

## Analyzing the Influence of Celebrity Endorsement on Climate Change

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### Abstract

*Social media becomes the fastest communication medium of the era and had a deep impact on the attitudes of the users. Apart from the negative impacts of social media, it has potential to play an important role in exposing climate change that losses the resilience of the ecosystem of our planet, the daily life of human beings and other species. These impacts have been widely discussed on mainstream media. However, the role of social media, being a diverse media in nature, has been widely unexplored. This research is based on the premise that the social media, being a major source of inspiration and a triggering tool, enables the climate change activists around the world to fight for climate change and avoid its severe impacts. The study is qualitative in nature. In this study, the researcher explored the role of social media and how it makes trends of the tweets by the celebrities in Pakistan to initiate debates to fight climate change. The purposive sampling technique was adopted to analyze the tweets of four social media celebrities that initiate debates and mobilize environmental activist to build pressure on the policymakers for revising environmental policies and quick action to mitigate the environment losses during 2019 to 2021. The researcher conducted a survey from twitter users, adopting purposive sampling to explore the impacts of celebrities' tweets about climate change. The results proves that celebrities are more concerned with climate changes as compare to politicians. Further, INGO's and social activists are also taking keen interest to bring change on individual level.*

**Keywords:** Climate Change, Pakistan, Social Media, Twitter, Celebrities, Environment.

### 1. Introduction

Climate change is a long-term average of change in weather patterns that defines earth's local, regional and global climates. These changes comprised on a broader range of observed effects that

are associated with the term.<sup>1</sup> Likewise, smog is result of such climate changes that becomes a major reason of affecting human beings.

The global climate change cause threats to the well-being and prosperity of the people of Pakistan. Climate change is projected to raise the occurrence and intensity of natural hazards as well as intensify people's vulnerability. It is expected that visible high-rise temperature and frequent heat waves across the country will lead to increase number of hot days and nights and glacial melts that will bring changes in Indus River flows. Likewise, the trends of rainfall expected to shift (peak summer rain shifting to August and peak winter rains shifting to March). Such magnificent changes will affect the agriculture due to dependency of 42 percent of the population is attached with agriculture.<sup>2</sup>

Currently Pakistan had population of 223 million in Jan, 2021, in which 48.5 percent of population is female and 51.5 percent is male. The rural population is consisted of 62.7 percent of the total population and rest of the 37.3 percent population lives in urban areas. Pakistan is one of the emerging nations that digitalize it very rapidly. It can be assessed that there are 61.34 million internet users in Pakistan and internet penetration rate in Pakistan is 27.5% this year. Likewise, there are 46 million social media users in Pakistan and this figure is equivalent to 20.6 percent of the total population of Pakistan. So, it has potential to reach to most of the population directly and indirectly through the social media users and increasing internet users' day by day.

There is dire need to address the masses about climate change and such content that may accessible all the time for the users. Social media is the only option that can have maximum reach to the audience and remain available for all the users to access such content according to their

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<sup>1</sup> E. Dotto et al., "Liciacube - The Light Italian Cubesat for Imaging of Asteroids in Support of the NASA Dart Mission towards Asteroid (65803) Didymos," *Planetary and Space Science* 199 (May 2021): 105185, doi:10.1016/j.pss.2021.105185.

<sup>2</sup> Mannava V. K Sivakumar, *Sustainable Agricultural Development*, 2006.

convenience. Social media is playing a significant role in serving humans to communicate, including spreading information about the hazards of climate change. Social media is providing content about the climate movements and suggest actions that can bring more awareness and access policymakers to take steps to overcome the issue.

There is a significant change in the world that celebrities come forward to take up the issue with the intentions to mobilize the common people through their identity to play their part and convince the concerned authorities, international institutions and global alliances to develop their action plans and come forward with sustainable solution to overcome the rapid climate change. It can be easily observed that lots of celebrities throughout the world fighting against climate change through making movies, spending times in summer campaigns, developing alternatives products, self-ban on plastic products, peaceful strikes against deforestation, arranging walks, spending money to secure bio diversity of their regions and marine life.<sup>3</sup>

Likewise in Pakistan, celebrities belong to different walks of life, continued the mission here as Pakistan remain in top ten countries that are heavily influenced by climate change. This helps to bring the attention of concerned authorities and common people as well to come forward and be the active part of this cause. And social media remains the vital part to bring them all together on basis of a source of the message that triggers the receivers to fight climate change.

Subsequently, Twitter is one of the renowned social media applications among the notables on global level including the celebrities mostly.<sup>4</sup> The main focused on twitter and the way celebrities take up the global issue of climate change in local context and impacts that enables their followers to lead the discussion towards a solution or bring the attention to certain topic.

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<sup>3</sup> B. T. Dudley, "Casino Exclusion Technique Exploration: Framework Development." (dissertation, 2003).

<sup>4</sup> Simon Lindgren and Ragnar Lundström, "Pirate Culture and Hacktivist Mobilization: The Cultural and Social Protocols of #wikileaks on Twitter," *New Media & Society* 13, no. 6 (June 27, 2011): 999–1018, doi:10.1177/1461444811414833.

## **2. Literature Review**

This study aims to explore the how the celebrities become a part of this cause and bring the attention of the common masses and policy makers. The researcher explored how the tweets of the celebrities make trends of debates among their followers and legislative authorities and provides a chance to leads towards a certain solution or action plan. Further this study will help to provide a glimpse of the studies that has been done regarding the role of celebrities & climate change and what else can be done in future.

Though social media come up in a mind with broader term, but some of the of the social media platforms are often used in different ways. Thus, in this article, the researcher remains focused on social media platform: Twitter. Twitter is a kind of micro-blogging social media platform that enables its users to post a ‘tweet’ a brief message consisted on 280 characters maximum in a single time. These tweets will be spread automatically among the followers and the users of the network and anyone who is using the web, unless the tweet handler set their accounts privacy to “private”.<sup>5</sup>

Twitter was selected for this study due to its unexceptional popularity and its extensive use to discuss the social and political issues around the world. Twitter is frequently used for spreading and reception of news, especially political information.<sup>6</sup> Consistent with feature, recent research shows that climate change has been widely discussed on Twitter by the users from different background, including politicians, grassroot activists, NGOs, and celebrities.<sup>7</sup> Likewise,

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<sup>5</sup> S. Ogar, “OgaCovert Networks: A Comparative Study of Intelligence Techniques Used By Foreign Intelligence Agencies to Weaponize Social Media” (dissertation, 2019).

<sup>6</sup> Ahmed Al-Rawi, Jacob Groshek, and Li Zhang, “What the Fake? Assessing the Extent of Networked Political Spamming and Bots in the Propagation of #fakenews on Twitter,” *Online Information Review* 43, no. 2 (October 2019): 53–71, doi:10.1108/oir-02-2018-0065.

<sup>7</sup> Jennifer R. Fownes, Chao Yu, and Drew B. Margolin, “Twitter and Climate Change,” *Sociology Compass* 12, no. 6 (October 9, 2018), doi:10.1111/soc4.12587.

celebrities have the charisma to bring public devotion and mobilize community engagement in the social causes they are involved in.<sup>8</sup> Among the general social causes, the issue of climate change has received the most attention and efforts from major celebrities.

In last decades twitter played a prominent role in the movements like Arab spring and Black Lives Matters. So, the renowned climate change activist Swedish teenager, Greta Thunberg uses the social media like other contemporary movements, with the hashtag of the School Strike 4 Climate to mobilize the climate change activists and youth. In results on 15<sup>th</sup> March 2019, 1.4 million youth protestors belong to the schools of 120 countries joined the strike to bring the attention of the Govt.'s and Media to oppose the actions against environment. This series remains continued for a year to bring more and more attention towards the issue for a rapid response.<sup>9</sup>

Ultimately, these climate strikes activities caught the attention of the UN Secretary General Antonio Guterres, who called for a Climate Summit on 23 September 2019. The UN Secretary ask the member countries to come up with a plan that shows how the nations will start reducing the emissions in 2020 and leads it to zero emissions by the mid of the century.<sup>10</sup> This was all felt by the Govt., NGO's, politicians and notable of the societies that how the students are organizing themselves through social media for global campaign that will be ultimately becomes voters in coming year and have influence on democratic process of every country. This was the element that enable Govt.'s, NGO's, politicians and celebrities to come forwards and play their role in this regard.

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<sup>8</sup> C. Jensen, "Jensen, C. (2021). Celebrity Everyday Maker: Public Policy and the Discourse of Celebrity Surrounding Kim Kardiashian.," *Public Integrity* 23, no. 3 (2021): 269–80.

<sup>9</sup> Homero Gil de Zúñiga, Karolina Koc Michalska, and Andrea Römmele, "Populism in the Era of Twitter: How Social Media Contextualized New Insights into an Old Phenomenon," *New Media & Society* 22, no. 4 (April 2020): 585–94, doi:10.1177/1461444819893978.

<sup>10</sup> K. Svobodova et al., "Complexities and Contradictions in the Global Energy Transition: A Re-Evaluation of Country-Level Factors and Dependencies," *Applied Energy* 265 (2020): 1–11, doi:10.1016/j.apenergy.2020.114778.

It can be easily assessed that one can utilize Facebook, twitter, and Instagram to access the audience, share and discuss his opinion instantly about the issues that vast across the border. A single tweet by Arnold Schwarzenegger, encouraged the followers to live in a “smarter, healthier, more profitable energy future” generated over 125,000 responses,<sup>11</sup> exhibiting the power of social networks. The renowned Pakistani cricketer Waseem Akram tweets about use of plastic and its impacts on environment of Karachi and the marine life that were viewed 180K times in a single day and re-tweet more than one thousand time.<sup>12</sup>

These celebrities not only inspiring the rest of the celebrities from different walks of life but also inspiring the youth. A group of young social activist belongs to Zhob & Sheerani, Pakistan realized that how their country is affected by the climate change and remained in most influenced countries. So, they had come up with a unique idea to arrange a “Jirga” (a council of local opinion leaders and a public to solve the disputes and multiple social issues on society level) on a tourist spot of the region to bring the attention of the opinion leaders of their tribes. It was intended to develop an action plan to fight against the deforestation, illegal hunt of migrated birds and initiate plantation to save the bio diversity of the region. This initiative finally helps the youngsters to fight the burning issues practically and play their role at best.<sup>13</sup>

### **3.1.Research Objectives**

1. To explore the understanding of celebrities about climate change in Pakistan.
2. To analyze the influence of celebrity’s endorsement on followers regarding climate change.
3. To understand the impacts of celebrities’ tweets among their followers.

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<sup>11</sup> Mavrodieva et al., “Role of Social Media as a Soft Power Tool in Raising Public Awareness and Engagement in Addressing Climate Change,” *Climate* 7, no. 10 (October 16, 2019): 122, doi:10.3390/cli7100122.

<sup>12</sup> Mohamed Kamel Abdelsalam Elhaddad, “Web Mining for Social Network Analysis” (dissertation, 2021).

<sup>13</sup> Abubakr Saeed, Muhammad Saad Baloch, and Hammad Riaz, “Global Insights on TMT Gender Diversity in Controversial Industries: A Legitimacy Perspective,” *Journal of Business Ethics* 179, no. 3 (June 2, 2021): 711–31, doi:10.1007/s10551-021-04849-6.

4. To find the interest of policy makers in working for climate change.
5. To investigate the impacts of social media as communication tool among the targeted audience.
6. To highlight the priorities of twitter users regarding their area of interest.

### **3.2. Research Questions**

- i. How much Pakistani celebrities engage on the issues of climate change?
- ii. How celebrity endorsement having an influence on followers regarding climate change?
- iii. What contribution Pakistani celebrities are giving for the climate change?
- iv. To what extent Pakistani Celebrities tweets having impact on people regarding climate change?
- v. What is the level of public engagement on climate change issues on social media?
- vi. How much awareness audience get through celebrities posting?

### **3.3. Methodology**

The researcher following the qualitative nature of research and adopted the purposive sampling to choose four celebrities whom working on spreading awareness among their followers regarding climate change. For that purpose, researcher analyzed ninety-one tweets of the celebrities, they did since January 2019 to December 2021. The researcher analyzed the user's engagement through re-tweets, likes, shares, and followers' discussion that focused topic of the tweet to overview the impacts of celebrities' tweets. Further, the researcher conducted a survey from 17 twitter users randomly to explore insights of their twitter usage and impacts of celebrities' tweets.

The researcher adopts the advance search tool of twitter to extract the tweets related to climate change through certain input of celebrities' twitter handles, time period, keywords related to

climate change, environment, pollution, action, civic responsibility, priority, Pakistan, and pollution. This method helps to extract the 91 tweets.

The researcher set the certain criteria of choosing the celebrities is 0.5 million followers on twitter. As there are 2.4 million active users of twitter in Pakistan and 0.5 million is twenty percent of total users in Pakistan and represent 20% of every 100 users of twitter. And such strength of follower makes someone notable and have influence whatever they said.

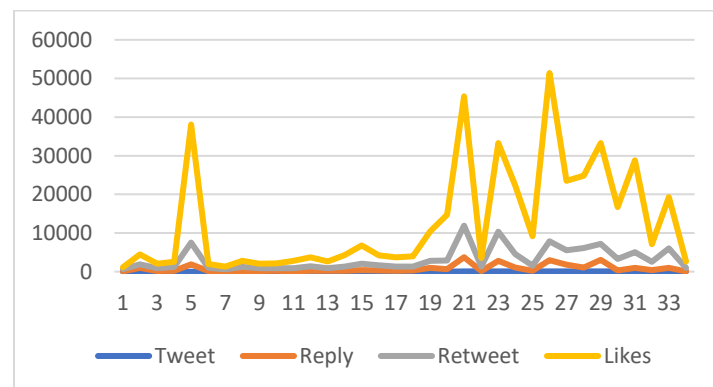
The researcher chooses five celebrities from different walks of life

- (i. Imran Khan (Politician - 15.4 million Followers)
- (ii. Waseem Akram (Sportsman - 5.7 million Followers)
- (iii. Shaniera Akram (Showbiz Star - 01 million Followers)
- (iv. Malala (Social Activist - 02 million Followers)

#### 4. Twitter Engagement

The researcher explores the user's engagement through quantitative approach and presents the types of engagement and out-reach in terms of likes, retweets (share, quote) and reply the tweet through tabular and graphs.

##### 4.1. User Engagement of Imran Khan's Tweets



*Figure 1 User Engagement of Imran Khan's Tweets*



Figure 01 explains that Imran khan's 34 tweets get 27 thousand replies, more than 107 thousand retweets and 437 thousand likes about climate change and environmental changes. On average a tweet gets 794 reply, 3,154 retweets and 12,882 likes that shows the interest of followers about climate change.

#### 4.2. User Engagement of Wasim Akram's Tweets

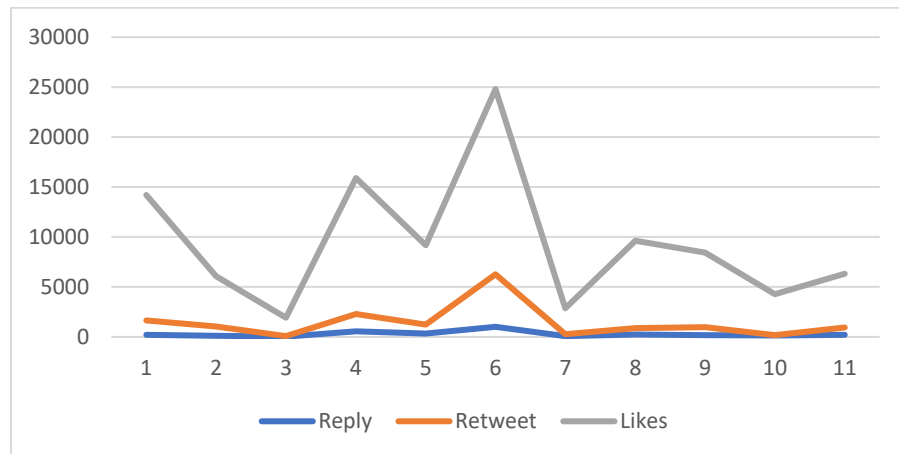


Figure 2 Wasim Akram's Tweets Engagement

Figure 02 explains that Wasim Akram's 11 tweets get 3,079 replies, 15,775 retweets and 103 thousand likes about climate change and environmental changes. On average a tweet gets 279 reply, 1,434 retweets and 9,429 likes that shows the keen focus of his followers about climate change.

#### 4.3. User Engagement of Shaniera Akram's Tweets

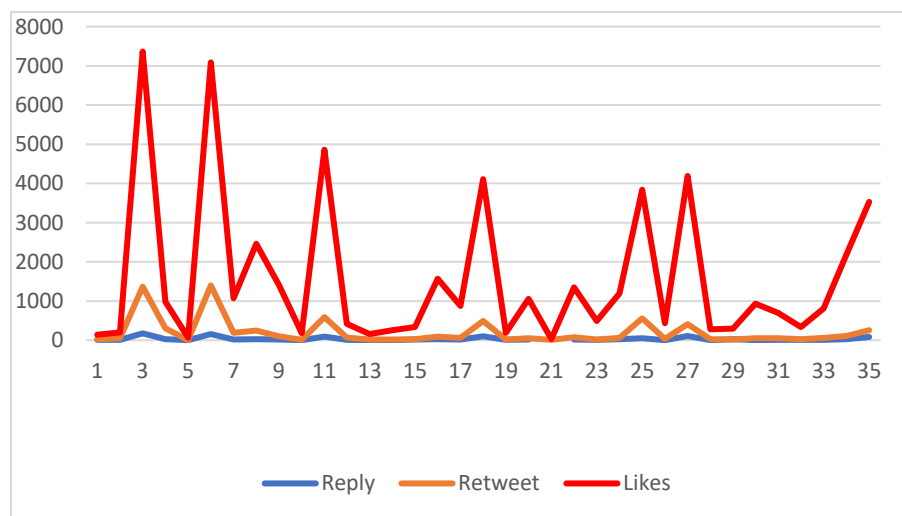


Figure 3 Shaniera Akram's Tweets Engagement.

Figure 03 presents that Shaniera Akram's 35 tweets get 31,149 replies, 6,887 retweets and 55,364 likes about climate change and environmental changes. On average a tweet gets 08 reply, 196 retweets and 1,581 likes that shows the keen focus of her followers about climate change.

#### 4.4. User Engagement of Malala's Tweets

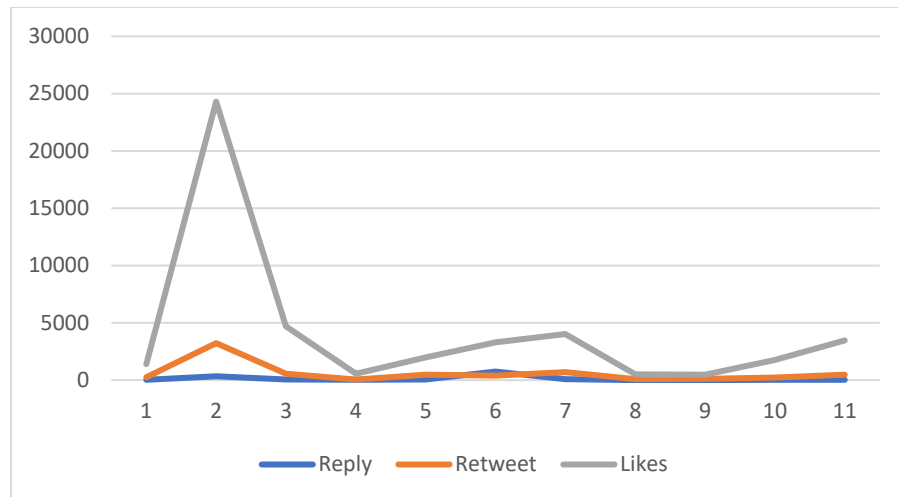


Figure 4 Malala's Tweets Engagement

Figure 04 presents that Shaniera Akram's 11 tweets get 1,378 replies, 6,528 retweets and 46,466 likes about climate change and environmental changes. On average a tweet gets 125 reply, 593 retweets and 4,224 likes that shows the keen focus of her followers about climate change.

#### 4.5. Tweeting Trend

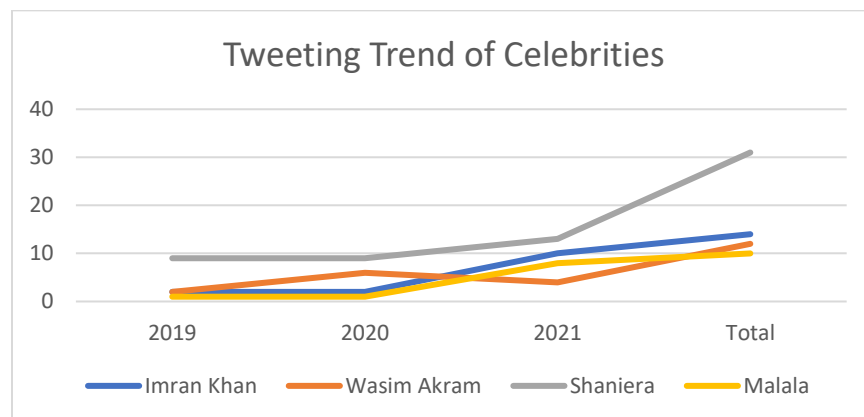
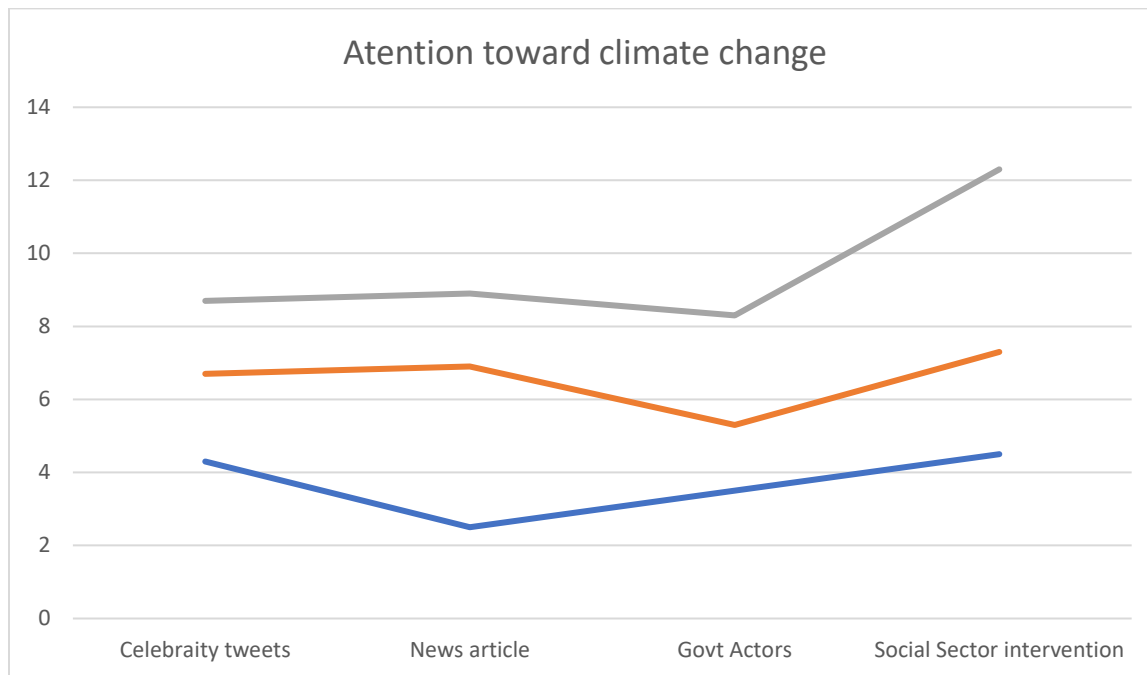


Figure 5. Tweeting Trends of Celebrities related Covid-19.

In figure 05, the researcher explored those celebrities understand the seriousness of the climate change and trying to bring the attention of their followers, civil societies and government to the issue. This graph explains well that celebrities increasing the ratio of tweets every year while considering the situation.

#### 4.6.Survey Insights

The participants of the survey share the insights that highlights their usage preferences and impacts of the content over their choices and develop their opinion on certain issues.



*Figure 6. Factors that bring the attention of the audience towards climate change.*

Figure 6 explored that 70.6% users feels that the tweets of celebrities about climate change bring their attention towards the issue and its intensity. They had realized that if celebrities lead any cause, it is more influential and bring a solution as compare to common man's efforts for a cause.

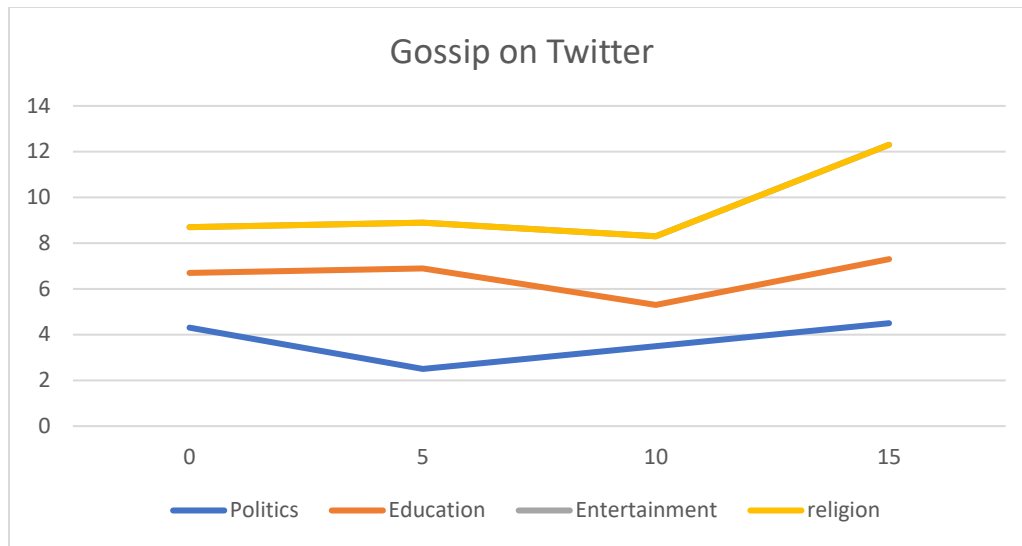


Figure 7: Most Favorite topics of Users on Twitter

Figure 7 shows that the most of the users use the twitter to discuss about climate change on priority basis and politics comes on second place in discussion.

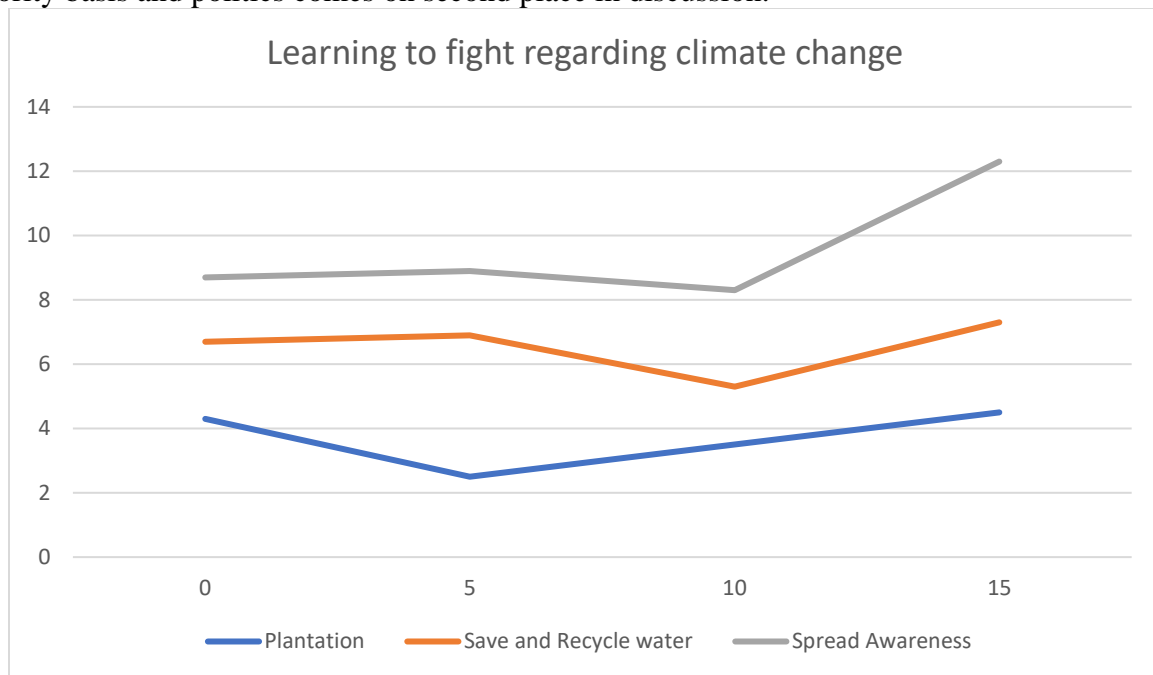
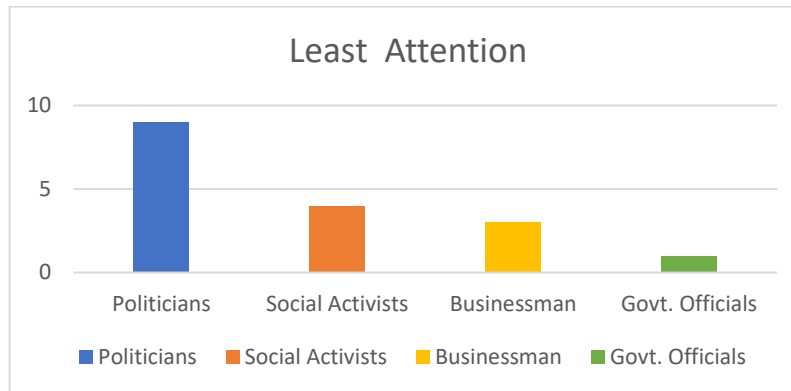


Figure 8: Users learnings towards fighting climate change.

Figure 8 explores that 76.5% users considers the public awareness and 70.6% users considered the plantation the possible solutions to fight climate change and it can be easily adopted by a common man to play their part in the cause.



*Figure 9: Public opinion about different sectors attention towards climate change.*

Figure 9 explains that users considered the Govt. officials and corporate sector are much involved in fighting climate change. The respondents considered the politicians least interested in fighting climate change.

## 5. Discussion

The researcher explored the follower's engagement through the comments and highlight the related responses to climate change that shows the seriousness of public towards the issue and their input to solve the problem or to bring the attention of notables.

The followers respond the tweets of Waseem Akram as:

1. It is the sheer responsibility of Govt. to maintain cleanliness of not only the public places but the residential areas without any difference.
2. Citizens should utilize the dustbin and garbage containers to avoid the scattered garbage.
3. Govt. is utilizing very low percentage of budget on education, that's why people are still uncivilized.
4. Govt. bodies like CBC are responsible for polluting the environment as they did not dispose of the garbage properly.
5. Celebrities must come forward and take up this issue.
6. Proper waste management system is the need of time to adopt throughout the country.

7. Waste management, recycling, Processing & Treatment is a very valuable source of sustainable alternative fuel which generates revenue as well.

The followers respond the tweets of Shaniera Akram as:

1. The attitude towards climate change is the result of lower literacy rate in Pakistan needs to be addressed.
2. Heavy fines must be imposed to discourage throwing garbage.
3. Plastic garbage can be used in plastic roads and promoting bio-gradable and sustainable products.
4. There is immense shortage of public awareness. Cleaning and throwing rubbish should be included in the educational syllabus more prominently.
5. Celebrities' follower not only praise them for the achievement over the cause and highlight other issues as well considering their capacity to solve their issues.
6. The subject of civics must be teaching to the students in schools.
7. Janitorial services must be outsourcing for cleanliness.
8. Environmental hazards bring a huge change in Gilgit and Chitral and urban migration is on rise.
9. People must refuse to take plastic bags from shopkeepers to strengthen Govt. campaigns and bans.
10. Govt. must ban plastic shopper and packing industries and banned the plastic packing of food items as well.
11. Followers share their knowledge that plastic is majorly use in plastic packings rather than plastic shopper to bring attention to reduce plastic packaging.

12. Followers share their experience about how they are shifting towards the alternatives of plastic use.
13. Direction and policy should come from provincial/ federal government and its enforcement will switch the people to real change.
14. Packaged food and beverage industry should be regulated to keep their CSR on garbage cleaning and recycling.

The followers respond the tweets of Imran Khan as

1. Mushroom growth of residential societies in also a reason of climate change.
2. Climate change is a global issue that can be counter through global efforts.
3. It is dire need to discourage private transport over the public transport to reduce air pollution.
4. Financing the renewable energy sector in Pakistan can help to tackle climate change.
5. Timber mafia must be handled very hardly to stop deforestation.
6. Followers insist on adopting solar energy, wind energy, eco-friendly paints, zero carbon emission industries, electric vehicles etc.

The followers respond the tweets of Malala as

1. Why Pakistani politicians are not taking the climate change seriously?
2. Northern areas are facing swear changes as compare to whole country specially in GB.
3. Strict policies, quick services and continuous awareness will lead the nation towards cleanliness.

## **6. Results**

It has been found through the direct interview technique that 70.6% of the celebrities' young followers persuaded by their advocacy messages and expressed serious concern regarding climate

change. The study also found that a climate change strike was organized by the environmentalists on the call of celebrities, students from 20 cities joined the strike and record their protest against climate change issues. The researcher also found that relevant government departments and corporates gave more attention to the climate related issue when raised by the celebrities. The study found minimum attention among politicians to the climate change campaign run by the celebrities. The study found that celebrities focused on specific keywords used in tweets (climate 28, change 12, environment 06, clean 10, pollution 02, green 03, plastic bag 07, plastic 15, ban 01, save 01, playing your part 03, Pakistan 16, recycle 03, reduce 01, plantation 05, Pakistani Flag 05, responsibility 04, protect 06).

## **7. Suggestions**

The topic of climate change and allied topic of environment have much more areas to explore. In future we can explore the user engagement through deploying artificial intelligence in some way to explore the keywords that commonly used by the social media users on different platform.

Further the researchers can compare the role of celebrities in different countries that are commonly fighting against the climate change to explore more interactive strategies to bring the attention of notables towards the solution of the issue.

Future studies should include older populations and need to consider different celebrities' messages to increase generalizability. It is urgent to investigate how to maximize the celebrity effects in climate advocacy, what the effective emotional and language frames are, what key mediators and moderators in strengthening the influence are, and the function of social media in enhancing celebrities' efforts to solve the climate crisis.



## **8. Conclusion**

Social media followers have called the government's crackdown on beaches or the prevention of environmental pollution an attempt by celebrities. They also claim that if the problem of sanitation in cities cannot be solved then environmental pollution at the government level cannot be eliminated unless indiscriminate sanitation arrangements are ensured everywhere. These measures include the removal of rubbish on a regular basis, proper disposal of cricket, and provision of sewerage to small settlements. Similarly, regarding the public role, social media followers say that environmental pollution is increasing rapidly due to public awareness and neglect of individual and collective social responsibilities. The best solution for this is to teach hygiene to the children by teaching them socks, while awareness campaigns and heavy fines for mature people are the solutions that can achieve the desired results.

The trend of Pakistani celebrities working on climate change is slowly increasing, while at present eight celebrities from different walks of life working on climate change on daily basis. The online celebrities not only raising awareness about the reasons of climate change among the audience. But they are liaising with INGO's and Govt. for joint ventures to fight climate change also. Social media followers are not only discussing climate change and becomes part of related activities. Rather, they demand stable policies on climate change from the relevant departments and parliamentarians.

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