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Abstract :

This paper will talk about fake news and will discuss briefly why people spread fake news and will classify the users on the basis of gender, age and education with their response towards fake news. It will discuss the Psychological impact of fake news on the users and how it renders their point of view and opinion. This paper also includes the analysis of research based on Pew Research Survey, where they used logistic regression analysis to answer some of the interesting questions about the individual response to fake news. This will answer why is the spread of fake news on WhatsApp, unique from other social media platforms? This paper will also talk about the fake news on political issues and why people spread fake political news in India.. It will discuss the previous research done, in brief about how the no. fake whatsapp news in upcoming years will continue to increase (analysis based on SIR method). No. of Whatsapp users in India is more than 200 million which most of us use throughout the day, it will be interesting to know how it influences individuals. It will discuss some statistics about Indian whatsapp users and how fake whatsapp news might change our perspective towards society.

Introduction:

The scale of fake news is growing rapidly because the access barriers to information consumption have almost disappeared and social media sites have become open, free and unrestricted platforms for news sharing and consumption (Allcott and Gentzkow, 2017).According to the recent data from the Reuters Institute (2017), more than half (54%) of all online users across 36 countries use social media as a source of news, and more than one in ten (14 %) use social media as their main source. These consumption patterns are especially remarkable in the USA, a country in which 43% of the population got news from social media in 2013 (Reuters Institute 2013), increasing up to 67% in 2017 (Pew Research Center 2017).This rising popularity of social media platforms in terms of news consumption has also led to serious concerns among scholars and legislators around the world about their potential influence in disseminating large volumes of non‐supervised journalistic content (Baum et al., 2017), empowering a misinformation phenomenon, (Darnton, 2017) and thus provoking the possibility to manipulate the public's perception of reality through the viral spread of fake news (Gu, et al., 2017). People prefer news sources that support their existing views [selective exposure] (Cook et al., 2012), which reflects that humans are biased information‐seekers (Baum et al., 2017). Because of this process, audiences perceive partisan content as more interesting and informative than content which contradicts their own ideas (Coe et al., 2008). Social networks like Facebook or Twitter are ideologically segregated and users tend to read and share news articles aligned with their ideological position (Bakshy et al., 2015). Readers trust the sharer more than who produces the article – regardless of whether the article is produced by a real news organization or a fictional one (Media Insight Project 2016). When people see a post from a trusted person they feel more likely to recommend the news source to friends (Media Insight Project 2016), and when the information comes from an unfamiliar or an opposition source it will usually be ignored (Baum et al., 2017).People share information that will evoke an emotional response in the receiver, regardless of whether the information is true or not (Cook et al., 2012). As a result, newsreaders might contribute consciously or unconsciously to the spread of fake information by sharing news that might have a larger impact on their online social connections (Barthel et al., 2016). In today's media environment, information is free‐floating on the Internet (Sundar, 2008) and traditional gatekeepers like professional editors journalists are largely absent (McGrew et al., 2017; Cook et al., 2012). This phenomenon gives people a huge responsibility to critically self evaluate the reliability of online information (McGrew et al., 2017), generating a growing difficulty for the audience to distinguish between journalistic and non‐journalistic news content and thus to calibrate the difference between false and correct information (Tandoc et al., 2017).More than 2 billion people in over 180 countries use WhatsApp to stay in touch with friends and family, anytime and anywhere. WhatsApp is free and offers simple, secure, reliable messaging and calling, available on phones all over the world. WhatsApp started as an alternative to SMS. WhatsApp supports sending and receiving a variety of media: text, photos, videos, documents, and location, as well as voice calls. Some of your most personal moments are shared with WhatsApp.It allows people to communicate anywhere in the world without barriers.(WhatsApp, 2020)

Thesis/Secondary research:

WhatsApp, India's most popular messaging platform, has become a vehicle for misinformation and propaganda ahead of the upcoming election. The Facebook-owned app has announced new measures to fight this but experts say the scale of the problem is overwhelming.India poses a particularly complex problem for Facebook. It is WhatsApp's largest market - more than 200 million Indians use the app - and a place where users forward more content than anywhere else in the world.The fact that up to 256 people can be part of a group chat makes it incredibly popular with extended families and large groups of friends. While much of these daily conversations involve people

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making plans, sharing jokes and catching up - political messages and videos are also shared widely (BBC 2019).

According to Collins Dictionary the concept of "fake news" started being used on US television to describe "false, often sensational, information disseminated under the guise of news reporting". Communication scholars have scrutinized different angles of the fake news phenomena, especially around the motivations for their production and dissemination (Allcott and Gentzkow, 2017; Subramanian, 2017) and the potential (negative) consequences of their consumption (Ferrara et al., 2016; Silverman, 2016; Gu, et al., 2017). In this regard, there is an academic agreement that the main motivations behind fake news production are commercial (chrematistic interest) and political (ideological) (Hirst, 2017). On the one hand, the commercial motivations refer to the creation and dissemination of fake news in order to increase the readership of a news site, and get more advertising revenues as a consequence (Allcott and Gentzkow, 2016).

The Psychology of Fake News :

It is imperative to understand the cognitive mindset of humans. Humans have fallible memory and are susceptible to falsehood and distraction. At the beginning of forming an opinion based on the information acquired, information is likely to have more weight than later accumulated information (Gupta Abhinav, 2020). This is termed as the primacy effect. The evaluation of the information acquired later is often prejudiced and partial to the prior assessment of information. Primacy effect and reinforcement of information results in the persistence of a particular belief where it is difficult to change the opinion of the individuals(Gupta Abhinav, 2020).

Information through social media reaches its user at a rapid rate. Therefore fake news can travel fast and in abundance, resulting in the primacy effect in individuals well before such information can be pulled down. After pulling down such information, there are no effective policies to notify the users of the same and provide with the alternative, correct information.(Gupta Abhinav, 2020). The users who have already formed opinions due to fake news and who are not provided with the correct information once the information is censored, even if the information may be deemed false, the primacy effect will prevent most users from changing their opinion. The present social media regulatory laws are not sufficient to counter fake news(Gupta Abhinav 2020). The regulation fails to take into account the cognitive functions of the human brain that helps them form opinions. Once these opinions are formed due to primacy effect and subsequent reinforcement, they are hard to change.

Why do we share fake news and how it depends on various demographic factors?:

Media@LSE Working paper #55 analysed and presented a research paper based on a Pew Research Center survey conducted on Dec. 1 through Dec. 4 2016, among a national representative sample of 1002 adults, 18 years of age or older, living in the continental United States. The results of the study carried out by the Pew Research Center (Journalism & Media) were descriptive. The model constructed was based on a binomial logistic regression, analyzing the probability of sharing political fake news as a dependent variable. This paper investigated how different demographic factors (age, gender, political orientation and income) and situational predictors (perception of frequency of political fake news, previous online fake news sharing [unnoticed], and perception of responsibility in preventing fake news [of members of the public, politicians and social networking sites]), affect the probability to share political fake news through social media platforms. Results of the logistic regression analysis provided strong evidence regarding the key role of age, gender, income and political orientation in the spread of political misinformation online. In this regard, the probability of sharing political fake news online is higher in males than females, despite the fact that women use social media more than men (Krasnova et al., 2017). In addition, their analysis also revealed that sharing political fake news increases with age, despite the fact that young people are the majority of internet users (McGrew et al, 2017). People tend to show an increasing interest in news as they get older. For younger users, topics like domestic politics, international politics and economy are seen as less interesting (Costera, 2007), which might explain why older people are more likely to share political fake news online. People with low incomes are also more likely to share political fake news. Previous studies suggest that educated people earn more money than people that have not accessed the school system (Diener and Biswas-Diener, 2002) where education increases people's capacities to differentiate fact from fiction and, also, offer people better means to counter argue in consistent information(Allcott and Gentzkow, 2017).

Their analysis suggested that people who inadvertently share fake news have less probability to share political fake news online. For many people it is complicated to recognize that a piece of information is false until they receive a correction (Cook *et al.*, 2012). Warning seemed to be effective because they induce people in a temporary state of scepticism, increasing their capacities to differentiate between true and false information (Cook *et al.,* 2012). Therefore, people who grant great responsibility to the public in preventing fake news stories from gaining attention are less likely to share political fake news.

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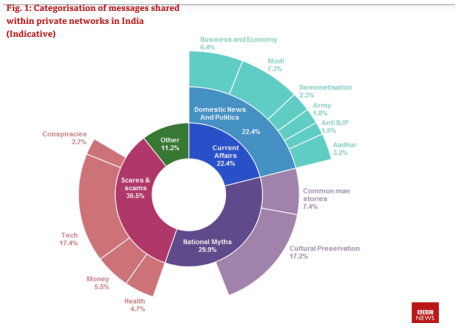
However, when it comes to social networking sites, the logistic regression revealed a statistically significant but positive association, in such a way that people who grant the responsibility to prevent fake news stories from gaining attention to social networking sites are themselves more likely to share political fake news stories.

In this context, professional journalism and fact-checking are increasingly important to mitigate, control and discover political fake news online and to lessen their potential damage to democratic societies. (Media@LSE 2018).

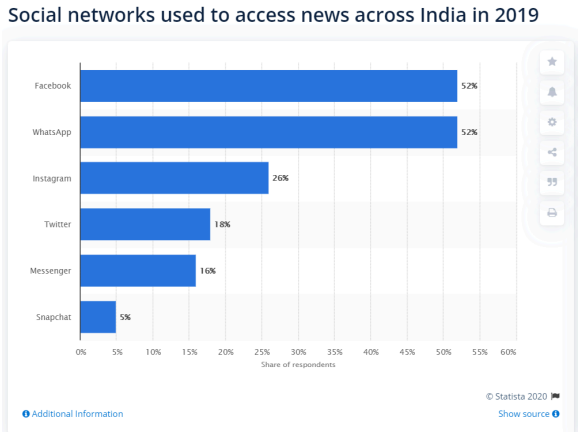
Why does Whatsapp pose a unique problem?(Ponniah Kevin, 2019):

India poses a particularly complex problem for Facebook. It is Whatsapp's largest market -more than 200 million Indians use the app- and a place where users forward more content than anywhere else in the world. Indian fact-checking websites like **Altnews** and **Boom** frequently debunk political posts shared on facebook and twitter - such as report that a British analyst of Indian elections had called Congress leader Rahul Gandhi "stupid" or that an air force pilot seen as a national hero had joined Congress(Usha Sumit, 2019). These posts, while not promoted by official party accounts, are often spread widely by unofficial groups or people supporting the parties. They are then sometimes shared by politicians. "Facebook and Twitter are platforms that do not allow too much secrecy which allows fact-checkers like us to trace who the bad actors are in many of the cases" said Jency Jacob, the managing editor of Indian fact-checking site Boom. The difference with WhatsApp is that posts there are private and protected by encryption. Mr Roy likened it to "something of a black hole". "No-one, including WhatsApp itself, gets to see, read, filter or analyse text messages,"he said.

Fig. 1: Categorisation of messages shared within private networks in India (Indicative)



This is the result from an independent research done by BBC (Khurana Pooja *et al.,* 2019). Categorisation of message within private networks in India (WhatsApp). About 36.5% of shared messages are Scares and scams which include conspiracies, Tech, money and health related messages. Scares and scams related to Tech contribution is maximum. Surprisingly, 29.9 % of shared messages include National Myths. In which 17.2% include Cultural Preservation (National Myths). 7.2% of shared messages are related to Modi, compared to it only 1.5 % was anti-BJP posts. An online Survey conducted by Statista with 1013 respondents with the following question "Which of the following have you used for finding, reading, watching, sharing or discussing news in the last week? Please select all that apply.".The result from this survey given below:



When asked about the different social networks used to access news as of 2019, a majority of the surveyed respondents in India stated Whatsapp and Facebook as their main sources at 52% each in the week preceding the survey period (Keerlery Sandhya, 2020). Another survey on statista, during the time measured , more than 63 percent of WhatsApp users in Mexico claimed to have received fake news from family members, while nearly 62 percent of participants said fake news were sent to them by friends (Navarro Jose, 2020). From this one can estimate how worse the situation can be if fake news spreads through whatsapp messages.

Independent Research by BBC and its partner:

BBC and its partner conducted an independent research which was a multi-method study that involved : Scan of 47,543 news articles in the English and vernacular media, network analysis on twitter across 16,000 profiles, network analysis on facebook using publicly available advertising data across 3,200 pages and interests, semiotic analysis of messages collected and 40 in depth, in home interviews. In this project they started with a central question: why does the ordinary citizen spread fake news, without verification? And if ordinary citizens are concerned about fake news, as multiple surveys seem to show, how have they changed their behaviour in response to that concern? This project was also interested in

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understanding better the type of fake news spread not as stories/urls but as images and memes- anecdotally known to be the key method of information dissemination in private WhatsApp and Facebook feeds. The authors were however keenly interested in starting to explore the question of whether or not there was a fake news ecosystem in India on social media. Using a combination of in-depth qualitative/ethnographic and big data techniques, they found that:

1)There are certain conditions that are necessary for the spread of fake news, those are:

- The blurring of lines between all type of news
- Scepticism about the motivations of the news media
- The flood of digital information and the shift to a high frequency news consumption world
- The coping mechanisms for dealing with onrushing digital informati. These are : selective consumption, preference for images, sender primacy, source agnosticism, nature of the forum, and 'feel' over 'think'
- The broken link between consumption and sharing
- The audiences sharing tactics for WhatsApp and Facebook

2) The motivation behind sharing is rich and complex and needs to be understood to establish why fake news is shared. Those are:

- Sharing to verify within the networks
- Sharing as a civic duty
- Sharing for nation building
- Sharing as an expression of one's socio-political identity.

They discovered that socio-political identity plays a key role in sharing of fake news, especially for those on the right. While they saw multiple distinct identities emerging within the right, they are all bound by common narratives, but there is no real unified sense of a 'left' identity in India; instead there are micro identities (eg Tamil, Bengali, Dalit), and even within that a deeply held socio-political identity can sometimes get reduced to the level of an issue for others within the broad 'left'.

3) This means that four types of narratives in fake news messages are particularly effective at passing by the critical filters of a wide swathe of the citizenry. Those are:

- Hindu power and superiority
- Preservation and revival
- Progress and national pride
- Personality and prowess(of PM Modi)

That is, validation of identity trumps verification of facts. They also discovered that similar tactics were used, by right leaning and left leaning fake news messages, but the volume of right leaning fake news messages was much more prominent in most respondent's phones.

4)There is some use of fact checking
For example the use of Google or going to television, but this is limited and specific. But even the few groups that do engage in this kind of verification behaviour are prone to sharing unverified false information if it resonates with their identity

5) There is an emerging fake news ecosystem on Twitter, where they found fake news sources and amplifiers on the political right to be much more densely interconnected and intermeshed.
On the network analysis map produced during this research, we see that many more of the Twitter handles that have published fake news sit in the pro-BJP cluster, than in the anti-BJP cluster. On Facebook, they saw signs of a polarised nation, with indications that those most engaged with politics also seem to take the most interest in sources of fake news. They also found on Facebook that legitimate news sources, and sources known to have published fake news, are followed by audiences with distinct interests.

They concluded that for the reasons discovered, checking the flow of fake news- especially in their current predominant form of images and memes - is likely to be extremely challenging. They suggested that all actors- platforms, media organisations, government, civil society- need to come together to tackle the problem, since it is, in fact, as much a social problem as a technological problem. But in this, ordinary citizens too need to take more responsibility about sharing things without verification - and surely platform centric solutions to help them can be found without compromising too much the essential characteristics of the platform. They also recommend that journalists investigate further whether or not there is an organised ecosystem of fake news production and dissemination.

Some limitation to above analysis:

All research studies have limitations. One limitation of this project is that no interviews were carried out in rural areas, where digital penetration is still comparatively low. The Authors believe that the factors described in this report will still apply to rural citizens, but to what degree and scale it is hard to specify.

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Future of Fake Whatsapp news:

Fake news, a type of pseudo news that causes the spread of misinformation on social media especially whatsapp is a measure of various scam and scares (Khurana , Kumar and Kumar 2019: 950). In this study they have demonstrated that how the fake news spread among the users and who are responsible for spreading this kind of rumors by estimating the parameters of the SIR (superiority and Inferiority Ranking method) model. The stability of the model had been evaluated and was compared analytically as well as numerically showing the significant incrementally in the trend of posting unreal information on What's app which is not going to be decreased in the next upcoming years as the ones who are active in posting rumors will remain sending fake news and the receivers will believe due to lack of awareness. This study, based on conclusion, suggested that all What's app users required to check the truthfulness of news before sending them to other users.

Sayan Banerjee's ongoing research and his view on Political fake news (India):

According to UK-based Indian researcher Sayan Banerjee, fake news does not change people's political opinion, but rather reinforces the existing beliefs and brings out the worst impulses within us (PTI 2019). Banerjee and his team from the University of Essex in the UK want to understand how fake news spread through WhatsApp affects politics, ethnic violence and public policy choices in diverse and developing countries like India. The team will conduct a five-week long research study in 18 constituencies across four states-- UP, Bihar, West Bengal and Jharkhand. In the interview with PTI Banerjee said, " Political research in the US has already found that fake news only reinforces the existing political ideas and beliefs. Fake news does not make a person change his beliefs". In their research they are trying to show that fake news is only a catalyst, the demon is within ourselves. This research project is still under construction. I would like to share Sayan Banerjee's view which he shared during the interview with PTI. He also pointed out that fake is not a new phenomenon. Misinformation has been used by governments for ages to control public opinions for generations. However, with increased accessibility to smartphones and internet, the dissemination of such messages has become more decentralised and harder to monitor. According to him, at present the BJP has the first mover's advantage. "BJP has a more organised ground game where they can influence people--at least motivate their own voter to go to the polls by sharing something racist or bigoted",Banerjee said. However, every political party is trying to do the same thing. Once they catch up, Banerjee says the influence of fake news will wear out. The data from their study will not be helpful for academics, but also for political parties, who will be able to better understand what their voters want. It is then up to a political party to decide whether they want to be the bad guy --whether they want to influence their voters with negative messages (PTI 2019).

Conclusion:

The rising popularity of social media has led to serious concern among scholars and legislators around the world about their potential influence in disseminating large volumes of non-supervised journalistic content.People prefer news sources that support their existing views which reflects biased information-seekers. Readers trust the sharer more than who produces the article – regardless of whether the article is produced by a real news organization or a fictional one. This is one of the main reasons people share messages without thinking that it might be fake. However people do think once who are warned before.People share information that will evoke an emotional response in the receiver, regardless of whether the information is true or not.As a result, newsreaders might contribute consciously or unconsciously to the spread of fake information by sharing news. Humans have fallible memory and are susceptible to falsehood and distraction.Primacy effect and reinforcement of information results in the persistence of a particular belief where it is difficult to change the opinion of the individuals. The spread of Fake news does depend on the Demographic factors (age, gender, political orientation and income).The probability of sharing political fake news online is higher in males than females, despite the fact that women use social media more than men. Research analysed that sharing of political fake news increases with age.People with low income are more likely to share political fake news.Warning seemed to be effective because they induce people in a temporary state of scepticism, increasing their capacities to differentiate between true and false information. People who grant the responsibility to prevent fake news stories from gaining attention to social networking sites are themselves more likely to share political fake news stories. Spread of fake news through WhatsApp is unique in a way that no-one, including WhatsApp itself, gets to see, read, filter or analyse text messages unlike Facebook and Twitter. In India 29.9 % of shared messages include National Myths and about 7.2% of shared messages are related to Modi, which is very high percent. 52% of people who use social media use Whatsapp to access news. More than 50 % of Whatsapp users claimed to have received fake news mostly from their family and friends. People share messages in India for reasons like

sharing to verify, sharing as a civic duty, sharing for nation building and mostly because for sharing as an expression of one's socio-political identity.The four types of narratives in fake news messages that are particularly effective at passing by the critical filters of wide swathe of the citizenry. Those are: Hindu power and superiority, preservation and revival, progress and national pride and personality and prowess (of PM Modi). There will be significant increment in the trend of posting unreal information on WhatsApp. Fake news does not change people's political opinion, but rather reinforces the existing beliefs and brings out the worst impulses within us. Fake news is only a catalyst, the demon is within ourselves. Misinformation has been used by the government for ages to control public opinions for generations. Political Parties has a more ground game where they influence people at least motivate their own voter to go to the polls by sharing something racist or bigoted. There is a strong recommendation from various researchers who worked on Fake news projects that journalists should investigate further whether or not there is an organised ecosystem of fake news production and dissemination. WhatsApp users are required to check the truthfulness of news before sending them to other users.

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