Study of Acceptance of Indian Political Cartoons in Facebook Landscape

Prasun Chakraborty, Anirban Chowdhury

Abstract: Indian society changed after digitalization and economical reformation. Currently, the Facebook is the most popular social media in India. The political cartoonist took that platform as an opportunity to share their thoughts and raise socio-political issues through their cartoons. The aim of the paper is to study responses (likeliness and affective) to political cartoons in respect to responsiveness towards cartoons, gender, and socio-economic status. The study was conducted among 875 Indians from different parts of India including males and females with various socio-economic backgrounds. The data captured in the form of sentiments (love, sadness, angry and happiness emotions) for each cartoon shared in the Facebook timeline. Then, relevant descriptive statistics were computed using IBM SPSS 20.0 software. Results showed that maximum Facebook users expressed their thoughts about political cartoons through emotions in terms of like, sad, angry, and happiness. It is found that male user are more likely to be expressive to political cartoons than female user. Mostly user from low and middle socio-economic backgrounds relate themselves with the cartoon scenarios and shown interest than users from higher class of the society. Hence, political socio-political scenarios can be communicated effectively using political cartoons in Facebook as the people of India are relating themselves with various cartoons.

Keywords: Political Cartoon, Indian Social media, Social Impact, Facebook

I. INTRODUCTION

India is always blessed with a countless number of talented and flourishing cartoonists. They are known for creating political awareness, a sense of satire, and their original draftsmanship. They typically combine artistic skills, concepts, and satire in order to question authority. Also, political cartoonists try to draw an attention on political violence, corruption, and other illnesses of the society. A good political cartoonist not only makes the target audience think about current events but also attempts to narrate their opinion from the cartoonist's point of view. [1, 2, 3, 4, 5, 6] In this context, it is necessary to highlight that the political cartoons are basically satirical depictions of a situation or political issue or event.

Manuscript received on August 20, 2021.
Revised Manuscript received on August 27, 2021.
Manuscript published on August 30, 2021.

* Correspondence Author

Prasun Chakraborty*, Professional cartoonist, National Institute of Design (NID), India

Anirban Chowdhury, Assistant Professor, User Experience Design, University of Calcutta, Kolkata (West Bengal), India.

© The Authors. Published by Blue Eyes Intelligence Engineering and Sciences Publication (BEIESP). This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Published By:
Blue Eyes Intelligence Engineering and Sciences Publication
© Copyright: All rights reserved.

Retrieval Number: 100.1/ijitee.J945008101021
DOI: 10.35940/ijitee.J9450.08101021
Journal Website: www.ijitee.org
They found relationship with network size and density. This research also identified the inverse relationship between duration of Facebook uses and sharing of affective responses. Usage of informal language and shortcut emotion rapidly increasing very fast in today’s social networking site. Through, the graphical icon such as emoticon helps to express and analyze the sentiment of social media user. [4, 23]

After several studies, it found that social media helps in political campaigning. Many scholar found the impactful evidence of social network; however, the use and miss use both are debatable. Its changing voting decisions, by influencing candidates’ perception or political information efficacy. The sentiment analyzing build path social media technology and voter. During local state campaigning in Mexico it was observed that Facebook emotion and emoticon study play vital role. [11]

Based on the above literature review, the aim of this paper is the understanding of acceptance of Political cartoon through like and emotions (sentiments) study in social media platform (Facebook). To achieve the aim, following objectives were considered –

1. To study likingness and emotional responses to political cartoons
2. To understand the status of each cartoon based on view, love, and likes data captured from Facebook
3. Influence of cartoon responsiveness, gender, and socio economic status on likingness of political cartoon

II. METHODOLOGY

A. Target population
A total number of participants responded for various cartoons is 875 (all are Indian). Among them 77.35% male and 22.65% female. Their age ranges from 22-50 years. The participant was among different cities of India like Kolkata, Mumbai, Dehradun, Delhi, Chennai and their Socio economic status ranging from INR 5 lakhs -15 lakhs per annum (except student).

B. Illustration of Political Cartoon
All cartoons shared in Facebook for this study is depicted in Fig.1. The author illustrated the cartoons considered in this study. The Cartoon 01 narrate the socio political chaos during Indian state election 2021. False promises of ruling Government vs exact situation were illustrate in the cartoon 02 through realistic way. The self-sufficiency and failure of Government shows in satire way through the cartoon 03. The procession of ruling political party on the death body of common people during COVID period. The cartoon 05 shows fighting of two heavy weight politician during election campaigning. During that time situation of common people, narrate through the cartoon 06. Again, the cartoon 03 shows the political drama. The cartoon 08 shows the international political situation. The cartoon 09 shows global impact of COVID-19, and cartoon 10 shows the Indian politician and common peoples fight against COVID-19. All the cartoons were shared and studied over period of 1 year (April 2020 to Mar 2021).

C. Measurement of acceptance and emotional responses
The data for acceptance and emotional responses have been captured in the form responses of Indian audiences using like, love, sad, angry and happy emotions for each cartoons shared in Facebook timeline.

D. Study of associations between various factors for likingness of political cartoons
Chi-square test of association along with like-hood ratio was computed using IBM SPSS 20.0 software. Odds ratio was also calculated for various factors (level of responsiveness toward the cartoon, socio-economic status and gender) to check the strength of associations.
III. RESULT AND DISCUSSION

A. Status of likeliness and emotional responses

Asper Facebook data, it is observed that the number of total likes is highest in Cartoon 09 score 133(15.20%) and the total lowest in Cartoon 07 score 45(5.14%) (Refer Table-1). This kind of result might be due to the message and element conveyed through composition of different cartoons. Any political cartoon is a kind of comedy about the political impact of society, and society is reacting to that particular situation. That is why time, place, and impact are very important in political cartoon. The cartoon 09 was able to gain high popularity because of the pandemic situation where the whole world is infected. Through one political leader flying kissing posture and of spreading COVID virus an element situation was narrated highly accepted by the audience. The layout was very simple, and the background color of the composition was very bright in cartoon 09. It is easy to capture the audience and indicate specific color of political party. Individual study of different cartoons and the characteristic number of highest love gained by Cartoon-10 and the lowest love gained by Cartoon 05. As mentioned, political cartoons are very much based on the message, which is conveyed through both cartoons 10 and 5. The cartoon 10 is spreading a very positive message, where it shows all political leaders in India forgetting their different ideological started fighting together against the Corona Virus. Therefore, it has proved through data most they would love to see leaders of different political party together when resolving any national level issued. This particular pandemic time and situation needs to be united effort rather than criticizing each other, which shows through cartoon 10. Almost in different situation and message convey through cartoon 05 got lowest love where its depict fighting with each other It is very rare that all cartoons convey all emotions, like angry love or sadness, because the story which they narrate is not necessary to convey all extreme emotions. Through data analysis, we found that only two cartoons were able to generate the emotion of sadness.

As compared to Cartoon 02 and Cartoon 03, which both convey sad emotions, Cartoon 02 is higher because it directly narrates the story of the cremation center place where people are dying and the graphics on the wall are Ache Din, which was promised by the ruling party. Cartoon 03, where the characters represent the Indian common people, holds an empty photo frame and their own Asthi, is Atmanirbhar (self-dependent). The common person in India carries for his own ash and all because they know that, even after death, they not able to get support from the government. As compared to other emotions like anger, here anger means people react angry at the system. Here, cartoon 2 is able to narrate the situation in which people react with their most angry emotions compared to cartoon 09, which is a lot less dramatic. The cartoon 09 also narrates the situation of the helpless world against a particular country, China. Compared with other emotions, humor, which is a core component of political cartoons. Humor only generates laughter and happiness. Once, R. K. Laxman (Legend Political Cartoonist of India) said in an interview that it is a more vital emotion that only humans have among all animals. [8, 9, 10] The statistical data analysis shows cartoons 01, 04, 05, 06, 08 and 09 are able to create a smile on the faces of the audience. The Cartoon 05, a comical way of presenting the fight between two heavy weight political characters, is able to capture the humor, which the audience expresses through their highest happiness. The ‘Cartoon 06’, which tries to capture the situation of ordinary people in an indirect way, captures the lowest humor or happiness. Both ‘Cartoon 05’ and Cartoon 06 are very interesting. These two cartoons were drawn during the time of the Bengal election. One is a direct interpretation through two heavyweight political leaders; the other is an indirect interpretation.

B. Resolutions from perceptual plots

A perceptual plot has been prepared based on no of view and love there are four quadrant in this plot. These four quadrants have different meaning which are described as follows-

1st Quadrant = low view and low love zone (least preference zone)
2nd Quadrant = High view and low love zone (See Fig. 2.)
3rd Quadrant = High view and high love zone (most preference zone)
4th Quadrant = low view and high love zone (See Fig. 2.)

Therefore, the political cartoons, which are in first quadrant, are least preferred cartoons and most preferred cartoons falls under the third quadrant.

Table-1: Likes and emotional responses to political cartoons.

<table>
<thead>
<tr>
<th>Cartoon No</th>
<th>Like (%)</th>
<th>Love (%)</th>
<th>Sad (%)</th>
<th>Angry (%)</th>
<th>Happy (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>66(73.33)</td>
<td>14(15.56)</td>
<td>0(0)</td>
<td>0(0)</td>
<td>10(11.11)</td>
</tr>
<tr>
<td>2</td>
<td>34(55.74)</td>
<td>10(16.39)</td>
<td>24(39.34)</td>
<td>3(4.918)</td>
<td>0(0)</td>
</tr>
<tr>
<td>3</td>
<td>87(66.41)</td>
<td>19(14.50)</td>
<td>16(12.21)</td>
<td>0(0)</td>
<td>0(0)</td>
</tr>
<tr>
<td>4</td>
<td>56(69.14)</td>
<td>13(16.05)</td>
<td>0(0)</td>
<td>0(0)</td>
<td>12(14.82)</td>
</tr>
<tr>
<td>5</td>
<td>29(60.42)</td>
<td>4(8.33)</td>
<td>0(0)</td>
<td>0(0)</td>
<td>15(31.25)</td>
</tr>
<tr>
<td>6</td>
<td>48(70.59)</td>
<td>19(27.94)</td>
<td>0(0)</td>
<td>0(0)</td>
<td>1(1.47)</td>
</tr>
<tr>
<td>7</td>
<td>38(84.44)</td>
<td>7(15.56)</td>
<td>0(0)</td>
<td>0(0)</td>
<td>0(0)</td>
</tr>
<tr>
<td>8</td>
<td>65(68.42)</td>
<td>20(21.05)</td>
<td>0(0)</td>
<td>0(0)</td>
<td>10(10.530)</td>
</tr>
<tr>
<td>9</td>
<td>112(84.21)</td>
<td>10(7.52)</td>
<td>0(0)</td>
<td>1(0.75)</td>
<td>10(7.520)</td>
</tr>
<tr>
<td>10</td>
<td>102(82.93)</td>
<td>21(17.07)</td>
<td>0(0)</td>
<td>0(0)</td>
<td>0(0)</td>
</tr>
</tbody>
</table>

Total number of participants (N) = 875; n = Number of participants responded for individual cartoons.
According to this study, cartoons 05, 02, 06, 07 and 04 are less preferred cartoon; and, cartoon 09, 10, 03, 08 and 01 are highly preferred cartoons. Among all these cartoons, cartoon 09 is most preferred cartoon and cartoon 05 is least preferred cartoon (Refer Fig. 2).

Another perceptual plotting has prepared and the plot is based on no of view and like and there are four quadrants in this plot. These four quadrants have different meaning which are described as follows-

1st Quadrant = low view and low like zone (least preference zone) (See Fig. 3.).
2nd Quadrant = High view and low like zone
3rd Quadrant = High view and high like zone (most preference zone) (See Fig. 3.).
4th Quadrant = low view and high like zone

Hence, the political cartoons, which are in first quadrant, are least preferred cartoons and most preferred cartoons falls under the third quadrant. According to this study, cartoons 05, 07, 02, and 04 are less preferred cartoon; and, cartoon 10, 03 and 08 are highly preferred cartoons. Among all these cartoons, cartoon 10 is most preferred cartoon and cartoon 05 is least preferred cartoon (Refer Fig. 3.).

![Fig. 2. Perceptual plot based on love ratings and number of views.](image)

![Fig. 3. Perceptual plot based on number of likes and number of views.](image)

C. Influence of cartoon responsiveness, gender and socio-economic status on likingness of political cartoons

There is a significant association observed between like of Political cartoon and cartoon type (low responsive vs. high responsive) of Indian audience \( \chi^2 (1) = 11.124, p=0.000852, \eta = 0.18 \). There is a significant association observed between like of Political cartoon and gender (female v. male) of Indian audience \( \chi^2 (1) = 190.299, p=0.000001, \eta = 0.77 \). There is a significant association observed between like of Political cartoon and socioeconomic status (low: INR < 5 lacs vs. high: > 5 lacs) of Indian audience \( \chi^2 (1) = 34.303, p=0.000001, \eta = 0.24 \).

In this study, the influence of three parameters were observed through chi-square test of association. These three parameters are cartoon responsiveness (is defined as level of sensitiveness towards a composition of a cartoon), gender (female vs male), and socio economic status (income bellow vs above INR 10 LPA). The odds ratio was calculated for these three factors to check the level of impact on acceptance of political cartoon. Odds ratio was highest for gender (OR = 86.949, % like = 74.3, refer Table-II) which means gender has the highest impact on likingness of political cartoons and males are more liking political cartoons than females [14]. This kind of result indicates that females are taking less interest on politics during use of Facebook . The level of cartoon responsiveness (OR =2.476, % like = 59.4, refer Table-II) had secondary impact on political cartoons likingness. This kind of findings due to various composition in respect to political event. The message through composition 5 and 2 both stands negative the cartoon 2 composition based on situation of death happened in Uttar Pradesh (state in India) where massive death happened during second wave of COVID 19. The cartoon 5 also narrate satire way the political fight between two heavy weight leader Prime Minister vs Chief minister of West Bengal, during West Bengal election 2021. Through online analysis of research it’s found that both of cartoons (2 & 5) get very less acceptance by the audience.

<table>
<thead>
<tr>
<th>Independent factor (S)</th>
<th>% Like</th>
<th>Odds ratio (Range at 95% CI)</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cartoon responsiveness (Ref. Low) High</td>
<td>59.4</td>
<td>2.476(1.462-4.195)</td>
<td>0.000852</td>
</tr>
<tr>
<td>Gender (Ref. Female) Male</td>
<td>74.3</td>
<td>86.949(39.144-193.14)</td>
<td>0.000001</td>
</tr>
<tr>
<td>Socio economic status (Ref. High) Low</td>
<td>61.0</td>
<td>1.299(1.219-1.383)</td>
<td>0.000001</td>
</tr>
</tbody>
</table>

Total number participant (N) = 362. * Data of two low responsive cartoons (cartoon 02 and cartoon 07) and two high responsive cartoons (cartoon 09 and cartoon 10) were considered for computed data presented in this table.
According to the study, responsiveness in Facebook platform the cartoon 9 and 10 are highly accepted by viewer, because of their composition concept and their message convey. The socio-economic status of Indian audience also had significant influence (OR = 1.299, % like = 61.0, refer Table-II) on likings of political cartoons at tertiary level. The result showed that the people those have income bellow INR 10 lakhs per annum (LPA) are more liking political cartoons than the people having income above INR10 LPA. This is because the middle class Indians are effected (both negative and positive) during various impactful political decision (as related political cartoons were shared immediately after these political events).

IV. CONCLUSION APPLICABILITY OF RESULT, LIMITATION OF THE STUDY AN FUTURE SCOPE

Political cartoon play important role to convey social crisis through social media platform like Facebook. In this study, it is observed that people are very responsive to various political cartoon because they relate themselves as it help them to express their emotion through different political cartoon. Therefore, in Indian context it is possible to conduct socio-political campaign through the social media and influence the target population. Through this study, it was found how gender and economic background plays impactful role during acceptance of Political Cartoon.

There are three important factors influencing the responses of Indians towards political cartoons are - responsiveness (sensitiveness), gender and socio economic status of target population. It is found that the Indian males are more proactively responses to shared political cartoons in Facebook. Indians who are sensitive towards cartoons are kin to express their emotions for political cartoons when shared in Facebook. Most of the population (from low and middle class background) are kin to respond to the shared political cartoons in Facebook. Sandoval-Almazan and Valle-Cruz (2018), found similar evidence during Mexico government election, where emotion and emoticon played very impactful role. [11] Therefore, it is possible to influence these Indian populations and the socio-political campaign might be effective using political cartoons in social media like Facebook. Although, like other research works, this research also has limitation. In this study, the Facebook was considered as social media for collecting user sentiments related responses, which can also be collected from other social media like Instagram, Twitter, and LinkedIn etc.

REFERENCES

10. H. A. Goswami, *Historical Overview on Political Cartooning in India with special reference to Assam*.

AUTHORS PROFILE

**Prasun Chakraborty** is a professional cartoonist. He has the post-graduate degree from National Institute of Design (NID), India and Master’s degree from Government Art College, India. He is currently working with School of Design (SoD), University of Petroleum and Energy Studies, Dehradun, Uttarakhand - 248007, India. He has also served as Designer and Senior Assistant Manager in Bombay Dyeing and Raymond respectively.

**Anirban Choudhury** is an author of a book titled "Neurodesign and Neuromarketing Startup Guide". He is a trainer of Design Thinking & Innovation and Data Analytics. He is an inventor of Non-parametric Mediation Statistics and Transition State Design Economics. He is a practitioner of Value-Based Design Education. He has joined as Faculty and Head of UX & IsD and R & D Coordinator to School of Design, University of Petroleum and Energy Studies, Dehradun, on October 2017. He has worked for MIT Institute of Design, Pune from January 2015 to September 2017 as an Assistant Professor of User Experience Design. He is an alumnus of the University of Calcutta. He was recently awarded the ‘Springer Young Researcher Award-2015 (Doctoral)’ given by Indian Society of Ergonomics (ISE) for his research work in the area of cognitive ergonomics and user experience design. He was also awarded the ‘Young Scientist Award’ (2014) by The Physiological Society of India for his Usability Engineering Research.
He awarded his PhD degree from the Indian Institute of Technology (IIT) Guwahati. Area of his PhD research was Cognitive Ergonomics and Anthropomorphic Product Experience Design. His areas of research and teaching focuses on Neurodesign and Neuromarketing Techniques, Cognitive Ergonomics, User Experience Design, Data Analytics, Virtual Ergonomics, Applied Ergonomics, Affective Design & Entrepreneurship. He has extensively worked on OHS at Regional Occupational Health Centre (E), Indian Council of Medical Research (ICMR). He is a member of the Design Research Society (DRS), Design Management Institute (DMI), American Psychological Association (APA), USA; Indian Society of Ergonomics (ISE), Association of Designers of India (ADI), Design Management Institute (DMI), UK; Indian Science Congress Association (ISCA), American Physiological Society (APS), USA; the Physiological Society of India (PSI), and the International Association of Engineers (IAENG). He has served as a Reviewer and as an editorial board member of several journals. He has 45+ Publications in National/ International Peer Reviewed Conferences/ Journals.