

Literature Review

Do users in India, Kenya and Ghana react differently to problematic content?

Theory

Methodology	Findings	Relevance for our Study
1. <u>Carnegie Mellon University: Misinformation in Social Media: Definition, Manipulation, and Detection</u> ¹		
Secondary research.	<p>Classifies misinformation (unintentional and intentional) in various definitional categories, i.e. disinformation², fake news³, unverified information⁴, rumours⁵, urban legend⁶, spams⁷, and trolls⁸.</p> <p>Tools used by spreaders of misinformation to camouflage misinformation, i.e. manipulation (content and network based) were distinguished.</p> <p>Misinformation detection methods to be used by service providers were discussed, based on – content⁹, context¹⁰, and propagation¹¹.</p>	<p>Intention behind different kinds of misinformation could be recorded, and also compared with whether consumers are knowingly or unknowingly fulfilling such intention, whether in thought, or in action.</p> <p>Awareness and capacity of consumers to uncover camouflage could be assessed.</p> <p>Though this study focussed on a service provider perspective, the effectiveness of misinformation detection tools could be assessed from a consumer perspective.</p>

¹ https://www.kdd.org/exploration_files/8_CR.10.Misinformation_in_social_media_-_Final.pdf

² Disinformation also refers to inaccurate information which is usually distinguished from misinformation by the intention of deception.

³ Fake news refers to false information in the form of news (which is not necessarily disinformation since it may be unintentionally shared by innocent users).

⁴ A piece of information can be defined as unverified information before it is verified, and those verified to be false or inaccurate obviously belong to misinformation. It may trigger similar effects as other types of misinformation, such as fear, hatred and astonishment.

⁵ Rumour refers to unverified information that can be either true or false.

⁶ Urban legend is intentionally-spread misinformation that is related to fictional stories about local events. The purpose can often be entertainment.

⁷ Spam refers to irrelevant information that is sent to a large number of users.

⁸ Troll aims to cause disruption and argument towards a certain group of people. Different from other types of misinformation that try to convince its recipients, trolling aims to increase the tension between ideas and ultimately to deepen the hatred and widen the gap.

⁹ Directly detecting misinformation based on its content, such as text, images and video.

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2. <u>First Draft: Fake news. It's complicated</u>¹²		
Secondary research.	Creates a comparison matrix of different types of misinformation and dissemination mechanisms.	Such a matrix can also be prepared from a consumer perspective, mapping the sources, validity, reactions of consumers etc.
3. <u>London School of Economics: Disinfo Wars: a taxonomy of information warfare</u>¹³		
Secondary research.	<p>Differentiates between misinformation¹⁴, disinformation¹⁵, and malinformation¹⁶. Another study has suggested that misinformation is false, malinformation is harmful, while disinformation may or may not be harmful.¹⁷</p> <p>Lays down three phases of information disorder, i.e. creation, reproduction and distribution, having three elements – agent, message and interpreter.</p> <p>Creates a matrix of target and agent, with respect to state, non-state and public actors, for influencing each other's perceptions or decisions.</p>	<p>Threat perception consumers with respect to these categories of misinformation may be conducted, i.e. when does false become harmful.</p> <p>Stakeholders interaction with cause and effect of misinformation on consumers may be assessed.</p>
4. <u>UNC-Charlotte College of Computing and Informatics: Human-Misinformation interaction: Understanding the interdisciplinary approach needed to computationally combat false information</u>¹⁸		

¹⁰ Detecting misinformation based on the contextual information available in social media, such as locations and time

¹¹ Detecting misinformation based on the propagation patterns, i.e., how misinformation circulates among users.

¹² <https://firstdraftnews.org/latest/fake-news-complicated/>

¹³ <https://blogs.lse.ac.uk/medialse/2019/09/27/disinfo-wars-a-taxonomy-of-information-warfare/>

¹⁴ Unintentional mistakes such as inaccurate photo captions, dates, statistics, translation, or when satire is to be taken seriously.

¹⁵ Fabricated or deliberately manipulated audio/visual content. Internationally created conspiracy theories or rumours.

¹⁶ Deliberate publication of private information for personal or corporate, rather than public interest, such as revenge porn. Deliberate change of context, date or time of genuine content.

¹⁷ <https://arxiv.org/pdf/1903.07136.pdf>

¹⁸ <https://arxiv.org/pdf/1903.07136.pdf>

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Secondary research.	Lays down three elements of misinformation and their inter-relationships: Content (Fact or not? Misleading content? Out of context? Expert fact-checking or Crowdsourced fact-checking or Automatic fact-checking), Consumer (Ideology, Belief, Mental Frames, Emotional State, Social circles, Political Affiliation), and source (Different Intents: Financial, Ideological, Political, or Parody).	Measuring and categorizing trustworthiness and veracity of sources may be done from a consumer perspective. Relevant parameters of the three elements may be used in our study as well.
5. <u>A Survey of Fake News: Fundamental Theories, Detection Methods, and Opportunities</u> ¹⁹		
Compiled different theories proposed by previous research.	<p>Individuals tend to reject new evidence because it contradicts with established norms and beliefs.</p> <p>Individuals tend to trust information that confirms their pre-existing beliefs or hypotheses or attitudes. Individuals are inclined to accept information that pleases them.</p> <p>Individuals tend to believe information is correct after repeated exposures.</p> <p>Individuals do something primarily because others are doing it. The influence of others leading us to conform to be liked and accepted by them. An individual's self-concept derives from perceived membership in a relevant social group. Individuals tend to adopt insights expressed by others when such insights are gaining more popularity within their social circles.</p> <p>Individuals perceive their knowledge to surpass that of others. A person's subjective confidence in his judgments is reliably greater than the objective ones.</p>	Some of such findings may be useful in framing and testing our own hypothesis.

¹⁹ <https://arxiv.org/pdf/1812.00315.pdf>

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	People tend to overestimate the likelihood of good things happening rather than bad things.	
6. <u>How to Filter Hate Speech, Hoaxes, and Violent Clips Out of Your Social Feeds</u> ²⁰		
Secondary research	Lists the various tools provided different social media service providers to limit exposure to certain kinds of content.	We may focus our questionnaire on one or more popular social media service providers. Also, consumers awareness and capacity to use existing tools could be checked in the questionnaire.

²⁰ <https://www.consumerreports.org/social-media/combat-hate-speech-and-misinformation-on-social-media/>

International Studies

Methodology	Findings	Relevance for our Study
7. <u>Co-inform: Survey of Misinformation Detection Methods</u> ²¹		
<p>Compilation and comparison of different misinformation detection studies.</p>	<p>Classifies content as: Authentic material used in the wrong context, Imposter news sites designed to look like brands we already know, Fake news sites, Fake information, Manipulated content, and Parody content.</p> <p>Advocates that misinformation spikes during disasters, times of war, breaking news developments etc.</p>	<p>Popular sources of misinformation may be mapped.</p> <p>Motivations behind consumers accepting misinformation to be true could also be gauged.</p>
8. <u>Proceedings of the National Academy of sciences of the USA: The spreading of misinformation online</u> ²²		
<p>Quantitative analysis of Facebook</p>	<p>Information was shown to be related to distinct narratives – conspiracy theories, scientific news, and trolling, leading to homogeneous and polarized communities (i.e., echo chambers) having similar information consumption patterns.</p> <p>Verifiability of both were checked. The generators of scientific information and their data, methods, and outcomes are readily identifiable and available. The origins of conspiracy theories are often unknown and their content is strongly disengaged from mainstream society and sharply divergent from recommended practices.</p> <p>Whether a claim (either substantiated or not) is accepted by an individual is strongly influenced by social norms and by the claim’s coherence with the individual’s belief system, i.e. confirmation bias.</p>	<p>Verifiability and intent to verify may be useful parameters for our study.</p> <p>Consumers belief systems and social status/norms may be key determinants of believing and acting on misinformation.</p>

²¹ <https://coinform.eu/wp-content/uploads/2019/05/D3.2-H2020-Co-Inform-Survey-of-Misinformation-Detection-Methods.pdf>

²² <https://www.pnas.org/content/113/3/554#ref-10>

Methodology	Findings	Relevance for our Study
<p align="center">9. <u>University of Washington: How people investigate — or don't — fake news on Twitter and Facebook</u>²³</p>		
<p>Observed 25 participants scroll through their Facebook or Twitter feeds while, unbeknownst to them, a Google Chrome extension randomly added debunked content on top of some of the real posts.</p>	<p>Participants had various reactions to encountering a fake post: Some outright ignored it, some took it at face value, some investigated whether it was true, and some were suspicious of it but then chose to ignore it.</p> <p>The study records various reasons for such reactions.</p>	<p>Could be useful for the lab study, and we could try to map the flow of mis-information and its amplification through user reactions.</p>
<p align="center">10. <u>Harvard Kennedy School's Misinformation Review: The causes and consequences of COVID-19 misperceptions: understanding the role of news and social media</u>²⁴</p>		
<p>Evaluated the presence of misinformation and public health recommendations regarding COVID-19 in a massive corpus of tweets as well as all articles published on nineteen Canadian news sites.</p> <p>Evaluate the impact of misinformation through a nationally representative survey that included questions about common misperceptions regarding COVID19, risk perceptions, social distancing compliance, and exposure to</p>	<p>Found that being exposed to news media is associated with fewer misperceptions and more social distancing compliance while conversely, social media exposure is associated with more misperceptions and less social distancing compliance.</p> <p>Misperceptions regarding the virus are in turn associated with less compliance with social distancing measures, even when controlling for a broad range of other attitudes and characteristics.</p> <p>Association between social media exposure and social distancing non-compliance is eliminated when accounting for effect of misperceptions, providing evidence that social media is associated with non-compliance through increasing misperceptions about the virus.</p>	<p>Such a possible chain may be created for our study as well – exposure to different kinds of news from different sources, trust and belief, followed by action etc.</p> <p>This may be more relevant for the lab study, wherein we could induce misinformation in a controlled environment through WhatsApp to participants, and see their follow-up reactions.</p>

²³ <https://www.washington.edu/news/2020/03/18/how-people-investigate-fake-news-on-twitter-and-facebook/>

²⁴ <https://misinforeview.hks.harvard.edu/article/the-causes-and-consequences-of-covid-19-misperceptions-understanding-the-role-of-news-and-social-media/>

Methodology	Findings	Relevance for our Study
<p>traditional news and social media.</p> <p>Regression was used for data analysis.</p>		
<p>11. <u>Internet users engage more with phatic posts than with health misinformation on Facebook</u>²⁵</p>		
<p>Conducted in-depth analyses of 500 posts that had generated, in 21 days, a total of 6,483,888 interactions: comments, shares, or reactions, through Facebook’s Crowd Tangle²⁶ Application.</p> <p>Regression was run for data analysis. Correlation was also made between different kinds of posts.</p>	<p>Tested various hypothesis which included:</p> <ul style="list-style-type: none"> • Negative content generates more interactions than neutral content or positive content. • Threat-related posts generate more interactions than nonthreatening posts. • Disgust-related posts generate more interactions than non-disgusting-related posts. • Sex-related posts generate more interactions than non sex-related posts. 	<p>Posts/forwards consumed by consumers may be categorised as such, and checked for the kind of traction they generate, based on responses.</p> <p>Results may be tested again in a lab setting.</p>
<p>12. <u>Trend Micro: The Fake News Machine How Propagandists Abuse the Internet and Manipulate the Public</u>²⁷</p>		
<p>Undertook cases studies of how fake news travels.</p>	<p>Proposes three factors for the success of fake news, i.e. social networks, motivation (commercial, political, psychological desires etc.), and tools & services (content marketing, data analytics services, social media promotion services etc.).</p> <p>Recommends consumer facing precautions for curbing fake</p>	<p>The recommendations for consumers given in this report may be tested in our study.</p>

²⁵ <https://www.nature.com/articles/s41599-020-0452-1>

²⁶ <https://research.fb.com/blog/2020/07/crowdtangle-opens-public-application-for-academics/>

²⁷ https://documents.trendmicro.com/assets/white_papers/wp-fake-news-machine-how-propagandists-abuse-the-internet.pdf

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	<p>news, as given below:</p> <ul style="list-style-type: none"> • Watch out for Hyperbolic and clickbait headlines, Suspicious website domains that spoof legitimate news media, Misspellings in content and awkwardly laid out website, Doctored photos and images, Absence of publishing timestamps, Lack of author, sources, and data. • Reading beyond the headline • Cross-checking the story with other media outlets if it is also reported elsewhere • Scrutinizing the links and sources the article uses to back up its story, and confirming those aren't spreading misinformation themselves • Researching the author, or where and when the content is published • Cross-referencing the content's images to see if they've been altered • Reviewing the comments, checking their profiles (if they're real or bots), and observing the timestamps between comments (i.e. see if a paragraph can be written and posted in a minute or less, or if previous comments were posted verbatim, etc.) • Reading the story thoroughly to see if it's not satire, a prank, or hoax • Consulting reputable fact checkers • Getting out of the "filter bubble" by reading news from a broader range of reputable sources; stories that don't align with your own beliefs don't necessarily mean they're fake. 	

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13. <u>Real or Fake? User Behavior and Attitudes Related to Determining the Veracity of Social Media Posts</u> ²⁸		
<p>An online survey using SurveyMonkey was conducted with 179 university community members (students and employees of a liberal arts institution in New England) and 198 members of the general public through social media (Facebook). Participants were recruited through snowball sampling method with the authors requesting people to share the survey link widely with family, friends and colleagues. Participants were not offered any compensation for their time. However, for every 25 completed surveys, up to a maximum of 500, a random drawing took place offering a \$25 gift.</p>	<p>Factors which consumers consider for building trust on a particular news were checked on a likert scale – grammar, sender, sources of information mentioned, availability of similar posts, position and timing of posts etc.</p> <p>Frequency of verifying news was also checked.</p> <p>Perspective on having an indicator of trustworthiness attached to content was also gauged – flashing stop light, number scale from 0-100, coloured graphic etc. Influence of these indicators was also checked.</p>	<p>Factors influencing not only trust, but reactions as well could be checked. Preferable ways to differentiating fake news could also be asked from respondents, with respect to their possible effectiveness.</p>

²⁸ <https://arxiv.org/ftp/arxiv/papers/1904/1904.03989.pdf>

Studies in India

Methodology	Findings	Relevance for our Study
1. <u>University of Michigan: Content patterns in COVID-19 related digital misinformation in India</u> ²⁹		
<p>Survey of 243 unique debunked COVID-19 related messages online.</p> <p>Qualitative coding of messages into different categories.</p> <p>Annotated each message for thematic-categories, representative-tags, source of claims & attributions and medium of propagation.</p>	<p>Messages were classified in different categories - Alarmism³⁰, Culture³¹, Cure³², Nature & the Environment³³, Casualty³⁴, Business & Economy³⁵, Government³⁶, and Doctored statistics³⁷.</p> <p>Amount of circulation of such messages is different for each category.</p> <p>Misinformation is more affective around identity and emotion, than around instrumental facts that can be scientifically verified.</p> <p>Mode of content relied upon to relay different kinds of misinformation varies between video, text, image and audio.</p> <p>Same/old news is often refabricated or re-circulated.</p> <p>Public figures and/or mainstream media are also noted to be spreaders of misinformation, which often adds credibility.</p> <p>Different keywords are used/observed for different categories of content.</p> <p>Popular misinformation content has been curated.</p>	<p>Classify kinds of misinformation based on subject, and type/mode.</p> <p>Check effects, frequency and emotions/reactions they trigger.</p> <p>List down factors giving messages credibility based on age, use of official seals or popular personalities etc.</p>
2. <u>Various statistics compiled by Statista.com</u>		

²⁹ <http://joyojeet.people.si.umich.edu/an-archive-of-covid-19-related-fake-news-in-india/>, and <http://joyojeet.people.si.umich.edu/temporal-patterns-in-covid-19-misinformation-in-india/>

³⁰ Message is alarmist when it refers to fear-invoking messages such as those with violent imagery, death or mass-killings.

³¹ Message is about culture when messages have religious connotations, celebrity or societal references.

³² Messages comes under cure-based when messages suggest remedies – alternative or mainstream – that make claims on curing people of the virus.

³³ Message is classified as nature when messages have references to animals and the environment.

³⁴ Messages relating to deaths, illness of people in the pandemic, including graphic images of suffering (not including doctored statistics)

³⁵ Messages relating to scams, panic-buying and target businesses with fake positive cases.

³⁶ Messages have government announcements and advisories or refer to police, judiciary, political parties.

³⁷ Messages that have exaggerated numbers of positive cases or death counts and fake advisories.

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	<p>The main factor which influenced Indian respondents of a survey to share information online was that it might benefit others. This was followed by a belief that mainstream media was biased and did not cover certain types of news.³⁸</p> <p>According to the results of a survey on rural India, 760 respondents were part of family WhatsApp groups, while about 105 stated that they were part of local administration groups on WhatsApp. The highest number of respondents were part of groups with friends on the social networking app.³⁹ It was found that about 15 percent of respondents never believed information they received via the messaging app. While about eight percent of respondents always believed the information, they received on WhatsApp during the survey period.⁴⁰ It was seen that about 36 percent of respondents only read forwarded messages whereas 25 percent of Indians in rural areas read and forwarded messages on WhatsApp during the survey period.⁴¹ A majority of respondents, about 43 percent trusted news channels, while about 15 percent trusted WhatsApp for news during the survey period.⁴²</p> <p>About 45 percent of the respondents of a survey about fake news in the Indian media said they had seen stories that were completely made up for political or commercial reasons. The survey respondents were asked to state the different kinds of fake news that they came across over the preceding week of the survey period.⁴³</p> <p>A majority of Indians under the age of 35 preferred to use online sources to access news, whereas, those above 35 years of age are more inclined towards traditional offline sources for news as of early January 2019.⁴⁴</p> <p>About 51 percent of the survey respondents agreed that they are concerned when facts were spun or twisted to push a particular agenda through fake news media. On the other hand, 32 percent of the respondents seemed to think satire was a concern in terms of fake news.⁴⁵</p> <p>When asked about the different social networks used to access news as of 2019, a majority of the surveyed</p>	<p>Consumer perceptions towards social media and mainstream media may be compared.</p> <p>Information consumption from different sources on WhatsApp may be mapped, and checked for trustworthiness, followed by re-actions.</p> <p>Perception towards agenda driven content being circulated online may be checked.</p> <p>Sources of receiving news (print, video, online etc.) may be checked and compared for trustworthiness.</p> <p>Factors influencing decision to believe or</p>

³⁸ <https://www.statista.com/statistics/996489/india-motivational-factors-to-share-information-on-social-media/>

³⁹ <https://www.statista.com/statistics/961517/india-nature-of-whatsapp-groups-in-rural-areas/>

⁴⁰ <https://www.statista.com/statistics/961486/india-credibility-of-whatsapp-information-in-rural-areas/>

⁴¹ <https://www.statista.com/statistics/961432/india-action-towards-forwarded-messages-on-whatsapp-in-rural-areas/>

⁴² <https://www.statista.com/statistics/961504/india-most-trusted-news-platform-in-rural-areas/>

⁴³ <https://www.statista.com/statistics/1027036/india-exposure-to-fake-news/>

⁴⁴ <https://www.statista.com/statistics/1026298/india-main-source-of-news-by-age/>

⁴⁵ <https://www.statista.com/statistics/1026835/india-fake-news-concern/>

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	<p>respondents in India stated Facebook and WhatsApp as their main sources at 52 percent each in the week preceding the survey period. Snapchat had the lowest use for news access at just five percent.⁴⁶</p> <p>63 percent of respondents according to a recent survey said the headline or picture was an important attribute to click-through to a news story on social media. This was in line with findings from another study that showed Indians largely rely on social cues or alternative markers like number of comments, images and the sender of the messages to access news.⁴⁷</p> <p>About 29 percent of respondents trusted news they received via WhatsApp or Facebook. About 55 percent trusted the news they read in a newspaper, while this was 50 percent among TV news consumers.⁴⁸</p> <p>About 41 percent of the respondents who supported BJP said they trusted most news most of the times in the week preceding the survey in early 2019, whereas, only 26 percent of those who did not support any political party and did not intend to vote said they trusted the news media that week.⁴⁹</p> <p>44.6 percent said that they had not heard of fact-checking organizations, while close to 20 percent trusted outlets that debunked fake news or fact-checked the news.⁵⁰</p>	<p>question the credibility of the news received online may be checked – picture, headline, source, likes etc.</p> <p>Awareness towards fact checking organisations, and capacity to use the same may be gauged.</p>
<p>3. <u>A digital media literacy intervention increases discernment between mainstream and false news in the United States and India</u>⁵¹</p>		
<p>Conducted preregistered survey experiments in both the United States and India examining the effectiveness of presenting people with “tips” to help spot false news stories.</p> <p>Used the average treatment effect on</p>	<p>Results indicated that exposure to variants of the Facebook media literacy intervention reduces people’s belief in false headlines.</p> <p>The media literacy treatment significantly reduced beliefs in false news stories, and respondents better distinguished between mainstream and false articles.</p> <p>Increased skepticism of false news headlines may come at the expense of decreased belief in mainstream news headlines—the media literacy</p>	<p>A proposed intervention to curb problematic content may be tested through the methodology.</p>

⁴⁶ <https://www.statista.com/statistics/1026234/india-social-networks-used-to-access-news/>

⁴⁷ <https://www.statista.com/statistics/1026277/india-attributes-to-access-news-on-social-media/>

⁴⁸ <https://www.statista.com/statistics/962662/india-trust-in-news-source/>

⁴⁹ <https://www.statista.com/statistics/1026819/india-trust-in-news-by-political-allegiance/>

⁵⁰ <https://www.statista.com/statistics/996531/india-level-of-trust-in-fact-checking-organizations/>

⁵¹ <https://www.pnas.org/content/117/27/15536>

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<p>the treated (ATT) method, using an instrumental variables approach.</p> <p>Exposed respondents to 2 waves of news items (pre-post literacy intervention) to check their ability to spot fake news.</p>	<p>intervention reduced the perceived accuracy of these headlines in both the US and India online surveys.</p> <p>Respondents' overall ability to distinguish between mainstream and untrustworthy news increases by more than 26% in the US sample and 17% in the highly educated online Indian sample.</p> <p>The findings provide important evidence that shortfalls in digital media literacy are an important factor in why people believe misinformation that they encounter online.</p>	
<p>4. <u>Research of Fake News Spreading Through WhatsApp</u>⁵²</p>		
<p>Tried to estimate the spread of Fake news on Whatsapp based on the Analytic Modeling, considering the number of feasible authors those are relevant for spreading of fake news (S), the wide variety of coetaneous authors who are highly active for posting the fake information (I), the range of authors who got the right information (R) through TV channels, newspaper etc who are inactive to spread the fake information.</p>	<p>Significant likelihood of increase in the trend of posting unreal information on WhatsApp in the next upcoming years as the ones who are active in posting rumors will continue sending fake news and the receivers will continue believing them due to lack of awareness. This study, based on conclusion, suggested that all WhatsApp users required to check the truthfulness of news before sending them to other users.</p>	<p>If remained unchecked, there is a significant risk of rise in the spread of problematic content through WhatsApp.</p>
<p>5. <u>Countering Misinformation Fake News In India</u>⁵³</p>		
<p>A web survey (1296) that collected data to understand the patterns of</p>	<p>The young (below 20 years) and old (above 50 years) that may be most</p>	<p>Possible solutions were recommended for different</p>

⁵² <https://www.ijitee.org/wp-content/uploads/papers/v8i6s4/F11930486S419.pdf>

⁵³ <https://factly.in/wp-content/uploads/2019/02/Countering-Misinformation-Fake-News-In-India.pdf>

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<p>information consumption in India and if there is a correlation between beliefs, attitudes, bias and motivation to share information.</p> <p>Consolidated opinions of multiple stakeholders (76) extracted from semi structured interviews - Technology & Internet Service Providers Government – Policy Law Enforcement, Media & Influencers, Fact Checkers & Verifiers, Academia, Political Parties.</p>	<p>susceptible to fake news.</p> <p>Those who are relatively new to use of technology/ internet & smartphones may be more susceptible to fake news than others.</p> <p>Newspapers still remain one of the top sources of information for people across age groups.</p> <p>Connecting with friends & family, exchange of information related to work/study and news are the greatest drivers behind people using social media.</p> <p>As age of the respondents increased, Friends or Friend Groups and groups based on political/social/cultural beliefs of the person was chosen by a greater proportion of respondents as their main source of information on social media.</p> <p>Background evidence and trust in organizations/persons are what make most people to believe in the information they receive on social media.</p> <p>Benefit to others and the lack of trust on mainstream media are what drive people to forward information on social media. is in line with global observations that most people forward/share information without knowing they are spreading fake news.</p> <p>People trust neutral media and fact-checking organizations more than others.</p> <p>A substantial percentage of people are not aware of the existence of fact checking organizations.</p> <p>People verify the information they receive when they are pushed to do so.</p> <p>Fake news has a greater probability of being correctly identified when it</p>	<p>stakeholders.</p>

Methodology	Findings	Relevance for our Study
	is fact checked/debunked by multiple organizations.	
6. “I don’t think that’s True, Bro!” An Experiment on Fact-checking Misinformation in India ⁵⁴		
<p>Studies if peer-to-peer corrections on the encrypted messaging app WhatsApp can reduce misinformation or not.</p> <p>An experimental evaluation is conducted among a large sample size of N=5104 to check the effect of different types of corrective messages against seven common rumours.</p> <p>Respondents are shown screenshots of WhatsApp group chat where one users posts a message carrying fake news and another user posts a corrective message as a response. The respondents are themselves not a part of the group and only view screenshot of the group chat.</p>	<p>Finds that peer-to-peer corrections substantially reduce belief in misinformation. Even brief, unsourced and unsubstantiated corrective messages have an affect which is comparable to that of corrective messages which are backed by evidence from credible sources.</p> <p>Suggests that even signalling a doubt about a rumour, substantiated or unsubstantiated, may significantly reduce spread of misinformation.</p>	<p>Intervention such as corrective messages on encrypted messaging apps may lead to a great degree of awareness and spread of misinformation may be prevented.</p>

⁵⁴ <https://sumitradrinathan.github.io/Assets/paper-whatsapp.pdf>

Studies in Kenya

Methodology	Findings	Relevance for our Study
1. <u>Audience Motivations for Sharing Dis- and Misinformation: A Comparative Study in Five Sub-Saharan African Countries</u> ⁵⁵		
<p>Secondary research.</p> <p>Conducted focus groups with undergraduate and graduate student in five countries - Kenya⁵⁶, Namibia, Nigeria, South Africa and Zimbabwe.</p> <p>A total of 59 participants joined the discussion, in groups ranging from 5 to 15.</p> <p>Discussions lasted between 50 and 65 minutes and covered the following general topics: media consumption, news sharing online,</p>	<p>In established democracy such as the United Kingdom, more than half of social media users (57.7%) have reported that they have recently come across news on these platforms of which the veracity was in doubt. Nevertheless, a high percentage (42.8%) of users admit to have shared false or inaccurate news, of which 17.3% said they thought the news was false at the time of sharing it.</p> <p>Race is one influence on how young social media users select exposure to news on social media.</p> <p>Users who willingly and/or knowing shared false information on social media platforms were ‘likely to be male, younger, and more interested in politics. Not only social position, but also political orientation was found to play a role in the likelihood of British social media users sharing false information.</p> <p>When asked to reflect on the reasons why they share news on social media, British respondents reported as the top three reasons ‘To express my feelings’ (65.5%), ‘To inform others’ (also 65.5%) and ‘To find out other people’s opinions’ (51,1%). These reasons display an orientation towards civic participation or purpose.</p> <p>The social utility of sharing ‘fake news’ in Singapore – ‘cope with uncertainty, build relationships, and for self-enhancement’. The main types of news stories that are shared, are those that have a ‘high informational utility – ‘news you can use’ which resonates with their own lives and that have a high emotional impact. Sharing news, is seen as contributing to social cohesion – users doing so are motivated by the emotional impact the news is seen to have, the relevance it might have for the receiver, and the sender’s</p>	<p>Parameters such as democracy, freedom of press may be kept in mind while data analysis and country wide comparison.</p> <p>Sample design may be split as per race/caste/religion, political alignment etc. for comparison.</p> <p>Knowingly and unknowingly sharing fake news may be checked, along with reasons for the same.</p> <p>These reasons may be personal, interpersonal, political, expecting response/action etc.</p> <p>Hostility could specifically be focussed upon, as a</p>

⁵⁵ <https://cyber.harvard.edu/sites/default/files/2019-12/%20Audience%20Motivations%20for%20Sharing%20Dis-%20and%20Misinformation.pdf>

⁵⁶ Kenya is an East African country with a vibrant independent media as well as a strong presence of international media, notably Chinese media who have made Nairobi a hub from where it expands into the region. Kenya also has a vocal, active community of social media users which makes it suitable for a study of dis- and misinformation online.

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<p>sharing of political information, the prevalence of fake news, and possible solutions to existing problems with mis- and disinformation.</p> <p>Online survey also conducted.</p>	<p>intention to ‘provide advice or warning’ (trust between sender & receiver, and inter-personal relationships).</p> <p>When hostile rumors are shared, the aim is to ‘(1) coordinate the attention and action of the audience with the goal of mobilizing against the target group and (2) signal their willingness to engage in conflict escalation (i.e., helping push the collective over the tipping point for collective action).’</p> <p>Studies on spread of ‘fake news’ in the African context, established a link between lack of trust in the news media and the sharing of false news. Second, there is a sense of civic duty that might lead social media users to share warnings of impending disasters or crises. Even if the information might turn out not to be true, the harm done by not informing others may be seen as outweighing that of not informing them. And, third, there’s the sense that information is democratic and needs to be passed on. Users may take the popularity or virality of a shared piece of information as indication of its veracity. This motivation might be especially relevant in African countries where the state exercises a great deal of control or ownership over the media, which may lead to a decline in trust in mainstream media. In the African context, further cultural influences such as the long-standing importance of informal sources of information such as gossip, rumour and may play a further role in the likelihood of media users to share news found on social media.</p>	<p>category of fake news, and expected result from self and receiver may be recorded.</p> <p>Again, indicators of checking veracity/trust on news items may be gauged with respect to similar parameters, as used in this study.</p>

Studies in Ghana

Methodology	Findings	Relevance for our Study
1. <u>Media Perspectives on Fake News in Ghana</u>⁵⁷		
A survey which had 154 respondents from newsrooms across the country was conducted. Majority of respondents were from radio stations. Other respondents were from converged newsrooms (a combination of two or more media types namely TV, radio, newspaper and online)	<p>This study is important in a number of ways more so that it is ground-breaking in the Ghanaian context. The study provides unique insights into how newsrooms are evolving especially by moving away from a reliance on traditional sources of news to social media and user content-generated material, which opens them up to the possibility of peddling fake news.</p> <p>The study also established that fake news is mostly manifested as fabricated content and false headline without connection to content.</p> <p>Overall, the study revealed that fake news is a growing problem. However, the media, regulatory bodies, and government do not have a clear-cut strategy to deal with the problem. Additionally, the Ghanaian media landscape does not have systems, budget and trained personnel dedicated to combat the menace of fake news.</p>	<p>Highlights the roles of newsrooms, especially considering the reliance on user-generated content, in safeguarding Ghanaians from fake news. It also highlights the need for editorial systems and concerted efforts towards putting in procedures and structures to monitor the news media.</p> <p>Similarly, it discusses the credibility of newsrooms in the light of the prevalence of fake news and the financial responsibilities needed to combat the spread.</p> <p>Highlights the need to promulgate strategy options, as well as legal and regulatory policies to combat fake news.</p>
2. <u>Double-edged Sword: Ghanaians see pros, cons of social media, want access but not fake news</u>⁵⁸		
Surveys were conducted	<p>Findings further cement social media as a common source of news for Ghanaians. Surveys showed that although radio and television remain the most dominant news sources, daily news consumption via social media and the Internet is steadily increasing. However, this study reveals that despite being a common source of news for Ghanaians, Ghanaians trust it less</p>	<p>Studies the dissemination of fake news and legal provisions for people who disseminate fake news.</p> <p>Discusses the perceptions of Ghanaians of political parties and politicians and their role in the dissemination of false information.</p>

⁵⁷ <https://penplusbytes.org/wp-content/uploads/2018/05/FAKE-NEWS-STUDY.pdf>

⁵⁸ https://media.africportal.org/documents/ad366-fake_news_and_social_media_in_ghana-7june20.pdf

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	than traditional media.	Highlights the perceived role of the government in combating the spread of false information, hate speech and other problematic content.