coulthard (2013) highlights forensic uses of Corpus Linguistic methods to compare confession statements made by prisoners and incident statements made by law enforcement to determine the likelihood of sample confessions being forced or forged. Many already existing corpora are available for analysis such as historical examples of English from select time frames, or samples from newspapers. Baker, Gabrielatos and McEnery (2012) study provides a pertinent examination of language use a corpus of British newspapers regarding the word 'Muslim'.

Such methodologies can be applied readily to online data, whether that is in the form of blog/video comments, tweets, forum posts or blog and news posts used by radical right members or those with a shared ideology.

Sutch and Carter (2019) have applied such methodologies to far-right and Islamophobic tweets, comparing the amount of Islamophobic terms across differing levels of user anonymity, membership length and postage frequency. Determining in the process that whilst Islamophobic terminology was statistically more frequent in the high anonymity users, the length of time the user had been a member on Twitter for, and how often the posted, did not have a significant relationship with the amount of Islamophobic content expressed. This approach considered over 100,000 tweets, forming a sizeable sample that would have previously been impractical to gather and analyse using traditional quantitative content analysis approaches or qualitative analysis.



# Data analysis

## Sentiment Analysis

This approach traditionally has been used within marketing to determine the perception towards particular products, services or adverts. In its most basic form, it is the simple recording of whether a response to an item is positive or negative (the polarity) and can be done either via manual classification of responses or by using data mining and machine learning (Pang & Lee, 2008). This approach has gradually become more sophisticated with the inclusion of emotional lexicons, and specialist lexicons. These are specific dictionaries where specific terminology is given a value, for example words associated with a positive response can be given a positive value, and those with a negative response a correspondingly negative value (though there are differences to this approach depending on whether a domain dependant or domain independent approach has been taken (Crossley, Kyle & McNamara, 2016)). Comments and responses can then be parsed and a value assigned to each based on the overall sentiment expressed in that response based on the lexicon values. This can again be as simple as a positive or negative assessment but with increasing research in natural language processing, psycholinguistics and emotional valence much more subtle lexicons have been developed.

For example, EmoLex (Mohammed & Turney, 2013) is an emotional lexicon that has two broad categories (positive and negative), and eight emotional categories (anger, anticipation, disgust, fear, joy, sadness, surprise, trust) with each of these having a list of associated words (essentially synonyms and modifiers). The EmoLex when applied can then give values for the level of emotional sentiment expressed in a body of text. This gives a much more fine grained understanding of the emotional content of a response, that can be quantified and compared with greater objectivity and reliability than a qualitative or manual assessment, and importantly can be scaled across a huge volume of comments or corpora. This process can be automated by software such as the Sentiment Engine for the Analysis of Cognitive Emotion, or SEANCE, (Crossley, Kyle & McNamara, 2016).

## Thematic/Content Analysis and Case Studies

Thematic Analysis was carried out according to Braun and Clarke's (2006; 2014) guidelines. This approach has been used in similar qualitative investigations of online communities (such as Attard & Coulson, 2012; Carter et al., 2021) to analyse post content in detail. A largely inductive approach was taken to ensure the coding and final themes had a strong foundation in data. This also allowed for flexibility in the potential final themes due to not being aligned to one particular theoretical stance. The intention was to approach the themes at the semantic level. The six phases outlined by Braun and Clarke (2006) were adhered to. Please see Study 3 and 4 for further detail about sampling, saturation and the development of themes/ selection of case studies.



# Recommendations

## 1. A button that helps users report misinformation on social media

We propose that social media companies such as Twitter and YouTube have a button that can help users report misinformation in order to detect online harms and potential impacts offline. We argue that this could help prevent the spread of conspiracy theories and assist in detecting false or misleading information. Some social media companies such as Twitter already allow users to label tweets as misleading but the report button could act as a powerful tool for users to report misinformation.

## 2. Soft verification of identity to tackle online anonymity

Although our findings suggest that an increase in Islamophobic conspiracy theories and misinformation was associated with Twitter users who were characterised by a higher number of identifiable items in their user name/profile, research has shown how it is paramount to explore how anonymity plays a role in levels of hate speech, conspiracy theories and extremism online. The findings of the present research demonstrates how anonymity can play a differential role in the levels of extremism and Islamophobia online. This research suggests that the role which anonymity plays in the occurrence of these types of behaviour online can depend on the trigger event and what drivers are involved. For instance, with Covid-19 much of the misinformation and subsequent hate speech and extremism which followed was widespread, with much of the content being presented by mainstream sources. In instances such as these, anonymity plays a lesser effect. Never the less, anonymity has been shown to act as a facilitator in levels of conspiracy theories, hate speech, misinformation and extremism online. One suggestion for social media and online platforms is to encourage or insist in some on a minimum amount of identifiable information to reduce conspiracy theories and hateful rhetoric.

## 3. Using a tier system to warn and remove users

Whilst there are some issues in relation to hateful speech that need to be addressed corpus linguistics and sentiment analysis could be used to create a crude tier system or early warning system for platforms or users, identifying videos with more toxic or conspiracy theories. If the comments for a video or platform pass a certain threshold users could be warned about the potential content, or reminders to fact check could be presented by the platform. This type of tier system could help remove racialising conspiracy theories from social media and the wider consequences should include the ability to de-platform offline and online stigmatising communications.

## 4. Educational digital training programme

As Covid-19 has increased the spikes in misinformation there is a need to incorporate an international digital training programme around social media literacy for users to be upskilled and help build resilience so that users are better informed on the actual drivers of misinformation. This digital training package would cover key stories around misinformation and act as a tool that helps users distinguish between fact and fiction. As this would be an international training programme it could also help raise awareness about international trigger events that lead to conspiracy theories and provide users with the knowledge to critically assess, analyse and evaluate what and how social media posts are used to create misinformation.

# Recommendations

## 5. Tracking conspiracy theories through evidenced-based research

The ability to be able to track false news stories and misleading information can help reduce the likelihood of misinformation. By adopting a research approach through an audit trail that can evidence false and misleading information such as images, videos, captions and posts in a large database it could help to identify fake news stories and compare them with factual news stories. This research approach should be evidenced-led and would apply some form of algorithms that would enable social media companies to quickly identify and detect conspiracy theories before they gain traction.

## 6. To prohibit the use of dehumanising language through clear repercussions

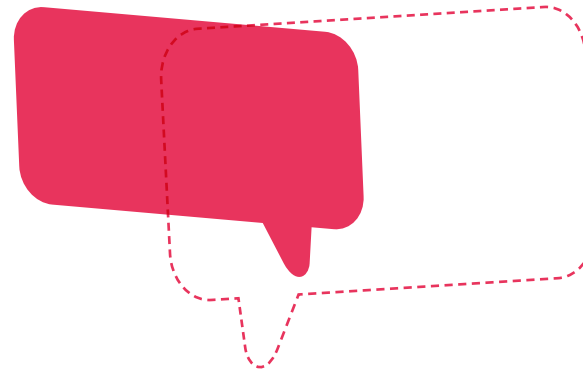
A new online digital charter should be adopted with clear aims that can start with the prohibition of dehumanising language. This could include rhetoric and language that is used to dehumanise a group of people because of their faith, religious identity, and visibility. This online charter should be underpinned by the welfare of its consumers. We believe that if some form of sanctions are applied against social media companies because they failed in their duty of care to consumers that this could create a social media fund that can be put back into the online community and be used to tackle language that incites and inflames racial tension.

## 7. Detection and Filtering misinformation content

Having a tool to detect and filter harmful sites and webpages that promote conspiracy theories is much needed. This could be used to detect and fact check how misinformation is spread online. This platform could be used to list trustworthy and credible accounts against those deemed untrustworthy. This could help to classify where misinformation comes from and also track people's digital footprint.

## 8. Bulk reporting of inappropriate content or misinformation

Whilst the options to report content currently exist within Twitter there is a cap on how many tweets can be reported at a time. At the time of writing approximately 5 tweets from an account can be reported in one go. Any further reporting of content from that same user must be done separately in another report, and usually after the first report has been addressed. This process can take a few days. Often though the account reported has many more tweets that could be reported, indicating an entrenched pattern of behaviour and communication that is at odds with Twitter's policy and respectful discourse. We would recommend that a bulk uploading of tweets (more than five), or of a time period (covering the offending tweets) would be more comprehensive.





## Conclusion

The preceding discussion has examined the online and offline impacts of Islamophobia on two main social media platforms; namely Twitter and YouTube. Specifically, the aim of this report was to examine: (a) To discover the impact of misinformation and the 'infodemic' pandemic on social media sites (for this project the social media sites included the platforms of Twitter and YouTube); (b) To understand the drivers of conspiracy theories and the relationship between online and offline extremism in relation to Islamophobia; and (c) To provide recommendations to ways to reduce Islamophobic hate speech on social media.

The project entailed four studies in relation to data collection. The four stages of this project considered the role of language, expression of emotion and sentiment, performed actions (pro-social and anti-social actions), Covid-19 miscommunication and misinformation related narratives, and potential links not only between these online elements of miscommunication but also potential offline impacts. These approaches highlighted the frequency of miscommunication that is spread throughout social media sites (Twitter, and YouTube) and how this can instigate miscommunication online. Importantly, it also considered the role of key factors like anonymity, membership and peer groups might have on social media content. Our findings suggest much more work needs to be done when considering the role and impact of conspiracy theories in relation to Islamophobia.



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# *Appendix A*

## **Sample Word List for Corpus Linguistics Data collection**

1. Againstislam
2. Antiislam
3. Banislam
4. Banmosques
5. Banmuslims
6. Bansharia
7. Deportthemall
8. Islamiscancer
9. Islamisevil
10. Virusjihad
11. Coronajihad
12. Covid 19
13. Islam
14. Muslim
15. Muslimcovid
16. Mosques/eid
17. Virusspreaders
18. Stopislam
19. Islamistheproblem

