

# MULTILAYER PERCEPTRON ANALYZED THE AUDIENCE PERCEPTION TOWARDS CITIZENSHIP AMENDMENT ACT-CAA (INDIA)

Mr. M. Shriram<sup>a</sup>, Dr. S. Arulchelvan<sup>b</sup>

## Abstract

This study provides an in-depth analysis of the public perceptions on Citizenship Amendment Act- (CAA) portrayed in the media. In a multicultural context, the media and their activities are generally seen as the most important and strategic tool for information flow for the government and policymakers and their actions and activities. Although the media has a certain influence on public policy, it is often hard to see how much it magnifies or restricts / censors messages sent to the public regarding specific policies. The main purpose of this research is to assess the extent of media influence on various public policies on audiences. This research not only examines the specific cases of the CAA's Media Coverage but also seeks to gain public feedback on the coverage. Furthermore, this research examines how observers perceived the way media responded and acted on the coverage the controversial bill -CAA while it was passed in the Parliament. Here this study analyzes the CAA's media coverage and its impact on audiences. The research further assesses how multilayer perception is measured and thereby how the media responds to messages that are of public interest to the audience. Although this study raises a particular issue of audience perception of media coverage in the CAA and its aftermath which have caused widespread debate in the public sphere. But a limited amount of research has been conducted on this subject.

**KEYWORDS:** Media coverage, CAA, Migrants, Ethnic Identity, Refugees, and Multilayer Perception

## INTRODUCTION

In today's world, the media is often regarded as an ambassador for the people, emphasizing the interests of the people, social cohesion, and national unity (Okoro, 2013, Lewis, 2008). However, many media outlets operate intending to stabilize their supporters and the target the revenue stream. Here the press and media management use sensational fabrications to reconcile the news, which often leads the media to distract readers and viewers (Carmichael, Brulle & Huxster, 2017, Pennycook & Rand, 2021). The media bias in reporting of CAA, can often leads more disenchantment among the audience (Kent, 2013, Cohen, Ding, Lesage, & Stolowy, 2017). Yet some continues to provide misinformation to increase circulation, audience and revenue. In many areas, the media often monopolizes the information flow, by sidelining important public issues and replaced with other sensationalized stories (Dubois & Blank,

2018, Kanozia, Arya, Singh, Ganghariya, & Narula, 2021).

## Review of Literature

The media, in essential cases, directly or indirectly exposes the futility that takes place in politics and governance. In the initial stages of passage of CAA law, media gave a limited space on the issue of CAA. This could be the result of many Indian people live of states that doesn't share geographical border with Pakistan, Bangladesh and Afghanistan. In those states, the CAA is not widely seen a threat or a major political topic (Sufian, 2020).

The media plays a primary role in shaping society's views on cultural, political, and socio-monetary guidance. All these elements show that the media strength and a useful messenger in delivering messages to the mass target audience. Further an impartial media reporting encourages the audience to seek more information (McCombs, & Valenzuela, 2020, Hoewe, & Peacock, 2020). In the recent years, audience are increasingly connected to the media and constantly bombarded with messages that has the potential to change their attitudes and

<sup>a,b</sup>Department of Media Sciences, Anna University, Chennai - 600025, Tamil Nadu, India.  
E-mail: <sup>a</sup>shriramnew1986@gmail.com, <sup>b</sup>arulchelvansriram@gmail.com

viewpoints (Wang & Shoemaker, 2011).

### The Passage of CAA

In the Indian Parliament, the CAA Bill was introduced in 2016, which sought to amend the Citizenship Act of 1955. The Joint Parliamentary Committee (JPC) submitted its report on this particular bill on 7 January 2019. The Citizens' Amendment Bill was passed in the Lok Sabha. But with the dissolution of the 16th Lok Sabha, the bill expired. At the start of the 17th Lok Sabha, the same bill was re-introduced by Home Minister Amit Shah on December 9, 2019. It was passed in the Lok Sabha on December 10 and later in the Rajya Sabha on December 11, 2019. The bill has become law after it was approved by President Ramnath Govind of India. During the passage of this Act, Parliament presented strong criticisms in both houses. The law has also drawn criticism from various political parties.

### Citizen Amendment Act, 2019

The Act grants Indian citizenship to Hindus, Buddhists, Parsis, Jains, Christians, and spiritual minorities who have fled the Muslim-majority countries of Bangladesh, Pakistan, and Afghanistan. This offer is suitable for people who entered India before December 2014 due to concerns about spiritual persecution. This law excludes only Muslims who have additionally fled from the above countries. Under this law, citizenship is granted to eligible people within 6 years (Chandrachud, 2020, Khan, 2020).

### Coverage of CAA Media

The history of a severely polarized political situation, in the past, often raises with definite suspicion the way of society, including the media, about the CAA (Klingeren, Boomgaarden, & Vreese, 2017). The media is often regarded here as an excellent distribution to tell and analyze the records given to the target market (Hart, 2013). As far as the CAA is concerned, the Indian media is not currently criticized for the safe analysis and protection of CAA-related information. Only after protests and massive public pressure the media have started to cover with the new law (Alam, 2020).

### Purpose of the study

This study aims to examine how media cover sensitive issues particularly like CAA and its impact on the Audience. Additionally, the study also identifies the how the audience react to the Media's coverage on CAA.

### Objectives

To analyse audience's perception of Media and Newspaper's coverage of CAA.

To study the impact Media coverage on CAA.

### Methodology

This study has been analyzed by the quantitative Method. The samples have taken in Chennai city above 200 in which 176 samples were selected with proper answers. The samples are men 90 and women 86. According to Categorical Variable Information Percent Factor Educational Qualification are Upto HSC 6.2% UG 46.0% Diploma 3.4% PG and above 31.2% Persuading PG 0.6% and Professional 9.1% Doctorate 3.4%. Annual family income in rupees have 1-3 lacs 30.1% 3-6 lacs 30.1% > 6 lacs 26.1% and <1lac 13.6% .

### Multilayer Perceptron

Multi-layer perceptron (MLP) is a supervised learning method.  $f(\cdot): R^m \rightarrow R^o$  By practicing on a database, we learn a function about the number of dimensions for input and the number of dimensions for output. The multilayer perceptron (MLP) is a feedforward synthetic neural network that generates an output from a set of inputs. An MLP is characterized by multiple layers of input nodes connected as an activated diagram between the input and output layers. Uses of MLP Back probation are to train the network. Perceptron has an input layer and an output layer. Like the perceptron, the inputs are pushed forward by the MLP, taking the dot product of the input with the weights between the input layer and the hidden layer (WH).

### Work of Multilayer Perceptron

Uses of MLP:

MLPs are suitable for classification prediction problems where inputs are assigned a class or label. They are also suitable for regression prediction problems where a real-valued quantity is predicted given a set of inputs.

### RESULT

Table 1. Case Processing Summary

		N	Percent
Sample	Training	124	71.7%
	Testing	49	28.3%
	Valid	173	100.0%
	Excluded	3	
	Total	176	

In Case Processing Summary (Table: 1), Sample value of Training is (124) 71.7% and Testing (49) 28.3%. The Valid numbers are in 173 with 100.0%.

Excluded value is 3, and Total numbers are 176.  
 Network Information Input Layer Factors 1  
 Preference of Media 2 Influence of Newspaper 3  
 Preference of Information 4 Perception of  
 Newspaper Coverage 5 Influence of CAA Coverage  
 6 Impact of CAA Coverage on Audience Number of  
 Unitsa 73 Hidden Layer (s) Number of Hidden  
 Layers 1 Number of Units in Hidden Layer 1a 2

Activation Function Hyperbolic tangent Output  
 Layer Dependent Variables 1 Media and Societal  
 Impact Number of Units 1 Rescaling Method for  
 Scale Depends Standardized Activation Function  
 Identity Error Function Sum of Squares a. Excluding  
 the bias unit and Figure 1: Hidden Layer activation  
 function: Hyperbolic tangent, Output layer  
 activation function: Identity.

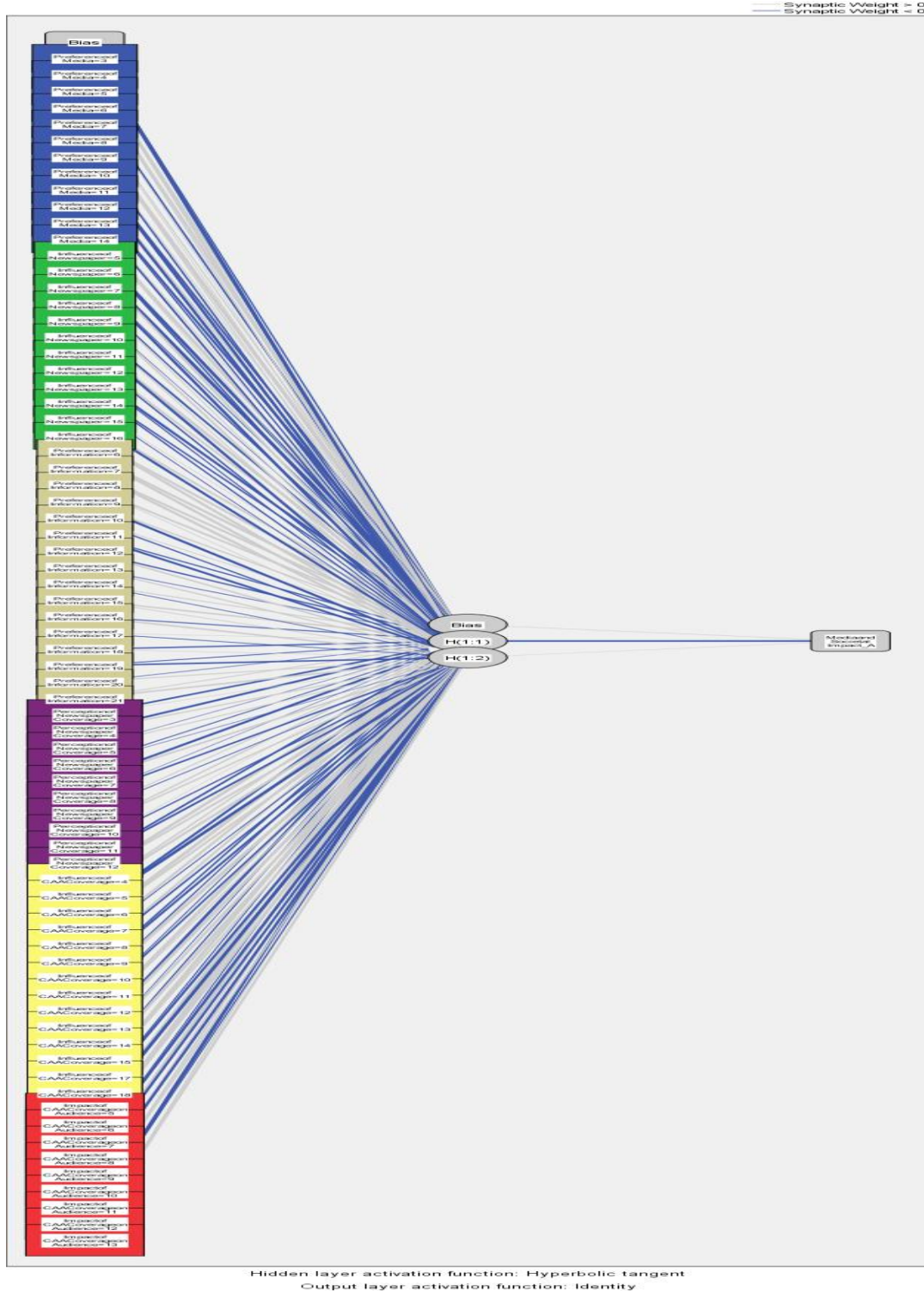


Figure 1. Hidden Layer activation function: Hyperbolic tangent Output layer activation function: Identity

Table 2. Model Summary

<b>Training</b>	Sum of Squares Error	52.203
	Relative Error	.849
	Stopping Rule Used	1 consecutive step(s) with no decrease in error <sup>a</sup>
	Training Time	0:00:00.03
<b>Testing</b>	Sum of Squares Error	37.758
	Relative Error	.940
Dependent Variable: Media and Societal Impact		
a. Error computations are based on the testing sample.		

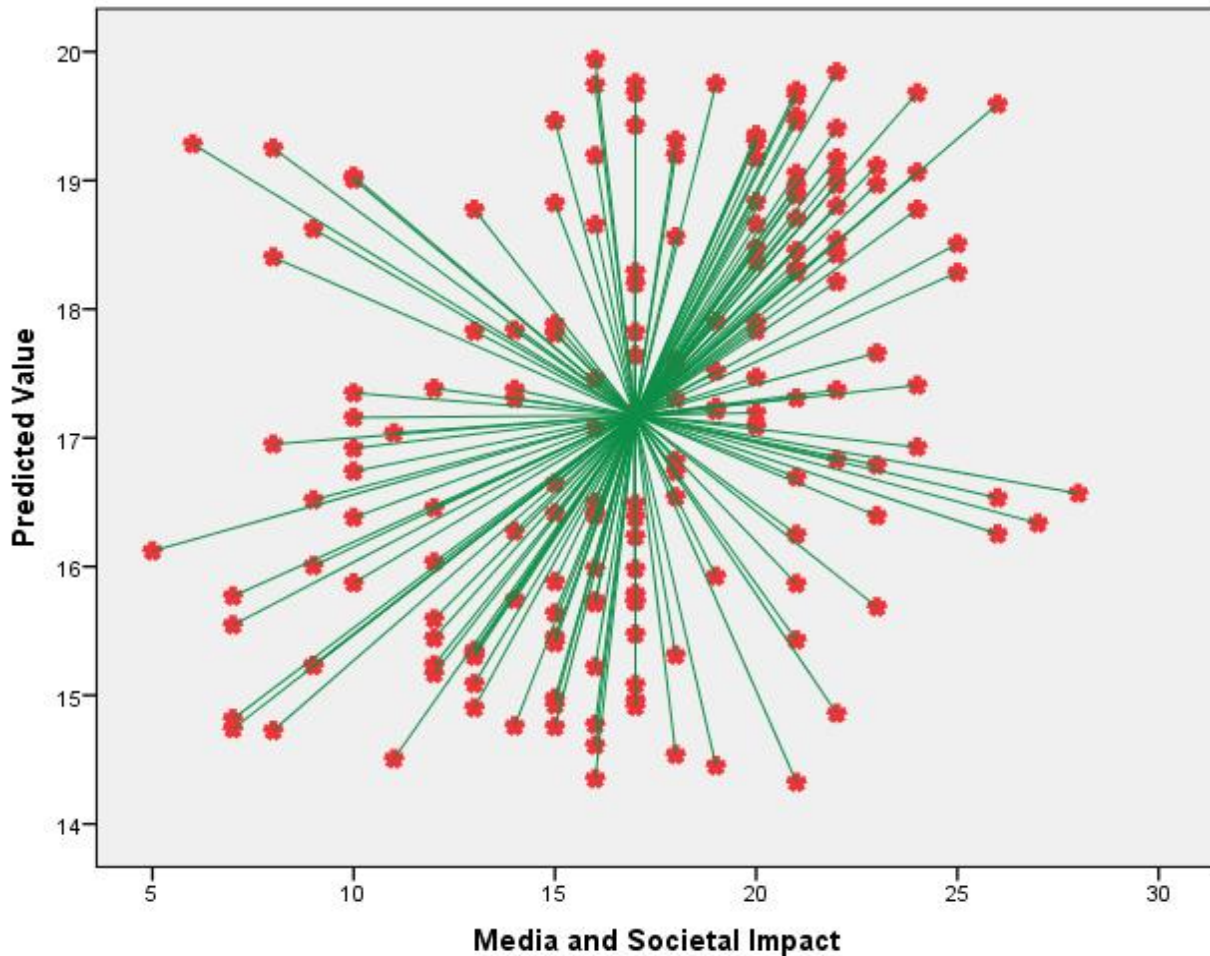


Figure 2. Media and Societal Impact

The distribution of Dependent Variable: Media and Societal Impact of CAA Coverage on Audience in a region can be formed. The graph line represents the most probable Media and Societal Impact distributed positions, and the color gradually fades from red to blue, indicating that the probability of Media and Societal Impact distribution is gradually increasing (Table: 2, Figure: 2). Based on the image, we can design the Media and Societal Impact clearance route or Media protection route with high impact and Figure 3: Predicted Value of Media and Societal Impact with a significant level. Table: 3 and Figure: 4 show that the through the

models above, we can evaluate the Independent Variable Importance of Preference of Media Importance is 0.158 and Normalized Importance is 83.0%. Influence of Newspaper Importance is 0.150 and Normalized Importance is 78.8%. Preference of Information Importance is 0.136 and Normalized Importance is 71.4%. Perception of Newspaper Coverage Importance is 0.183 and Normalized is 95.9%. Influence of CAA Coverage Importance is 0.182 and Normalized Importance is 95.6%. Impact of CAA Coverage on Audience Importance is 0.191 and Normalized Importance is 100.0%.

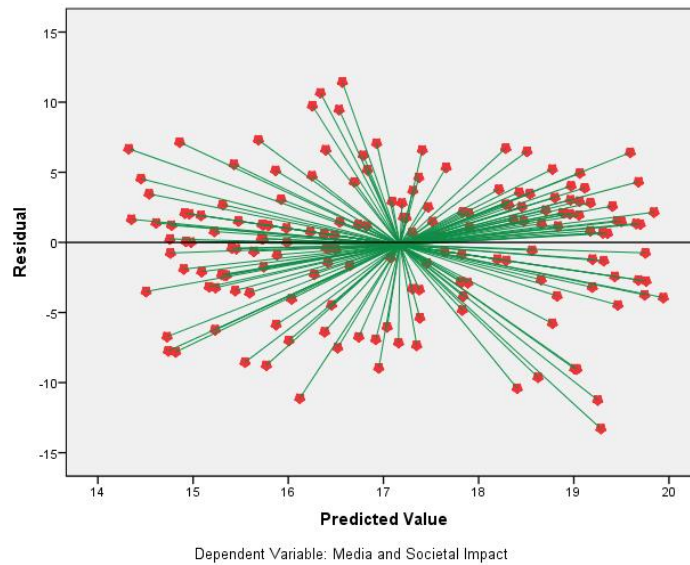


Figure 3. Predicted Value of Media and Societal Impact

Table 3. Independent Variable Importance

	Importance	Normalized Importance
Preference of Media	.158	83.0%
Influence of Newspaper	.150	78.8%
Preference of Information	.136	71.4%
Perception of Newspaper Coverage	.183	95.9%
Influence of CAA Coverage	.182	95.6%
Impact of CAA Coverage on Audience	.191	100.0%

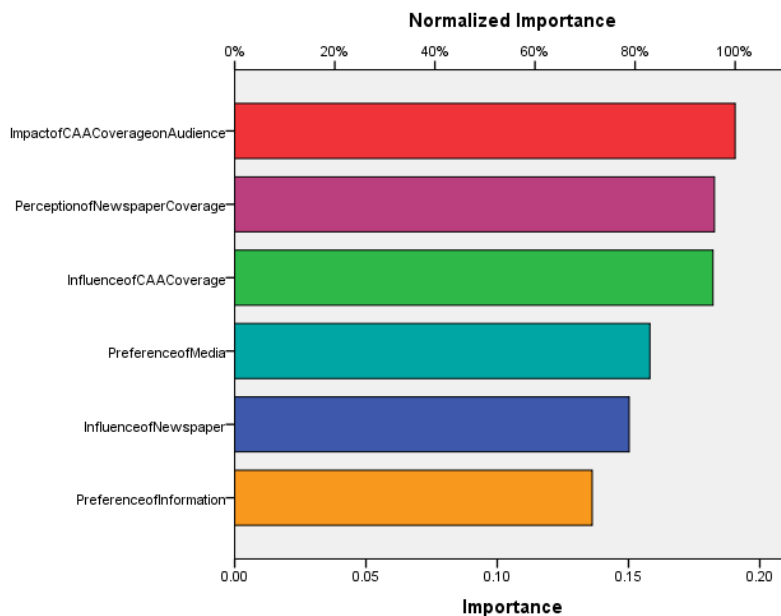


Figure 4. Normalized importance of the Factors

**DISCUSSION**

In the context of the severely polarized political situation, the impact of the CAA is often viewed with strong suspicion by the community, including

media coverages on such issues. Yet media is often regarded as the primary source to report and propagate the information to the audience (Dixit, 2021). When the media does not provide enough

information and facts to the audience, it can be difficult for the public to make meaningful assumption over the subjects. Such information can be made clear to the audience by providing facts in a clear and conscious manner (Hoewe & Peacock, 2020). And should be readily made available to the public (Cotterrell, 1999). The introduction of the CAA was hastily passed with limited or no public consultation and consideration. Because the information about CAA did not directly inform the public before and after, Media's role in dissemination becomes even more crucial (Kumar & Gandhi, 2020). The media plays an important role in informing the public, but the media has failed to do so. In this way, the media coverage directly affects the public by restricting the content and information flow of the audience. Furthermore, the findings show that the newspaper provides adequate coverage of CAA - related issues.

#### **Preference of Media**

The language of most of the newspapers is mostly read by Tamil 36.4% and English 31.8%. 19.3% of electronic media, 12.5% of print media, 26.1% of social media, and 39.8% of all the above want the media to get information. People have more access to the internet (social media, websites, podcasts, blogs and more, & etc) 14.8%.

#### **Influence of Newspaper (Over another medium)**

Approximately 43% of viewers in this study generally believe that newspapers provide a true version of the facts compared to television news programs. Only 14% of respondents believe that newspapers do not need to provide more accurate facts than other mass media. Recognition and detailed presentations are greatly influenced by the credibility factor of newspapers, the main reason why one-third of the respondents in this research value choose newspapers in newspapers and other media for its credibility and credibility and 32% of readers agree that newspapers provide comprehensive coverage, and this is one of the most important factors in picking up newspapers to learn about daily events.

When it comes to the consumption of information from newspapers, readers are much divided in the medium in which newspaper products are read. Nearly 37% of readers here prefer to read newspapers in hard copy format or pick them up in stores. About 29% of respondents say they read newspapers online, and 34% say they read a news article in hard copy newspapers and other digital media.

Based on the fact that people tend to read

newspapers more often, the results are different, with 27% of readers using daily newspapers. Each was approximately 25% divided equally. When asked about their topic of interest, more than 40% of respondents prefer news-related national events and are closely followed by 36% who want to learn more about local affairs. Significantly about 22% of respondents say they are interested in following international events as well.

#### **Preference of Information**

When asked about the type of news they see in the newspaper, nearly 25% of people say politics is their favorite topic, followed by sports-related articles 14.8% and other news articles about education, local city news, and crime news about 12.5% among readers. Of these, 29% choose news articles, followed by 26.1% for featured articles, and 15.3% for editorials. In choosing news articles, almost half of the readers prefer news articles with both pictures and texts. A further 52.3% of readers prefer medium-sized news articles over short-sized articles (31.2%) and longer articles (16.5%).

#### **Perception of Newspaper Coverage**

More than 54% say they have not been able to measure the impact of CAA's newspaper coverage. More than 38% of respondents believe that newspapers played a major role in CAA coverage. The media (51.1%) believe that CAA-related news is neutral. But 31.2% of readers view this policy emotionally, although notable readers have a strong positive or negative perception of the issue.

#### **Influence of CAA Coverage**

More than 40% of respondents in this study were very skeptical when they were optimistic about newspaper coverage about the CAA, 31.8% reported. Similarly, 18.8% of readers said they did not fully trust the media, 34% were satisfied with media CAA coverage, and 25% of respondents were not satisfied. But the majority of respondents (63.6%) believe that newspapers provide adequate coverage for CAA-related issues. Here 40.3% of respondents take a neutral position.

#### **Impact of CAA Coverage on Audience**

In this research, 13.6% voted in favor of CAA policy and voted for political parties opposed to the implementation of CAAs and 12.5% of respondents against CAA voted for a party that supports CAA. However, 47% are happy with their political parties that agree with their views on the CAA. The majority (52.8%) could not answer whether their opinion had changed after the CAA Act and 36.4%

said it had not.

### Media and Societal Impact

41.5 percent say the media does not cause unwanted net positive or negative effects on society. More than 56% of respondents believe that one or two political groups (ruling and opposition political parties) are dishonest. When some people discuss the CAA with the public, only 28% of them feel comfortable expressing their opinions.

### Conclusion

The media is often viewed as an indispensable tool or a threat, that present facts and opinions to the public; however, many media outlets act to entertain or satisfy their supporters and viewers by providing favorable contents to them instead of challenging the establishment. These types of reporting create an atmosphere for the general public or non-partisans view media with even stronger suspicion (Kent, 2013, Stroud, Muddiman & Lee, 2014,). When reporting on sensitive topics like CAA and others, where the general public might not be well informed, here Media becomes first means for audience to learns about the issue. And Media might exercise this advantage to form their own narrative. This also gives them the right to define and develop specific policies (Groeling, 2013, Larcinese, Puglisi & Snyder, 2011). In this particular study, when covering sensitive issues like CAA the media has to be unbiased and concerned about impact its messages can be interpreted. More nuances should be applied when issues covered concerning marginalized or minorities (Ohm, 2021). The media plays a vital role in shaping society's perceptions of culture, politics, and socio-economic politics (Jackob, 2010, Garnham, 2020). All of these factors indicate that the media will become a powerful tool for providing information to the public. It thereby creates good results by promoting good ideas and beliefs and attracts the attention of the audience. In recent years, people have become increasingly involved in the media to get information about political changes (Kirilenko, Molodtsova & Stepchenkova, 2015).

### References

- [1] Okoro, E. (2013). The media, development communication, and governance in Nigeria: The press for national integration. *International Journal of Academic Research in Business and Social Sciences*, 3(11), 541.
- [2] Lewis, P. M. (2008). Promoting social cohesion: the role of community media.
- [3] Carmichael, J. T., Brulle, R. J., & Huxster, J. K. (2017). The great divide: understanding the role of media and other drivers of the partisan divide in public concern over climate change in the USA, 2001–2014. *Climatic Change*, 141(4), 599-612.
- [4] Pennycook, G., & Rand, D. G. (2021). The psychology of fake news. *Trends in cognitive sciences*.
- [5] Cohen, J., Ding, Y., Lesage, C., & Stolowy, H. (2017). Media bias and the persistence of the expectation gap: An analysis of press articles on corporate fraud. *Journal of Business Ethics*, 144(3), 637-659.
- [6] Dubois, E., & Blank, G. (2018). The echo chamber is overstated: the moderating effect of political interest and diverse media. *Information, communication & society*, 21(5), 729-745.
- [7] Kent, M. L. (2013). Using social media dialogically: Public relations role in reviving democracy. *Public relations review*, 39(4), 337-345.
- [8] Kanozia, R., Arya, R., Singh, S., Ganghariya, G., & Narula, S. (2021). A Study on Fake News Subject Matter, Presentation Elements, Tools of Detection, and Social Media Platforms in India. *Asian Journal for Public Opinion Research*, 9(1), 48-82.
- [9] Sufian, A. (2020). Geopolitics of the NRC-CAA in Assam: Impact on Bangladesh–India Relations. *Asian Ethnicity*, 1-31.
- [10] McCombs, M., & Valenzuela, S. (2020). *Setting the agenda: Mass media and public opinion*. John Wiley & Sons.
- [11] Hoewe, J., & Peacock, C. (2020). The power of media in shaping political attitudes. *Current Opinion in Behavioral Sciences*, 34, 19-24.
- [12] Wang, X., & Shoemaker, P. J. (2011). What shapes Americans' opinion of China? Country characteristics, public relations and mass media. *Chinese Journal of Communication*, 4(01), 1-20.
- [13] Khan, T. (2020). The Citizenship Amendment Act, 2019: A Religion Based Pathway to Indian Citizenship. Available at SSRN 3665743.
- [14] Chandrachud, A. (2020). Secularism and the Citizenship Amendment Act. *Indian Law Review*, 4(2), 138-162.
- [15] Van Klinger, M., Boomgaarden, H. G., & De Vreese, C. H. (2017). Will conflict tear us apart? The effects of conflict and valenced media messages on polarizing attitudes toward EU immigration and border control. *Public Opinion Quarterly*, 81(2), 543-563.
- [16] Hart, C. (2013). Argumentation meets adapted

- cognition: Manipulation in media discourse on immigration. *Journal of pragmatics*, 59, 200-209.
- [17] Alam, M. (2020). Poetry of Resistance: From the anti-CAA protests in India. *Feminist Dissent*, (5), 275-279.
- [18] Roy, S., Mukherjee, M., Sinha, P., Das, S., Bandopadhyay, S., & Mukherjee, A. (2021). Exploring the dynamics of protest against National Register of Citizens & Citizenship Amendment Act through online social media: the Indian experience. *arXiv preprint arXiv:2102.10531*. ----
- [19] Bhatia, M. (2021). State Violence in India: From Border Killings to the National Register of Citizens and the Citizenship Amendment Act. In *Stealing Time* (pp. 171-196). Palgrave Macmillan, Cham. --
- [20] Dixit, P. (2021). The Citizenship Debate in India: Securing Citizenship for the Stateless. *Available at SSRN 3819159*.
- [21] Cotterrell, R. (1999). Transparency, mass media, ideology and community. *Journal for Cultural Research*, 3(4), 414-426.
- [22] Kumar, N., & Gandhi, M. (2020). The Citizenship Amendment Act 2019 (CAA) and National Register of Citizens (NRC): The Cuteness Law in India. *Journal of Critical Reviews*, 7(19), 3866-3875.
- [23] Kent, M. L. (2013). Using social media dialogically: Public relations role in reviving democracy. *Public relations review*, 39(4), 337-345.
- [24] Stroud, N. J., Muddiman, A., & Lee, J. K. (2014). Seeing media as group members: An evaluation of partisan bias perceptions. *Journal of Communication*, 64(5), 874-894.
- [25] Groeling, T. (2013). Media bias by the numbers: Challenges and opportunities in the empirical study of partisan news. *Annual Review of Political Science*, 16, 129-151.
- [26] Larcinese, V., Puglisi, R., & Snyder Jr, J. M. (2011). Partisan bias in economic news: Evidence on the agenda-setting behavior of US newspapers. *Journal of public Economics*, 95(9-10), 1178-1189.
- [27] Ohm, B. (2021). Media against communication: media/violence and conditionalities of Muslim silencing in Northern India. *Media, Culture & Society*, 43(4), 750-763.
- [28] Garnham, N. (2020). *The media and the public sphere* (pp. 357-365). Routledge.
- [29] Jakob, N. G. E. (2010). No alternatives? The relationship between perceived media dependency, use of alternative information sources, and general trust in mass media. *International Journal of Communication*, 4, 18.
- [30] Kirilenko, A. P., Molodtsova, T., & Stepchenkova, S. O. (2015). People as sensors: Mass media and local temperature influence climate change discussion on Twitter. *Global Environmental Change*, 30, 92-100.