Journal of Global Information Management
Volume 29 • Issue 5 • September-October 2021

Gauging Opinions About the Citizenship Amendment Act and NRC:
A Twitter Analysis Approach

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ABSTRACT

Today, the advent of social media has provided a platform for expressing opinions regarding legislation and public schemes. One such burning legislation introduced in India is the Citizenship Amendment Act (CAA) and its impact on the National Citizenship Register (NRC) and, subsequently, on the National Population Register (NPR). This study examines and determines the opinions expressed on social media regarding the act through a Twitter analysis approach that extracts nearly 18,000 tweets during 10 days of introducing the scheme. The analysis revealed that the opinion was neutral but tended to a more negative reaction. Consequently, recommendations on improving public perception about the scheme by suitable for interpreting the Act to the public are provided in the paper.

KEYWORDS

Citizenship Amendment Act, Electronic Governance, NPR, NRC, Public Perception, R, Sentiment Analysis, Social Media

INTRODUCTION

Social media has emerged as a significant force to reckon with due to the vast and rapid advances in information technology (Charalabidis & Loukis, 2012; Rana et al., 2017). This force has motivated and prompted people to express their opinions on various topics, products, and services. Of the various social media platforms today, Twitter has emerged to be a widely used social media micro-blogging platform (Terpstra et al., 2012; Gautam & Yadav, 2014; Arun, Srinagesh & Ramesh, 2017; Suganthi & Geetha, 2017; Iftikhar & Khan,2020) for expressing opinions on various issues now also including political schemes and legislations. Contemporary issues and political debates are found to stir from Twitter's opinions, making it an interesting source with scope for mining and analyzing social media data.

One such burning issue for contemplation is the introduction of the Citizenship Amendment Act(CAA) (Poddar,2018; ET Online,2019; Nath,2019; Chandrachud,2020), which assures granting Indian citizenship to the Hindus and other religious communities like the Sikhs, Buddhists, Jains, Parsis and Christian religious immigrants in India from the three countries namely Pakistan, Afghanistan,

DOI: 10.4018/JGIM.20210901.oa10

and Bangladesh. However, this Act excludes the Muslims from a grant of citizenship, and this drew flak from the Islamic minorities, political parties, and students for granting citizenship based on religious discrimination.

While existing studies (Arun, Srinagesh & Ramesh, 2017; Joseph *et al*.,2017) perform sentiment analysis, the sentiment's variation over a while needs to be examined. This would enable in understanding the varying opinions and the triggering incidents which chronologically alter the opinions. This would enable more informed and dynamic decision-making and governance. Further, by understanding the varying opinions, strategies can be formulated to appease society's concerned and distressed sections. Further, there is a need to examine the overall nation-wide opinion and the state-wise and region-wise impact of a governance scheme to handle the situation better. This would help to formulate strategies at a more granular level by understanding the pain points of the people affected by Act region-wise. This would enable the amendment of the Act to include specific provisions and exceptions, thus favoring the innocent people.

The paper thus presents a dynamic nation-wide and state-wise sentiment distribution and emotion analysis model. The Twitter Application Programming Interface (API) was used for tweet extraction based on keywords related to CAA, NRC, and NPR and for further analysis due to its amenability to textual mining and sentiment analysis (Fang & Zhang, 2015; Panigrahi & Srivastava, 2018; Naiknaware et al.,2019). Thus, the divergent opinions on this topic were proposed to be gauged in the paper through the Twitter platform to identify the loopholes and provide customized recommendations on how the Act can be reframed and conveyed with a more amicable tone to improve public perceptions.

The rest of the paper is thus structured as follows.

A brief literature survey of existing studies in opinion analysis is presented, followed by the data sources and methodology adopted to extract tweets, social media analysis of word frequency, topic, and sentiment mining. The results and discussion section is presented. The implications of the results at both theoretical and practical levels are discussed, and the paper is concluded, providing scope for future research. The references are stated.

LITERATURE REVIEW

The studies conducted in the domain of social media opinion mining are depicted in Table 1.

Figure 1 illustrates the limitations of the existing studies.

Firstly, the existing studies using Twitter are not robust and do not adopt state-of-the-art methodologies on large datasets for validation. A typical state-of-the-art methodology is expected to capture the sentiment at a particular instance of time and analyze the distribution variation over time. While existing studies capture the sentiment during a particular period, the time series analysis of Twitter sentiments is not performed to gauge government schemes' varying public opinion. This is required in the case of burning issues like the Citizenship Amendment Act that have a variable impact on different sections of the society and warrants a time series analysis to capture the varying opinions and the rationale behind them.

Secondly, while sentiment analysis is performed for government schemes, the recommendations to reframe and interpret the same policies in a more favorable way are not provided, which is essential in the current scenario of protests across the country in the wake of the CAA due to misinterpretation of some provisions by a specific community of people. They need to be clarified and elaborated on for a better understanding of the actual intentions. For overcoming the above limitations, a proposed Twitter analysis model is adopted in the paper.

Table 1. Existing Studies

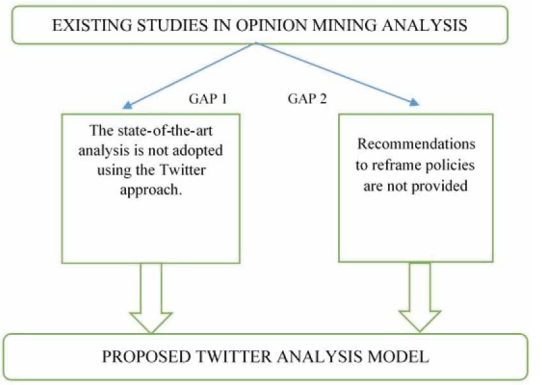
S.No	Citation	Research Objective	Methodology /Technique	Implications
1.	Vakeel & Panigrahi (2018)	The applicability of social media in electronic governance is investigated.	A conceptual framework for investigating the role of power distance in e-governance is developed.	It is established that e-participation initiative is a mediating factor between power distance and social media usage.
2.	Joseph *et al*. (2017)	The concept of the Internet of Things (IoT) is reviewed methodologically.	The Twitter social media platform is used to get insights about IoT.	Twitter is a reliable sentiment analysis platform to analyze opinions about the phenomenon.
3.	Azad *et al*. (2010)	The role of national government institutions and the influence of e-governance is studied.	Structured Equation Modelling (SEM) technique is adopted.	Electronic Governance has diffused to a large extent due to its ability to provide better decisions.
4.	Ali & Green (2007)	The IT governance mechanisms influencing governance in Australia are investigated.	An empirical data analysis is performed from public sector data.	The presence of an IT strategic group and effective technology systems also are found to influence IT governance in Australia. This finding can be extended to other countries.
5.	Chetty & Alathur (2019)	The violent protests by citizens and their reflections on social media are studied.	A systematic literature review (SLR) approach is adopted.	Social media websites reflect the citizens' genuine emotions, significantly negative emotions like hate and violence in response to the government's acts and schemes.
6.	Rani & Sumathy (2018)	The role of social media in shaping the opinions of customers and citizens is examined.	K means clustering is performed for opinion mining and detection.	Social media websites, especially micro-blogging websites like Twitter, are rich sources for extracting genuine opinions.
7.	Oliveira & Garcia(2019)	The role of electronic sources of media in shaping the opinions of citizens is investigated in the paper.	A systematic literature review (SLR) approach is adopted.	Social media websites reflect the genuine opinions of the citizens regarding government policies.

continued on following page

Table 1. Continued

S.No	Citation	Research Objective	Methodology /Technique	Implications
8.	Alryalat et al.(2017)	The existing studies that use social media to analyze the effectiveness of government policies are reviewed.	Twitter analysis studies are reviewed.	Twitter is a useful online platform for analyzing government policies.
9.	Charalabidis & Loukis(2012).	The studies that adopt social media to analyze public policies are reviewed.	One hundred thirty-nine research articles are reviewed.	Social media is useful in analyzing the transparency and success of policy implementation.
10.	Arun *et al*. (2017)	This paper deals with analyzing the perceptions of citizens about the demonetization phenomenon.	The Twitter platform is used to analyze perception.	There is a high level of acceptance by people, i.e., 72% to the de-monetization phenomenon.
11.	Jaeger & Bertot (2012)	The use of social media for implementing e-government services is examined.	Thematic analysis is performed.	Transparency and accountability are emerging themes.
12.	Gupta (2012)	The evolution of e-governance in India is studied.	A qualitative framework is suggested for e-governance.	Social media plays a vital role in the implementation roadmap of the e-governance strategy.
13.	Naiknaware et al. (2019)	The paper studies how Twitter can be used for analyzing and gauging the sentiment of government schemes.	Thematic review-based coding is adopted.	Twitter is a useful online platform for sentiment and opinion analysis.
14.	Suganthi & Geetha(2017)	This paper deals with analyzing the perceptions of citizens about the GST phenomenon.	The Twitter platform is used to analyze perception.	There is a neutral reaction to the GST phenomenon.
15.	Terpstra et al. (2012)	The impact of social media analysis for solving government policy crises is explored in a disaster management context.	Twitter is used to investigate the impact.	Twitter is found to be a useful tool for crisis management.
16.	Jagdale et al. (2016)	The existing studies that use social media to analyze the effectiveness of government policies are reviewed.	Twitter analysis studies are reviewed.	Twitter is a useful online platform for analyzing government policies.

Figure 1. Research Gap



DATA COLLECTION AND RESEARCH METHODOLOGY

Data Collection

This research dataset is 18000 tweets extracted on ten days from December 28th, 2019, to January 5th, 2020. The NRC discussions started in December, and the bill was first signed on December 12th,2019, and was expected to be effective from January 10th, 2020. This period witnessed many debates about NRC's need and contributed to the maximum number of tweets during this period. Hence, this period was chosen for investigation in the paper. Twitter social media analysis is applicable for analyzing very short-range periods of 10-15 days. Any period chosen beyond this horizon would not be effective in terms of insights. Hence, the last ten days of the one month from December 12th to January 10th was narrowed down since Twitter API could only extract relevant tweets for the last ten days, and also the analysis could also be more useful for this short period. The discussion about NRC and CAA was found to peter off after the bill was brought into effect from January 10th, and hence, the period after was not considered in the study. The tweets were extracted based on the trending hashtag keywords that sparked debates in Twitter, i.e., #Citizenship_Amendment_Act, #NRC and #NPR using the Twitter web API. The detailed methodology is presented below.

Research Methodology

Figure 2 illustrates the research methodology adopted as follows.

Extraction of Tweets Related to the Citizenship Amendment Act

The first step is to extract the tweets relevant to the opinions expressed about the Citizenship Amendment Act, NRC, and NPR for which the Twitter web API is connected to the 'rTweet' package in R, a pre-defined package used to extract tweets.

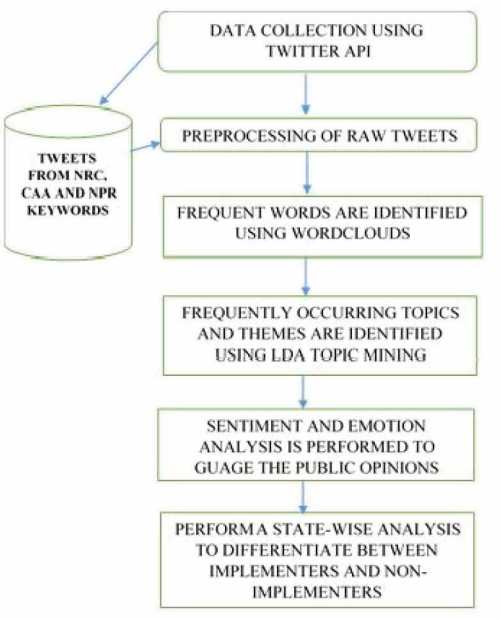
For this purpose, an authentication token is created to establish a client-server connection to the server, containing all the tweets for extraction.

The create_token() functionality in 'rTweet' is invoked, which creates a token with access credentials like consumer key, consumer secret, access token, access secret generated at the time of initiating the Twitter application.

During authentication, the command redirects to the Twitter URL, which authorizes the access credentials and enables the user to extract the tweets.

The user then invokes the search_tweets() functionality, which pulls all the 18000 English language tweets related to the keywords #CAA, #NRC, and #NPR during the ten days mentioned above to generate the corpus for further pre-processing.

Figure 2. Research Methodology



Pre-Processing the Corpus

The following steps are carried out on the corpus:

- **Text Cleaning:** The text part of the tweets contains irrelevant information such as Numbers, URLs, Special symbols, emoticons, punctuation marks, HTML Tags, etc., which are filtered out.
- **Stop words Removal:** Stop words include irrelevant filler words such as is, at, which, on, etc., eliminated from the corpus since these words do not add as qualifiers to reflect the public opinion accurately and are considered redundant for further textual analysis.

Other levels of pre-processing include:

- **Removal of Retweets (in the case of the Twitter dataset):** Re-tweets are the tweets' replies. These re-tweets mostly duplicate the existing tweets and do not convey any relevant information to gauge public opinion, which is required in the paper and filtered out.
- **Stemming:** The root words (stems) are retained while the words derived from these are eliminated since they convey the same meaning and are redundant for further analysis stages. For instance, the words governance and government tend to the same root word, "govern" which is replaced in the dataset to provide a more concise corpus.
- **Tokenization:** The entire text is split into individual tokens for processing and opinion extraction.

Generating Word-Clouds

The pre-processed clean corpus is now transformed into a Term Document Matrix(TDM) that provides a two-dimensional representation of tokens and existing in a particular document.

For instance, the term 'NRC' existing in Document 1, 4, 5, and 6 is assigned to a value of 1 in the TDM, while since they do not exist in Document 2 and 3, they are assigned to 0 in the TDM.

Based on the entries in the TDM, the frequency of the terms are computed by aggregating the occurrences in the documents, for instance, the frequency of the term 'NRC'= $\sum term_i^k$; where i tend to value of 1 or 0 and k is the number of documents=6 in this case:

Document1(1)+Document2(0)+Document3(0)+Document4(1)+Document5(1)
+Document6(1)=4

Similarly, the frequencies are computed for all terms, and the terms are sorted in descending order of frequency to construct the word-cloud of terms.

The pre-defined library 'wordcloud' in R is used to generate the word cloud. A minimum threshold frequency of term frequency=3 is set to generate a more optimized word cloud representation.

This visual representation provides a view of all the triggering keywords, which led to the opinions expressed on Twitter.

LDA Topic Mining

The Latent Dirichlet Allocation (LDA) method is adopted to identify the most widely discussed ten topics and under each of the topics, the five most frequently occurring terms are generated to corroborate the results generated from the above word cloud. LDA is preferred since it is a generative and probabilistic model for analyzing the most frequent corpus topics. It is preferred over other topic modeling techniques due to its ability to generalize the predominant topics from specific words used in the twitter corpus. The trending topics for discussion by the user can be easily identified due to its ability to infer each specific word's latent meaning and map it to its context. These topics are inferred without the need for prior domain knowledge and are deduced probabilistically and not intuitively (intuition can only guess but not provide the topic with high confidence). LDA is, thus, a very useful pre-processing step for feature extraction.

Sentiment and Emotion Analysis

The pre-defined package "Sentiment 140" API is adopted to compute the sentiment polarity for the preprocessed text for which initially, the text is classified into: "positive", "negative," and "neutral" categories. Subsequently, the tweets are mapped to their date of creation in the dataset to construct a consolidated dataset of tweets and sentiment polarity date-wise.

The sentiment polarity is transformed into numerical categories: +1,-1, and 0, respectively, for positive, negative, and neutral tweets.

Similarly, the emotions expressed about the CAA scheme are also computed using the package "syuzhet" package in R, which classifies the given tweet into one of the categories like "trust", "fear", "anticipation", "anger", "sadness", "joy", "disgust" and "surprise" using the NRC Emotion Lexicon(Mohammad & Turney,2013) which adopts a dictionary-based approach for emotion classification.

The sentiment polarities are plotted vis-a-vis their date of creation to visualize the sentiment patterns. This, in turn, reflects people's changing opinions over the above ten-day period about the CAA scheme.

State-Wise Analysis

The states that implemented the CAA Scheme, like the National Capital Region (NCR), including New Delhi and Haryana, and states like Kerala which did not implement CAA scheme (non-implementers), are then separately analyzed, implementing the above methodology to capture the differential reaction CAA in these states.

The results and insights that emerged are discussed below in Section 4.

RESULTS AND DISCUSSION

Generating Word Cloud

Figure 3 illustrates the word cloud representing the most frequent triggering keywords reflecting the Citizenship Amendment Act and NRC scheme's opinions. It is found that: caa protests, muslims, law are the frequent words indicating that the CAA act's anti-muslim stance has triggered violence and led to riots. This has further led to the government's police force (Jaeger & Bertot,2012) to counter the protests. This situation is indicative of an adverse reaction to the Act, which has led to further exploration in the LDA topic mining results below.

LDA Topic Mining Results

Table 2 corroborates the above word cloud visualization depicting the frequent topics related to this Act is related to anti-muslim, Assam and has led to protest campaigns against this Act also indicative of a negative response to the Act. However, the extent of negativity is quantified below in the sentiment analysis results.

Sentiment Analysis Results

Figure 4 illustrates the sentiment polarity chart, which shows that while 7000 tweets are neutral and contemplative of the Act, 3200 tweets are found to be negative, and 2000 tweets are found to be positive. This confirms the above results in Figure 4 and Table 2 that the Act's provisions indicate religious partiality. This has led to widespread protests by the minorities impacted by the scheme, which has led to the police force, especially in Assam's Northeast states.

Figure 3. Wordcloud results

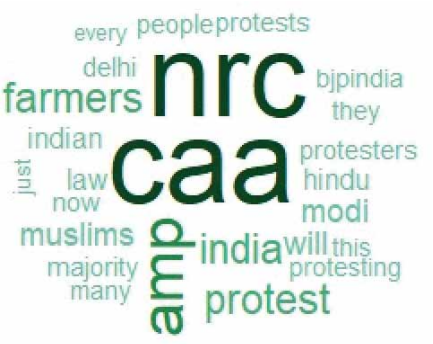


Table 2. LDA Topic Mining Results for top 10 topics and top 5 frequently occurring themes per topic

Terms	Topic 1	Topic 2	Topic 3	Topic 4	Topic 5	Topic 6	Topic 7	Topic 8	Topic 9	Topic 10
1	the	nrc	the	the	nrc	caa	nrc	nrc	nrc	the
2	nrc	the	nrc	caa	the	you	caa	caa	Anti-muslim	and
3	and	caa	and	Assam	caa	are	the	Assam	for	caa
4	will	protests	are	you	and	with	will	for	you	for
5	are	not	for	have	for	that	Assam	and	against	not

Figure 4. Sentiment Analysis of opinions about NRC Scheme

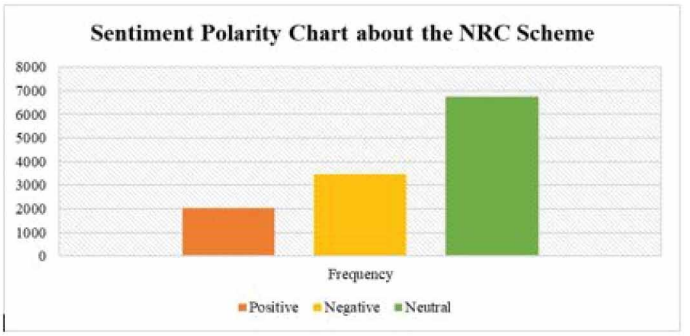


Figure 5 illustrates the emotion analysis chart and corroborates the above sentiment chart in Figure 4, with negative emotions like fear, anger, and disgust dominating over more positive emotions like joy, trust, anticipation, and surprise.

However, these visualizations are only indicative of the aggregate opinions of people.

Figure 6 plots the sentiment distribution of opinions about the scheme over time.

Initially, the Act's anti-Muslimism stance triggered an immediate adverse reaction among minorities, opposition parties, and students alike, which led to a sharp decrease in the sentiment polarity in the first four days from December 12th, 2019 to December 16th, 2019.

However, the stance was softened when other provisions were explored, and other communities and Hindu immigrants from Pakistan, Bangladesh, and Afghanistan expressed their satisfaction with the scheme leading to the sharp increase over the next 2-3 days till December 19th, 2019.

However, Assam's northeast states were not satisfied since the Citizenship Act's provisions did not apply to Northeast states' territories, which led to a drop in sentiment to negative sentiments over the next four days till December 23rd, 2019. The government then relaxed the norms for north-eastern states over the next 4-5 days, which improved the reaction.

The last ten days, i.e., from December 28th, 2019 to January 5th, 2020 however, were primarily dominated by adverse reactions from students in universities, opposition parties, and Muslim minorities with families in neighboring states except for some positive reactions from benefitted

Figure 5. Sentiment Analysis of emotions expressed about NRC Scheme

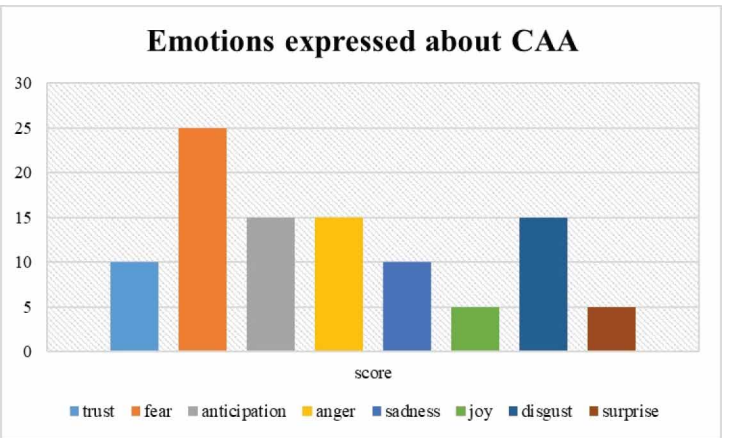
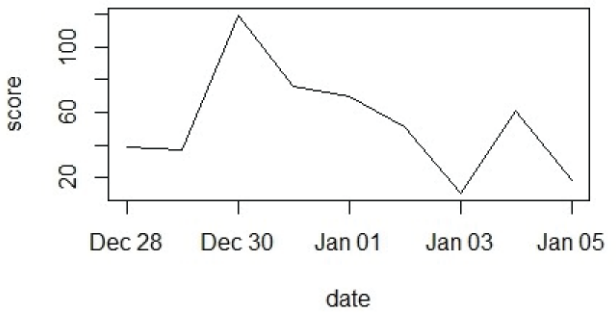


Figure 6. Sentiment Distribution of opinions about the CAA and NRC- 10 day's period



religious minorities (on December 30th, 2019 and January 4th, 2020) and this led to the plummeting sentiment distribution till present time.

State-Wise Analysis Results

The state of Kerala, which protested and objected to the CAA Scheme, is analyzed, and the results of the analysis are as follows.

Figure 7 illustrates the word cloud representing the most frequent triggering keywords reflecting the opinions about the Citizenship Amendment Act and NRC scheme, and it is found that: caa protests and anti-muslim are the frequent words indicating that the anti-muslim stance of the CAA act has triggered an adverse reaction in the state of Kerala.

Figure 8 illustrates the sentiment polarity chart, which shows that while 35 tweets are neutral and contemplative of the Act, 15 tweets are negative. Five tweets are positive, confirming the above results in Figure 7 that the provisions of the Act are biased towards the muslim minorities and hence were received negatively by the Kerala citizens who are majorly muslims.

Figure 7. Wordcloud results for Kerala

Figure 8. Sentiment Analysis of opinions about NRC Scheme in Kerala

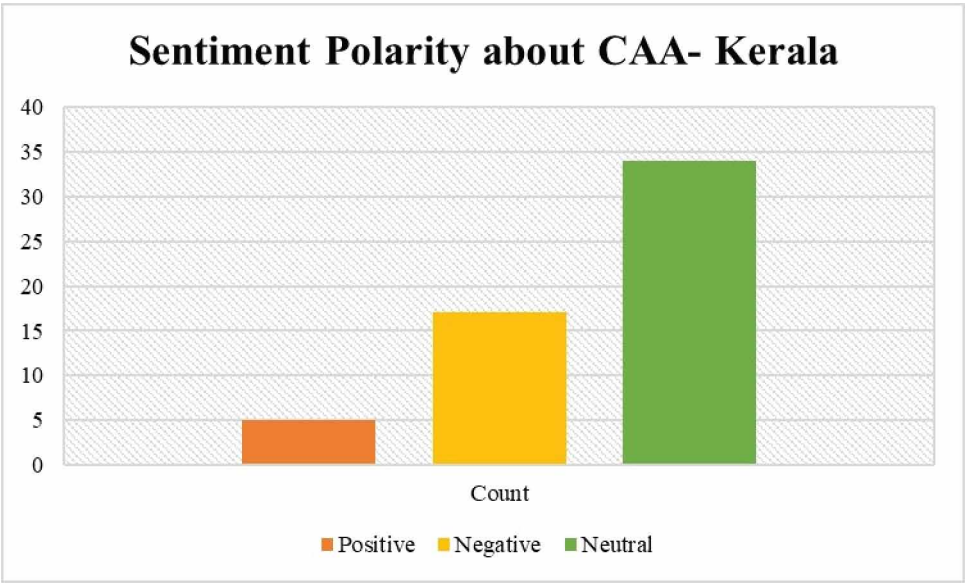


Figure 9 illustrates the emotion chart which corroborates the above sentiment chart in Figure 8, with negative emotions like fear, anger, and disgust dominating over more positive emotions like joy, trust, anticipation, and surprise.

Figure 10 illustrates sentiment distribution chart of opinions. The sentiment distribution is largely negative from December 31st to January 2nd and from January 4th to January 6th except January 3rd

Figure 9. Emotions expressed about the CAA Scheme in non-implementer like Kerala

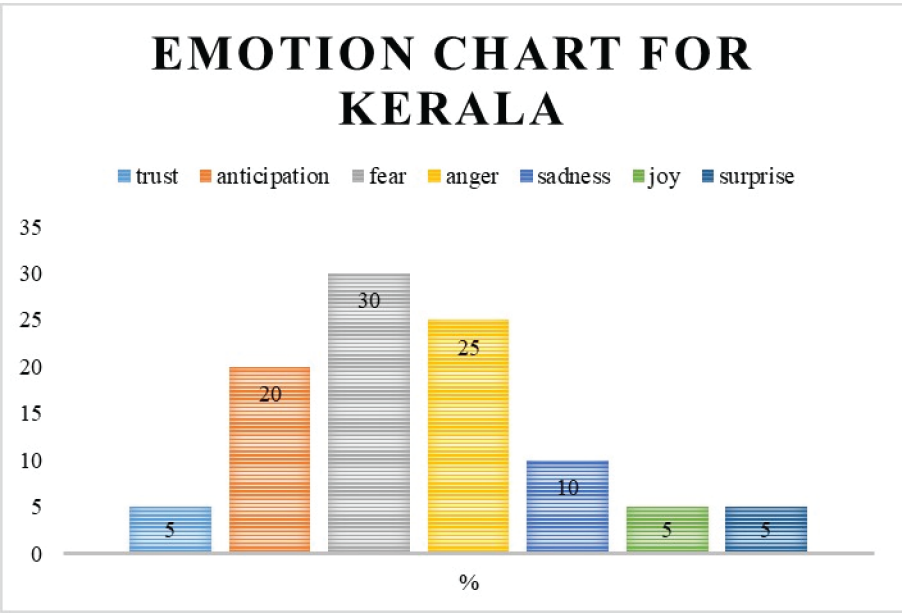
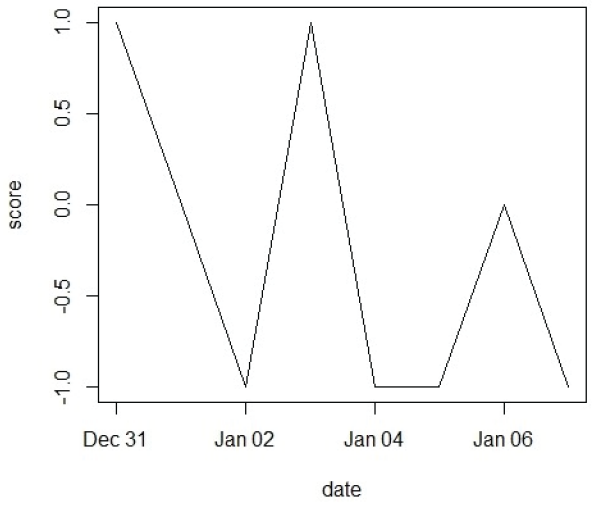


Figure 10. Sentiment Distribution of opinions about the CAA and NRC- 10 day's period



due to another majority religion in Kerala, i.e., Christians expressed their satisfaction regarding the CAA provisions being in their favor.

On the other hand, the tweets analyzed from the National Capital Region (NCR) constituting some parts of New Delhi, Uttar Pradesh, and Haryana presented contradictory results.

Figure 11 illustrates the word cloud representing the most frequent triggering keywords reflecting the Citizenship Amendment Act and NRC scheme's opinions. It is found that while some of the words like "caa protests" and "discriminatory" are prominent due to protests by the Delhi based university students and opposition parties, some words like "bhakts" are indicative of a positive reaction to CAA also reflected in the states of Uttar Pradesh and Haryana which implemented the provisions of the Act.

Figure 12 illustrates the sentiment polarity chart, which shows that while 40 tweets are neutral and contemplative of the Act, five tweets are found to be negative, and 15 tweets are found to be positive, confirming the above results in Figure 11 that the provisions of the Act are favorable and thus implemented by the states of UP and Haryana.

Figure 13 illustrates the emotion analysis chart for NCR and corroborates the above sentiment chart in Figure 12 with negative emotions like fear, anger, and disgust dominated by more positive emotions like joy, trust, anticipation, and surprise.

Figure 11. Wordcloud results for NCR

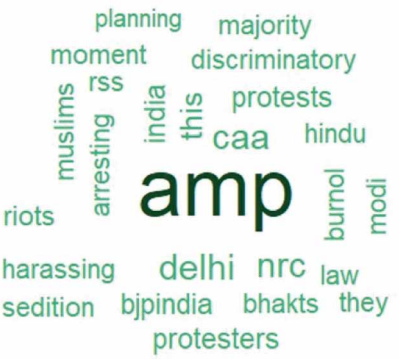


Figure 12. Sentiment Analysis of opinions about NRC Scheme in NCR

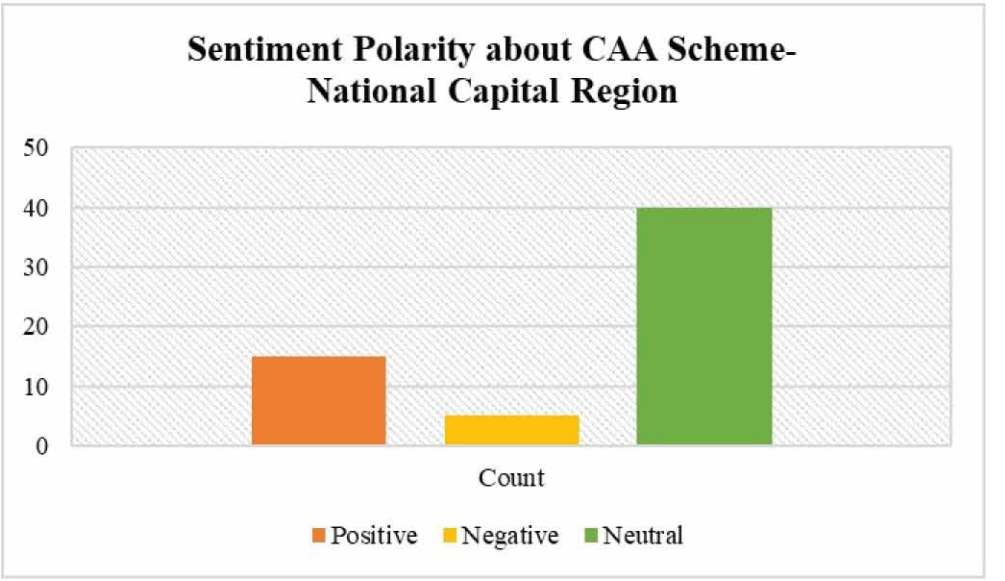


Figure 13. Emotions expressed about the CAA Scheme in implementer like NCR

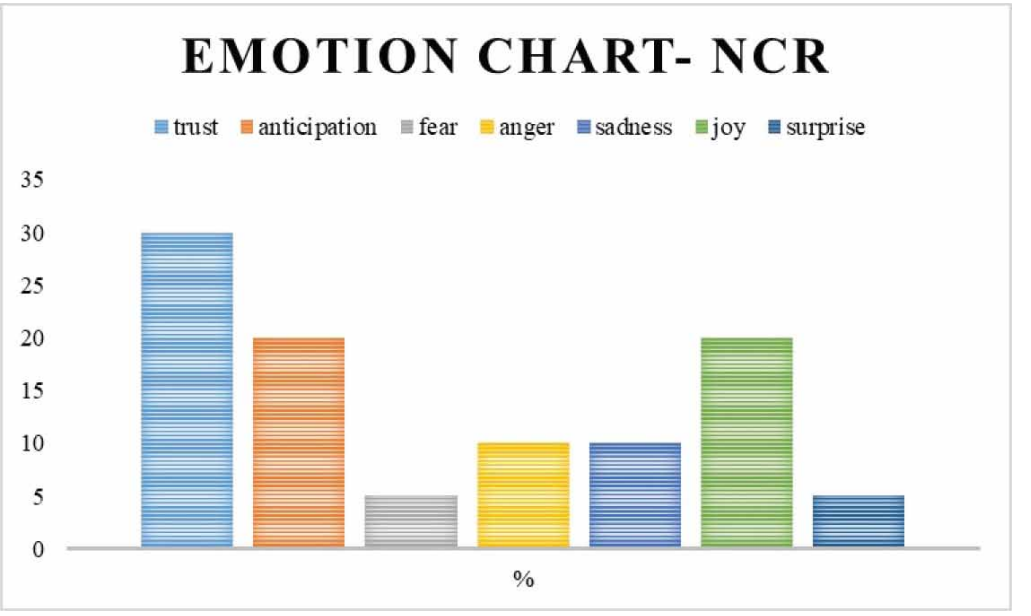
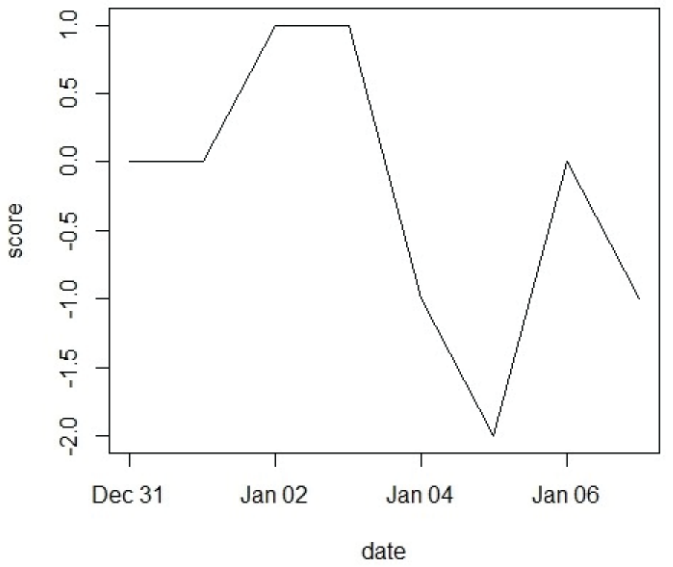


Figure 14 illustrates the sentiment distribution chart reflecting a lull in the sentiment from January 2nd to January 4th due to the Delhi protests by students and opposition parties. UP and Haryana's positive reaction is reflected in the positive sentiment distributed from December 31st to January 2nd and again from 4th to 6th.

Figure 14. Sentiment Distribution of opinions about the CAA and NRC- 10 day's period in NCR



DISCUSSION AND IMPLICATIONS

The paper aims to analyze the Citizenship Amendment Act (CAA) opinions and provide strategies to clear the misunderstanding about the Act's provisions. The implications of the paper are discussed both at a theoretical level (in terms of methodology contributed) and at a practical level (providing recommendations to change the negative public perception about the Act).

Theoretical Implications

The paper formulates a time-series sentiment analysis model that takes Twitter opinions about the Citizenship Amendment Act (CAA) and generates a sentiment distribution analyzing the varying opinions over time. A word-cloud and topic modeling analysis is also performed to identify the CAA's triggering and controversial keywords. Further, an overall country-wide sentiment analysis and emotion analysis are performed to analyze the scheme's emotions and understand the citizens' pain-points first at the national level. Further, the analysis is then performed at each state-wise level to capture each region's opinions and understand the public's grievances both at the nation-wide level and region-wise. This would help understand the apprehensions of affected people and clarify the provisions of the Act for their reassurance.

The paper thus presents a methodology to capture the varying public opinions and emotions about government schemes required in burning issues like the Citizenship Amendment Act considered a case in point. This methodological approach can be extended to analyzing different government schemes in India and across the globe.

Further, the practical implications and recommendations are provided below.

Practical Implications and Recommendations

Though the Citizenship Amendment Act (CAA) has done justice to the vast majority of the immigrant minorities from Pakistan, Bangladesh, and Afghanistan, the exclusion of Muslims from the north-east states, including Assam, is the root cause the negative opinions about the Act. Though significant modifications cannot be done at this stage in the Act, the Government and Judiciary can take steps

to change the public perception suitably by interpreting the provisions of the Act in greater detail and highlighting the following advantages.

Firstly, CAA assures that all citizenship-related documentation will be linked to the Aadhar card. If the Aadhar card is not produced, only then other documents are sought. All citizens, irrespective of religion, who can produce an authentic Aadhar card are thus, not applicable for scrutiny. Since Aadhar card is a standardized identification in contemporary India with several Aadhar enrolment centers opened for registration of new Aadhar cards in remote villages and with the presence of electronic Seva (e-Seva) centers which also offer Aadhar-related services, it is not difficult for even marginalized sections of the society to provide an Aadhar card. The linking of citizenship to the Aadhar card thus eliminates the need for other inconsistent documentation, which would be highly beneficial for most citizens. Thus, there is no need for citizens with genuine Aadhar cards to spread negative perceptions about the Act.

Secondly, the Act is only applicable to the immigrants who entered India via Assam before December 2014, thus applicable only to a niche set of people, and this need not, therefore, cause unrest among other parts of the country. This will also not threaten the local Assamese security since those immigrants who entered Assam before 2014(Nath, 2019) need to produce genuine Aadhar cards or other citizenship-related documents to prove their citizenship; otherwise, they will be scrutinized and punished for violating the Act. Local Assamese will not be threatened by Bangladeshi immigrants or refugees, which is a positive aspect of the Act to be noted.

Thirdly, CAA only impacts the immigrant Muslim minorities from Assam while the already existing and residing citizens who have genuine citizenship documents are not threatened, and their citizenship is not at peril, thus assuring their safety irrespective of their religion.

If the CAA is closely scrutinized, the rationale for excluding Muslim minority immigrants from the law is very clearly stated as follows: while other religious minorities like Christians, Sikhs, Buddhists, etc. face the threat of persecution from neighboring countries like Pakistan, Bangladesh, and Afghanistan, muslim minorities do not face the same level of threat due to Islam being the majority religion in those countries and hence have been excluded from the Act. However, there is no other vested interest or intention from an anti-Muslim point of view, which has been the primary cause of misunderstanding, and this can be resolved by amicably discussing the above-stated rationale.

Further, social media platform could be leveraged by the government in framing social media updates about the CAA in a suitable diplomatic way by avoiding using controversial keywords like ‘anti-muslim’, ‘discriminatory’, ‘religious intolerance’ and ‘protests’ thereby adding fuel to the stigmatizing attitude towards the CAA. Instead, positive words like ‘rightful citizenship’, ‘Aadhaar enrolment’, ‘social security’ and ‘registered citizen’ could be promoted regarding CAA in order to reassure the people of the fairness and justice in the provisions of the Act.

These measures taken by the Government are only recommendations to change the negative perception created due to misinterpretation of the CAA provisions.

CONCLUSION AND FUTURE SCOPE OF RESEARCH

The paper has attempted to determine the public’s opinions regarding a burning scheme introduced, namely the Citizenship Amendment Act and its impact on the National Citizenship Register (NRC) and National Population Register (NPR) nation-wide and state-wide level today. For this purpose, the micro-blogging platform Twitter and its application programming interface (API) have been adopted to analyze the sentiment and identify the triggers for a negative response to the citizenship act from all quarters.

The sentiments were neutral though inclined towards a negative polarity due to misinterpretation of some of the clauses in the Act. To clarify this misinterpretation, recommendations to change the public perception have been provided by highlighting some of the Act’s merits and how it can be viewed more positively.

States that implemented the Citizenship Amendment Act were found to exude positive sentiment, while those that did not implement the Act expressed contempt towards the Act, thus indicating that social media is a true reflection of public opinion.

Thus, the Citizenship Amendment Act is an amendment that has its pros and cons but needs careful examination to avoid misinformation, and this would help alleviate the negative sentiment among the citizens.

Therefore, this study is a case in point to demonstrate the power of social media in reflecting public opinions and triggering further action through sentiments if messages are not strategically framed, keeping in view the needs of the citizens. After all, India is a democracy for the people and the people and run by the people!

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