Fake News and the Polarized Indian

Studying the relationship between political attitudes and engagement with disinformation

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ABSTRACT

India is experiencing a disinformation epidemic that is permeating the fabric of the country and polarizing the public, whether people are aware of it or not. Though extensive coverage is being given to this ‘fake news crisis’ in media discourse, the focus is often on the technologies that have enabled its fast proliferation rather than the socio-political atmosphere that encourages it and even less on the ordinary public that unwittingly distributes it. Through an experimental research, this study delves into how individuals engage with political (dis)information and the role that personal political attitudes play in that process. Research is conducted through an online within-subjects experimental survey in the run up to the 2019 Indian General Elections, focusing on the subset of the Indian population that are internet users and consumers of English language news. The collected data revealed that holding left or right-leaning attitudes influences the way in which attitude affirming or discrepant political information is engaged with. Guided by a greater need to avoid cognitive dissonance and achieve confirmation bias that impacts critical information processing filters, right-leaning individuals are more susceptible to believing disinformation when it aligns with their views than left-leaning counterparts. Growing polarisation of socio-political identities has also been identified as a factor, especially in the distinction between the consolidated right-identity versus the left-identity that is more loosely connected and more defined in their opposition to the right. These results need to be viewed in the context of the growing power of the BJP and the mass appeal of Indian Prime Minister Narendra Modi, who has become central to the socio-political imagining of the country. The results of this quantitative study compliment the findings of previous qualitative research, which highlight the alignment of the rise of BJP and Modi with the surge in nationalism-fuelled disinformation distribution.

KEYWORDS: disinformation, confirmation bias, polarization, political attitudes
ACKNOWLEDGEMENTS

To say that the process of producing this thesis was a smooth and unhindered process would be a bigger understatement than saying that it was just a thesis. What you will see in the following 80-odd pages might be what I refer to as ‘the last shreds of my sanity’, but it is also so much more than that. The idea at the core of this thesis is one I have been toying with since 2016, a good year before I knew what I would be doing for my masters – let alone that I would be switching disciplines from history to media studies. It is a topic I have been building towards slowly from the first paper I wrote for my Academic Skills workshop back in September 2017 to the last paper I wrote from my New Media, Politics and Campaigns course in April 2019. It was why I chose to do this specific programme, and why I chose to do quantitative research even though numbers scare (read: terrify) me; it is the culmination of the past three years of my life.

To say that the process of producing this thesis was one that I achieved single-handedly would be a bigger understatement than the one I started this page with. I have a long list of people to thank and I do not plan on shortening it for the sake of being concise. It was the support of each one of these people that came together to become the scaffolding that held me up while I converted a nagging thought into a full-fledged research. To my sister, who reminded me along every step of the way why I undertook this study, and when that failed, told me that I could do this because she did hers in less time. To my parents, for the getting me to where I am in this world but also showing me that I could change it in my own little ways. To my aunt and uncle, who have always told me to reach for the stars when I was just trying for the moon. To my family, who have engaged with me in every discussion about fake news and politics and the state of the world with the same level of interest today as they did 3 years ago. To my girls, who have seen me through the good, bad and ugly, and made themselves available round-the-clock for anything and everything I needed. And finally, to my supervisor, who has what I can only imagine are infinite reserves of patience and understanding, and without whom none of this would have been possible.

I dedicate this thesis to every single person back home who has fought for and continues to fight against all odds and adversity for the freedom of press, for the freedom of speech, for the freedom to live, and for freedom. This one is for you.
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1. Introduction

1.1. Context and research question

This research focuses on two global phenomena – fake news and polarization of political attitudes – and delves into their characteristics in the Indian context. Fake news, hyper-partisan news and politically slanted information are all examples of disinformation, the latter of which is an all-encompassing term referring to *deliberately* factually incorrect information (Tucker et al., 2018). The disinformation epidemic is intimately tied with political propaganda, due to its propensity to polarise and radicalise opinions (Carson, 2018; Laser et al., 2018).

This is especially true in India, where the nexus between toxic nationalism and political polarisation has been identified as one of the primary driving forces of disinformation proliferation (Chakrabarti, Stengel & Solanki, 2018). The instrumentalisation of disinformation has led to a rise in extremist right-wing politics, with the additional consequence in rural areas of rumour-fuelled violence attributed to the lack of familiarity with online technologies and practices (Uikey & Dubey, 2018). Overall, there is growing polarisation across the country which has been associated with the (mis)use of online media technologies, which increases in intensity during election periods (Gupta, 2019). Its use in political propaganda becomes especially visible during campaigning periods, which in India is a messy, long drawn out or even permanent affair.

However, this does not adequately address the audiences of disinformation, the people for whom this information is created or shared. What makes someone engage with disinformation, what makes them believe it, and what makes them – often unwittingly – distributors of fake news. Through an experimental research, this proposed thesis aims to explore a more specific aspect of the aforementioned issue: testing the relationship between political attitudes and engagement with disinformation. Existing research has established that political attitudes influence an individual’s relationship with disinformation (Tucker et al., 2018; Van Duyn & Collier, 2019); however, this relationship nor its intricacies have been explicitly explored within India, which differs from western contexts in its socio-political history, system of governance and population demographics. This leads to research questions that this study is guided by:

**RQ:** To what extent do an individual’s political attitudes influence their engagement with disinformation messages in India?
1.2. **Social and academic relevance**

Much of the discourse surrounding India’s disinformation crisis has been centred around offline acts of violence (Chakrabarti et al., 2018), increasingly focusing on the technologies facilitating the practice rather than the socio-political environment that allows or encourages it (Gupta, 2018). This diverts public attention from insidious processes such as the polarisation of political attitudes – especially within the right – fuelled by weaponization of disinformation (Gupta, 2019). Furthermore, the adoption of disinformation as a tool for campaign propaganda in the upcoming national elections has never been witnessed at this scale, much less studied (Perrigo, 2018).

Academically, the discourse surrounding disinformation has been tackled from the perspectives of media platforms and governmental institutions but there exists a gap in addressing the role of the ordinary Indian in this phenomenon. Questions surrounding individual engagement with disinformation have only recently received the in-depth attention that other stakeholders have, as seen in the Indian edition of BBC’s Beyond Fake News series (Chakrabarti et al., 2018). The exploration of individual profiles assumes greater importance when considering their role in the proliferation of political disinformation, and a primary aspect to consider are political attitudes.

The disinformation epidemic in India is now receiving academic attention, providing some in-depth and contextual insights on the issue (Gupta, 2019). However, these are either brief reports by media outlets (e.g. www.storyful.com), sub-sections in larger reports (e.g. Ireton & Posetti, 2018), or in-depth qualitative research (e.g. Chakrabarti et al., 2018), with theorisation derived from these studies and its applicability to large populations being questioned or challenged (Sarkar, 2018). Due to this, the proposed thesis takes a quantitative approach as it provides objective and unbiased methods to study this complex social phenomenon (Babbie, 2014). Additionally, the external validity and generalisability of quantitative findings are greater than its qualitative counterpart (Neuman, 2014), which is crucial for populations as staggeringly large and diverse as India. The proposed thesis sets out to answer some basic but crucial questions, with the aim of laying a foundation and providing direction for future research.

1.3. **Structure of the thesis**

After briefly explaining the background and context of this study and introducing the research question, the remainder of the paper has been organized into various chapters. Chapter 2 presents the theoretical framework, which primarily expounds the theories of confirmation bias, selective
exposure and polarization that form the foundation of this research, appropriately applies them to the Indian context, and also provides the argumentation behind the 5 sets of hypotheses. Chapter 3 explains the overall research design of this study, by detailing the research method, sampling, operationalization of measures, survey design, and reliability and validity of the research. Throughout the chapter, the various ethical considerations that were kept in mind while designing a study into the sensitive topic of political (dis)information during elections are also touched upon.

Chapter 4 comprises the results of the statistical tests, with chapter being introduced through some descriptive statistics which enrich the data analysis process, before presenting the analyses to the 5 sets of hypotheses. Finally, Chapter 5 provides the conclusion of the study wherein the overall discussions vis-à-vis the research question are given, and implications of the research outcomes are briefly explored. The chapter concludes with the limitations and recommendations for future research. The last two sections provide a list of all referenced sources and literature, and appendices with additional supporting material.
2. Theoretical Framework

How an individual interacts with information is the result of various conscious and unconscious influences, and this research aims at exploring the specific relationship between internet users and political (dis)information. At the core of this theoretical framework are the concepts of confirmation bias, selective exposure and polarization based in socio-political identities, which are then explored within the context of the disinformation epidemic in the Indian media and political landscape.

Though the studies used for the core concepts are primarily based in non-Indian/western countries, theorizations can be drawn and applied to the Indian context due to certain common elements between the otherwise different systems. Furthermore, the lack of India-specific academic research also forms the justification for the initial hypotheses, which replicate the basic assumptions in confirmation bias and selective exposure theories and seeks to establish them in the Indian context.

2.1. Characteristics of the Indian media system

To establish the context in which this study is situated, India’s media and political system will be characterised using the model of comparative media systems as developed by Hallin and Mancini. This characterization will further aid in the application of theories from other countries to the Indian context, and this contextualization is essential to answer the research questions appropriately. In their seminal study, Hallin and Mancini (2004) compare eighteen western democracies by systematically analysing various dimensions of the media and political system in each country, and further classifying each as being one of three Liberal, Democratic Corporatist, or Polarized Pluralist models.

In the follow-up to their first book, Hallin and Mancini (2012) revisit their framework and apply it beyond the western world. Though India is mentioned as the world’s largest democracy with a growing news media sector, the authors do not apply their model to the country. Since then, other scholars have used this comparative framework to study the Indian system and this section will primarily rely on Mushtaq & Baig’s (2016) classification, using secondary sources to confirm and/or update their analyses. A preliminary reading of the Indian system shows strong parallels to the Polarized Pluralist model, especially considering the political system characterized by clientelism and commercialized media with weak professionalization; however, the early development of democracy and minimal state intervention has brought it dominantly closer to the Liberal model.
2.1.1. Media system

According to Hallin and Mancini’s (2004) framework, a media system is characterized by four dimensions: development of mass media, political parallelism, professionalization, and state intervention. India witnessed the early development of mass media, primarily in the form of a thriving newspaper industry inherited after independence from British colonial rule (Mushtaq & Baig, 2016). While Hindi and English language newspapers form majority of national publications, vernacular languages comprise a more significant share of the market and readership (KPMG, 2018). With around 180 languages and over 540 dialects, linguistic diversity has been a prominent driver of growth and development in the mass media industry (Mushtaq & Baig, 2016).

This is especially noticeable when looking at the print industry which – in contrast to global trends – continues to grow at a robust (albeit slower) rate because of increasing literacy rates and growing regional markets (KPMG, 2018; Mushtaq & Baig, 2016). In addition to print, electronic media has been historically integral to the industry, witnessing enormous growth since the economic liberalization in 1990 (EY-India, 2018). For example, India is the third largest market for television in terms of viewership, with around 140 million TV households (Mushtaq & Baig, 2016). With regards to the digital media industry, India is the second largest online market with over 550 million internet users (Aneez, Neyazi, Kalogeropoulous, & Nielsen, 2018). Offline media such as print and television remain an important source, but social media is becoming the gateway for online news; however, it should be noted that digital news has not replaced print news but rather supplements it (Aneez, et al., 2018; KPMG, 2018). It should be noted that these (and subsequent) figures are national averages which do not reflect the uneven penetration and distribution of media across geographic, linguistic, class, caste, religious and demographic divides (Mushtaq & Baig, 2016).

Political parallelism – the second dimension to assess media systems and considered to be its defining characteristic – indicates the extent to which media content and organizations are politically biased and affiliated (Hallin & Mancini, 2004). The media are seen as being politically and ideologically divided, with support being expressed to certain parties or in favour of certain ideologies. The political divide is particularly prominent as many media organizations are either owned or indirectly influenced by politicians or their close relatives, and owners and editors of media groups are known to openly express their political allegiances (Mushtaq & Baig, 2016). Ownership in the media and telecommunications sector is concentrated in the hands of certain business families, and these industrial giants are known to exert pressure on ruling parties and politicians for financial concessions and benefits (Mushtaq & Baig, 2016). The close and interlinked ties between the political and corporate elites has led to the industry being labelled as direct or
indirect partisan media or networked media (Chakravarty & Roy, 2013), highlighting the external pluralism that characterizes Indian media. Due to this networked media, the main problem remains to be the objective coverage of news. However, despite the belief that news sources do not provide all sides of a story, the public trust in media is attributed to the diversity and pluralism within the media sector (Mushtaq & Baig, 2016).

The third dimension of professionalization refers to the independence of the media vis-à-vis the state, and its ability to adhere to the ethical norms and standards of journalistic practice (Hallin & Mancini, 2004). As evidenced by the previous paragraph, the media are not completely autonomous and exhibit weak professionalization. Due to early politicization, Indian media has lacked a coherent code of ethics and specialized training for journalists (Mushtaq & Baig, 2016). Additionally, media content being commercially motivated and entertainment oriented (Chakrabarti et al., 2018; Rao & Johal, 2006) has led to the further deterioration of ethical values. Due to high politicization and commercialization, the media developed characteristics of tabloidization, information manipulation, and paid news (Rao & Johal, 2006). Paid news has become a particularly pervasive issue – especially noticeable during election campaigning periods in the last decade – transforming the media into “an instrument for manipulation of public opinion instead of device for authentic news and information” (Mushtaq & Baig, 2016, page 51).

An example of the widespread practice of paid political news was uncovered in 2018 which severely compromised the integrity of Indian press institution but was subsequently buried by the players involved. The Cobrapost is a non-profit Indian journalistic practice that conducted a sting named ‘Operation 136’ – a reference to India’s press freedom rank in the 2018 – by sending a reporter undercover to 27 of the largest media houses in the country (TheWire, 2018). This reporter implied an association with the BJP’s parent organization and revealed plans to use news content to stir communal discord and help tilt the 2019 elections in BJP’s favour for a large sum of (black) money (TheWire, 2018). Of those approached, about two dozen were willing to strike business deals to promote the Hindutva agenda in the run up to the elections (TheWire, 2018).

Finally, the fourth dimension relates to level of state intervention i.e. the role of the government in the shaping and functioning of the media system (Hallin & Mancini, 2004). Television and radio had been under government control, but the 1991 economic liberalization saw the entry of private stations, leading to the diminishing of governmental monopoly and rise of transnational media organizations and conglomerates (Mushtaq & Baig, 2016). Though there is no evidence of direct state intervention, operators are known to give into state and right-wing pressures during period of crises or flared tensions (Mushtaq & Baig, 2016). On the other hand, the print industry has
historically been free of state control with no direct restrictions being imposed. However, indirect control through external pressures, and political/corporate ownership has resulted in a biased and partisan press (Mushtaq & Baig, 2016). With increasing levels of regulation and censorship by the state and attacks on journalists in recent years, India’s ranking in the World Press Freedom Index has dropped from the 133rd rank out of 180 countries in 2016 to 140th in 2019, reflecting the second lowest categorization of a ‘bad/difficult situation’ (Reporters Without Borders, 2019).

2.1.2. Political system

India is an interesting case among developing countries; it is the largest democracy in the world but is often considered to be a ‘deviant democracy’, referring to the segmented social structures, high political polarization and instrumentalization (Mushtaq & Baig, 2016). Though there is a low level of trust in political elites, the public has consistently shown trust and support of the long history of democratic traditions and strong electoral processes (Mushtaq & Baig, 2016), as reflected in the 2019 General Elections seeing a voter turnout of nearly 68% - the highest in the country’s history (Wu & Gettleman, 2019). To better understand this unique political landscape, Hallin and Mancini’s five dimensions for political systems will be used to analyse the contemporary political landscape.

The first dimension – the role of the state – assesses the interventional activity of the state by drawing a distinction between liberal and welfare state democracies (Hallin & Mancini, 2004). The constitution establishes India as a sovereign socialist secular democratic republic and secures inalienable fundamental human rights (Mustaq & Baig, 2006). Social rights, on the other hand, are ‘strived’ for, allowing for flexibility in its implementation (Mushtaq & Baig, 2016). Historically, India has been characterized as a welfare state, but post-liberalization also enabled a free and competitive market to invigorate the stagnating economy (EY-India, 2018). While overall socio-economic conditions have improved since, progress has been uneven and led to greater class divides (Mushtaq & Baig, 2016). Despite the major economic upheavals in the last three decades, democracy remains a strongly rooted idea with “political democracy [thriving] way before social democracy could find its place” (Mushtaq & Baig, 2016, p. 53).

The second dimension also makes a dichotomous comparison, referred to as consensus versus majoritarian democracy (Hallin & Mancini, 2004). An analysis of the political system using this dimension reveals the changes democratic processes in India have undergone. The Indian National Congress (INC or Congress), a secular centre-left party borne of the independence struggle movement, has dominated the political system of India since the 1950’s (Mushtaq & Baig, 2016). The unchallenged domination of Congress was followed by the rise and consolidation of the opposition
in the late 1960's, leading to a multi-party system (Mushtaq & Baig, 2016). Over the following decade, Congress' hold weakened due to shortcomings and failures during its governing years as well as the dynastic stronghold of the Nehru-Gandhi family. Jawaharlal Nehru was the first prime minister of India, his daughter Indira Gandhi succeeded him to become the first female and second prime minister, and her son Rajiv Gandhi was the sixth and youngest prime minister (Wu & Gettleman, 2019).

After the period of state emergency imposed by Indira Gandhi from 1975-77, the country witnessed its first non-Congress party – the Janata Party – coming to power in the 1977 General Elections (Mushtaq & Baig, 2016). Though the Janata Party dissolved in 1980, former members reconvened to form the Bharatiya Janata Party (BJP), which has since emerged as the main opposition and alternative to Congress (Consuelo, 2015; Manchanda, 2002). Though Congress has returned to power multiple times since then, political power has been exerted by coalition governments – either the Congress-led United Progressive Alliance (UPA) or BJP-led National Democratic Alliance (NDA) – since 1989 (Mushtaq & Baig, 2016). Congress and the BJP continue to be the two major national political parties, always standing in opposition to each other, though the parties that join their coalitions are not constant (Newsnation.in, 2019). The NDA led by current Prime Minister Narendra Modi had a landslide victory in the 2014 elections, with BJP itself securing enough votes to form majority government (Consuelo, 2015) – a feat they replicated in the 2019 elections (The New York Times, 2019).

Coalition governments are a hallmark of consensual democracies, highlighting the will of ‘as many people as possible’ over the ‘majority of people’ (Lijphart, 1999). However due to the nature of transition in democratic processes, Lijphart (1996) identified India as a deviant case of the majoritarian model and being more consociational. Consociationalism is observed in countries which are deeply divided into distinct religious, ethnic, racial, or regional segments, with key characteristics of power sharing through coalitions and segmental autonomy (Lijphart, 1996; Mushtaq & Baig). Consociationalism provides a higher quality of governance as well as broader representation – the latter being key in addressing the segmentation and diversity in Indian society (Mushtaq & Baig, 2016).

The third dimension draws a distinction between individual and organized pluralism, referring to the ideology of liberalism and corporatism respectively (Hallin & Mancini, 2004). India is marked by its diversity but also a scarcity and disparity in access to resources, which are not ideal conditions for individuals to shape their relationship with political processes; therefore, liberalism could not take hold (Mushtaq & Baig, 2016). On the other hand, the abundant and cross-cutting of
different social groups makes it difficult for organization at a level where policy can be influenced; therefore, organized pluralism is not seen (Mushtaq & Baig, 2016). However, the Indian constitution does recognize severely disadvantaged groups (such as backward castes, tribes, and classes) and assures non-discrimination, autonomy and reservation in governmental institutions (Mushtaq & Baig, 2016). Religious minorities are also granted similar protection.

The fourth dimension indicates the difference between rational-legal authority and clientelism (Hallin & Mancini, 2004). After the displacement of Congress and the “familial charisma of the Gandhi family” (Mushtaq & Baig, 2016, p. 55), the country started transitioning towards rational-legal authority. Institutions like the judiciary, bureaucracy, and the Election Commission of India are autonomous, but a history of party-affiliated clientelism has led to struggles with rational authority and which prevents these bodies from functioning completely independent of any state pressures (Mushtaq & Baig, 2016).

The final dimension is conceptualized as the difference between moderate and polarized pluralism. Hallin and Mancini’s (2004) definition of polarization based in the spectrum of right and left-leaning political ideologies does not adequately reflect the nature of pluralism in India, which sees polarization based more in religious, caste and socio-economic divides. With major conflicts being rooted in religious difference, clashes of Hindus with other minorities (especially Muslims) underscore major socio-political events (Chaturvedi, 2002). The past few decades have witnessed a growing wave of right-wing Hindu or hindutva nationalism, aligning with its increasing presence in the agenda and rhetoric of some political parties and leaders (Consuelo, 2015). Parties like the BJP – whose parent organization Rashtriya Swayamvek Seva (RSS) is staunchly Hindutva – and allied parties have been involved in communal riots between Hindus and Muslims in 1992 and 2002 (Manchanda, 2002; Tripathi, 2005). Congress and its allies have been more secular in their approach but have been accused of playing vote-bank politics in favour of Muslims and other minorities (Chaturvedi, 2002).

Indian politics is experiencing high polarization between Hindu nationalism and secular nationalism (Mushtaq & Baig, 2016). However, there are parties, like the Communist Party of India, which are defined by primarily by their political ideology. Polarized pluralist multi-party systems are marked by a history of political violence and extreme ideological gaps, which are features that India has; however, the pluralism is not considered to be a threat to the status of party system and is therefore considered more inclined towards moderate pluralism (Mushtaq & Baig, 2016).
2.2. Socio-political identities in India

India’s defining characteristics is her heterogeneity, guided by the core principle of ‘unity in diversity’ since the beginning of the nation-building process in the 1940’s (Alam, 2017). The ideal notion of a nation-state has been primarily understood in its mono-racial or mono-cultural form, and India does not fit into that definition as its social fault lines are multi-dimensional and intersectional, with social structures heavily segmented based on caste, class, ethnicity, language and race (Chowdhury, 2018). In fact, the ‘Republic of India’ is the result of demarcation of sovereignty under the British colonial rule and further reorganization and consolidation undertaken by leaders of the Indian independence movement, with the key unifying factor being the shared history of the people living in the region (Alam, 2017).

The ideal of a homogenized nation-state is linked to the ease of governance and progress, an ideal that India has not historically subscribed to. While democracy rooted in pluralism and diversity are essential features to India’s multi-ethnic nation-state, the maintainability of this ‘idea of India’ has been brought into question, especially by forces within the country that desire India to be unified under a homogenous identity (Chakrabarti et al., 2018; Alam, 2017). In recent years, right-wing Hindutva nationalist forces have started a movement which seeks to consolidate the Indian identity around the Hindu identity – a process that has been fuelled by the rise in popularity of Narendra Modi and the BJP (Chakrabarti et al., 2018).

The past 30 years of Indian politics as witnessed the rise of Hindu nationalism, which has situated itself in opposition to secular nationalism (Chakrabarti et al., 2018). The Hindutva ideology expresses a range of discourses along the spectrum of mild to extreme but is rooted in the core idea that India is a culturally Hindu country. Here, ‘Hindu’ is not limited to followers of Hinduism but rather the culture of Hindustan, which comprises the traditions and languages of Sanskrit and Hindi that originated in the ancient Vedic age, as well as the way of life associated with Hinduism. Buddhists, Jains and Sikhs are included within the fold of Hindus, as they belong to religions borne out of India; whereas Muslim and Christians are suspect of having ‘extraterritorial loyalties’ as their holy lands lie outside of India (Chakrabarti et al., 2018). Through religion is but one aspect of the multi-faceted Indian identity, its importance and centrality to socio-political expression has magnified immensely in recent years – especially since the decisive victory of Modi and the BJP in 2014 and 2019.

Political ideologies and orientations are a manifestation of socio-political identities, the formation of which can be understand in the context of Tajfel and Turner’s social identity theory.
This theory posits that an individuals’ conception of self is derived from the perceived membership in a social group (Tajfel, 1982). This theory can be used to predict inter group behaviours based on the status of different groups, which can lead to the perception formation of in-groups and out-groups or a ‘us versus them’ set-up (McKeown, Haji, Ferguson, 2016). Applying this theory to this Indian context, the (upper caste) Hindus have occupied the ‘us’ position while ‘lower’ caste Hindus, tribal groups and religious minorities have consistently occupied the ‘them’ position (McKeown, Haji, Ferguson, 2016). The ‘othering’ in India socio-political imagination is particularly visible in the treatment of Muslims. Islam entered the Indian subcontinent centuries ago and has been an integral aspect of Indian life (Mistry, 2007), and while Muslims now comprise the largest minority in the country – second in number to the majority Hindus – they are also the most vilified and misrepresented. Though the two communities have existed side by side for centuries now, Muslims have historically and contemporaneously been treated as the "outsiders" or “invaders” (Ahmed, 2017; Kumar, 2011).

‘Polarized’ is a term that has been used with increasing frequency to describe India’s socio-political atmosphere, and this polarization is especially visible in the last decade. In their research on fake news and Indian citizens, Chakrabarti, Stengel and Solanki (2018) found evidence of multiple socio-political identities crystallising in response to the rise of Hindutva nationalism and Narendra Modi. They identify three broad hindu/tva groups on the right side of the political spectrum: conservatives, progressives and warriors. It should be noted, ‘hindu/tva’ is used to indicate that the two are not synonymous as there are also some Hindus who do not ideologically identify with Hindutva. While groups on the right are unified by clear ideologies with similar views and goals, the left is not organized around a political ideology but rather in its opposition to the right. In this sense, they are united in their positioning against certain narratives in the right-leaning political discourse. Chakrabarti and his team (2018) identified four key “left” narratives in their fieldwork: anti Hindutva, anti Modi policies, anti Modi personality, and pro Congress/other parties. They also identify a third socio-political identity that are not moderate or centrists but are disengaged from the (political) news cycle.

2.3. News and disinformation in the digital age

2.3.1. Digitization of Indian news

Indian media has witnessed a dramatic change in the past decade, especially with the rapid increase in digital access and consumption (KPMG, 2018). As mentioned earlier, India is the second largest
online market with over 550 million internet users (Aneez, et al., 2018), of which around 315 million are urban users, and the rest from rural areas (IAMAI-Kantar IMRB, 2018). The explosive expansion of internet users comes from the rural areas, which has witnessed a 35% growth in number of users in the 2018; in comparison, urban users have grown by 7% (Economic Times, 2019). The influx of rural users was spurred by the launch of a new mobile network operator ‘Jio’ by telecom giant Reliance Industries in September 2016 (KPMG, 2018), whose competitively priced data plans brought in over 50 million new users online by the end of the year (EY-India, 2018). Data consumption per user has grown by eight times (KPMG, 2018), and as a significant number of these new users were from rural areas, mobile internet became was often their first contact with the online world (Chakrabarti, et al, 2018).

While print circulation is dominated by Hindi and vernaculars, English newspapers are leading in developing digital strategies (KPMG, 2018). Therefore, the reports that this section relies on primarily rely on samples of English-language news users with internet access, and subsequent generalizations are drawn from that small but significant subset (Aneez, et al., 2018). Overall findings suggest:

“English-language Indian news users with internet access are embracing a mobile-first, platform-dominated media environment with search engines, social media, and messaging applications playing a key role in how people access and use news in a setting characterised by low trust in many news media, high concerns over the possible implications of expressing political views, and widespread worries about different kinds of disinformation.

(Aneez, et al., 2018, page 8)

The rapid move to digital and mobile-based media has had significant consequences on journalistic practices (Augey & Alcaraz, 2019) as well how Indians access and engage with news information (Aneez, et al., 2018). The mobile-first and platform-dominated market is further established with an overwhelming majority of users relying on distributed discovery rather than direct discovery of news, which demonstrates how central intermediaries such as Facebook and Whatsapp have become to online news distribution (Aneez, et al., 2018). Furthermore, social media has low barriers of entry compared to offline publications, therefore providing larger number and variety of sources. A consequence of receiving news via social media – especially with Facebook – is that the lines between personal and public, news and entertainment, hard and soft news, and fact and opinion have become blurred, as they appear in the same feed (Chakrabarti, et al., 2018).
India is the largest market for WhatsApp, and the second largest for Facebook (EY-India, 2018), and the Reuters Institute India Digital News Report (2018) indicates that Facebook and WhatsApp are the most widely used online sources for news. Though online news consumers show varying degrees of interest in and frequency of news consumption, a higher use of different sources emerges as compared to peers in other countries – which could be a result of the tradition of subscribing to multiple newspapers regularly (Aneez, et al., 2018). Along with higher engagement with news are the higher levels of concern about openly expressing political beliefs online; this can be viewed in the context of recent cases in India wherein over 20 individuals – among the general public, journalists or critical commentators – have been arrested since 2012 for sharing ‘offensive or threatening’ material against politicians (Aneez, et al., 2018).

As a platform, Facebook has an audience larger than any singular media outlet in India making this platform central in existing traditional media promoting their digital offerings. Additionally, Facebook’s instant news feature – which allows news reading on lower internet bandwidths – has made it the preferred destination for users (Aneez, Chattapadhyay, Parthasarathi, & Nielsen, 2017). Due to the widespread competition for audience attention, news is constructed to be attention grabbing and stand out in an ultra-competitive market (Aneez, et al. 2017).

In terms of the online sources that users rely on, the digital versions of legacy print brands still remain the primary sources of online news. However, there is a growing number of alternative and partisan news portals emerging that are feeding on the lack of trust the public has on mainstream media to appropriately and consistently represent their views (Aneez, et al., 2018). Overall, trust in media and platforms plays out differently in the online landscape where direct (e.g. websites, apps) and distributed (e.g. search engines, social media) discovery complement each other. There is a general low trust in news, but that level of trust becomes higher when combined with distributed discovery (Aneez, et al., 2018). However, the proliferation of fake news has shaken the trust and credibility of news sourced from social media, leading to future of online news being closely scrutinized (KPMG, 2018).

2.3.2. Disinformation in online networks

Fake news has become a prominent term in media-politico discourse and is increasingly seen as “one of the greatest threats to democracy, free debate and the [democratic] order” (Carson, 2019, para 1). Fake news refers to false information distributed via traditional and digital channels, ranging from hyper-partisan to misleading to completely fabricated content (Aneez, et al., 2018; Chakrabarti et al., 2018; Tufekci, 2018). Though fake news is the most commonly used term, ‘disinformation’ has been
identified as the most appropriate terminology as it specifically indicates the deliberately misleading nature of this content (Tucker et al., 2018), which is what this study focuses on.

Within the Indian context, the coverage given to the disinformation crisis has grown considerably in the past three years. The English language media were the first to address the crisis, with vernacular news engaging with this discourse in more recent times as the issue spouted tangible consequence (Chakrabarti et al., 2018). The proliferation of disinformation has led to the credibility of online news being brought into question by industry experts as well as the public, though the latter primarily comes from English language audiences (KPMG, 2018). However, the discourse has primarily focused on the technologies through which disinformation is shared and subsequent violence, and not the socio-political conditions that allow it to thrive (Gupta, 2018). In this discourse, the role of the public in the distribution of this content is either missing or portrayed as a victim of forces beyond their control and having minimal agency.

There is a huge volume of information competing on for the limited attention span of users. One consequence of the high competition – especially on Facebook – is “unsubstantiated content [being] fed to the readers simply for sensationalism” (Aneez, et al., 2017, p. 59). While Facebook is the primary source of news for almost three times as many people as Twitter, the latter is used from breaking news updates and becomes the site for public debate and extended distribution of disinformation – even though it is seen as being a toxic environment in India (Aneez, et al., 2018). The use of Whatsapp as a source of news brings with it the dynamic of news shared between private – and therefore more like-minded – networks, which has played a role in the distribution of disinformation (Aneez, et al., 2018).

2.3.3. Disinformation in political news

The BBC Report (2018) on fake news and the ordinary citizen has been the most comprehensive and credible study conducted in India and will form the foundation of how this thesis applies and understands various theories to the Indian socio-political context. In their study, Chakrabarti and his team (2018) identified four key narratives that have appeared in fake news messages that are especially effective in fooling readers. These narratives are: Hindu power and superiority, preservation and revival, progress and national pride, and the personality and prowess of Modi (Chakrabarti, et al., 2018). This lends an answer to the widespread question of why citizens engage with disinformation, revealing that the validation of socio-political identity overrules the need to verify its truthfulness. Though similar fake news tactics have been observed on both the
right and left side, the volume of right leaning disinformation has been noted as being far more significant and organized (Chakrabarti, et al., 2018).

The surge in political disinformation in India aligns with the election of Narendra Modi as Prime Minister and the BJP to the national government in 2014 (Chakrabarti et al., 2018; Consuelo, 2015). Modi and the BJP are active proponents of the Hindutva agenda, and the rising tide of Hindutva has been identified as driving citizens to spread misinformation (Chakrabarti et al., 2018), fuelled by the incendiary and communally divisive rhetoric of the BJP (Edwards & Ramamurthy, 2017). Research has also suggested that the disinformation ecosystems of the right are more organised than of the left and overlap with support networks of Modi and BJP – examples of the conflation and consolidation of the ‘right’ identity with Pro-Modi or BJP attitudes (Chakrabarti et al., 2018).

BJP’s 2014 election campaign had a political communication strategy with a pointed focus on social media (Bajaj, 2017). Modi’s social media campaign has been one of the most successful made by a public figure (Pal, 2015), further establishing social media as an effective campaign tool in India (Bajaj, 2017). The General Elections, which leads to the appointment of the national government, takes place every 5 years, most recently occurring in May 2019 (Perrigo, 2019). After the success of BJP in 2014 – attributed to their extensive media strategies – the 2019 elections witnessed even more rigorous online campaigning by all parties (Perrigo, 2019), creating a huge surge in disinformation through political propaganda (Shanker, 2018).

The big social media networks, such as Facebook and Twitter, are where a wealth of disinformation distribution takes place (Laser et al., 2018). However, Whatsapp has taken primacy in India in terms of being the platform of choice for most internet users who engage with and share disinformation (Uikey & Dubey, 2018), with more than 90% of smartphone users having it installed (Perrigo, 2019). The potential of Whatsapp for (dis)information dissemination has been noticed; political parties are increasingly investing resources into creating thousands of Whatsapp groups to share political messages for the upcoming elections, leading to it being called India’s first ‘Whatsapp Elections’ (Chakrabarti et al., 2018; Perrigo, 2019).

2.4. Confirmation bias versus informational utility

The exponential rise of online media has led to an abundance of available information, making online environments a space that allow audiences to pick and choose content with great specificity
(Bennet & Iyengar, 2008), laying the groundwork for selective exposure based on interplay of factors such as confirmation bias and informational utility (Stroud, 2017).

2.4.1: Cognitive dissonance and confirmation bias

The theory of cognitive dissonance proposed by Festinger (1962) is predicated on the idea that individuals seek information that aligns with existing attitudes, striving for cognitive consistency and avoiding discomfort caused by an internal contradiction in beliefs. This implies that individuals actively or unconsciously avoid situations that could cause instances of cognitive dissonance, and – by extension – seek out information that aligns with previously held beliefs (Knobloch-Westerwick & Kleinman, 2012). This tendency to seek, favour or interpret information in a way that affirms pre-existing beliefs is known as having a confirmation bias (Knobloch-Westerwick, Mothes, & Polavin, 2017).

Social media has risen in importance as a source of political news and information (Alcott & Gentzkow, 2017). With the continuously increasing online information choice, the process of how individuals select political messages becomes even more important. Individuals who follow news will typically be presented with a variety of topics simultaneously (Knobloch-Westerwick & Meng, 2009). This would be especially applicable in the case of online users in India, who are characterized by their distributed consumption of news from a variety of sources (Aneez, et al., 2018). Regarding how this news information is interpreted, one way for an individual to minimize cognitive dissonance when they are confronted with attitude-discrepant information can be to question the veracity of the message itself and interpret it as false information or ‘fake news’. Therefore, in the case of disinformation, the theory of confirmation bias can be extending to theorise that individuals would not be motivated to doubt attitude-affirming information and be motivated to doubt attitude-discrepant information – in an effort to maintain cognitive consistency. This lends to the testing of the first set of hypotheses:

*Hypothesis 1a:* Individuals are more likely to accurately identify disinformation when the message is incongruent with their political attitudes.

*Hypothesis 1b:* Individuals are less likely to perceive a message as disinformation when it is congruent with their political attitudes.

*Hypothesis 1c:* Individuals are likely to perceive a message as ‘real news’ faster when it is congruent with their political attitudes.
Studies have been conducted to specifically explore the influence of confirmation biases with regards to political (dis)information – especially in the election campaigning period (e.g. Allcott & Gentzkow, 2017; Knobloch-Westerwick & Kleinman, 2012) – wherein selectively attending to messages is motivated by preparing or adapting to future socio-political changes.

2.4.2. Risk aversion and informational utility

While the theory of confirmation bias has formed the foundation of psycho-social understandings of individuals’ engagement with attitude-discrepant and -affirming information, subsequent research has not always supported the primacy of this theory. Empirical evidence has revealed that there are extenuating circumstances when attitude-discrepant information is actively sought out by individuals, a key factor in these circumstances being informational utility (Knobloch-Westerwick & Kleinman, 2012). While a confirmation bias refers to individuals seeking out attitude-affirming information to avoid cognitive dissonance (Mullainathan & Washington, 2006), informational utility dictates that if a message is perceived to be useful – and therefore, has high utility – an individual will engage with it regardless of its alignment with existing attitudes because then “information functions as an aid for adaptation to the environment” (Knobloch-Westerwick & Kleinman, 2012, p. 171) i.e. a tool for risk aversion.

Though the two concepts are not always mutually exclusive, they often clash due to the differing definitions of what individuals classify as being ‘useful’. This dynamic is not as simple to establish as it can be influenced by an interplay of other context-specific forces, which is something this study seeks to explore through its second set of hypotheses. In a socio-political context, the information utility versus confirmation bias struggle can be defined by an interplay of factors such as personal political history (e.g. beliefs, party loyalty), external environmental factors (e.g. election period), news consumption patterns (e.g. variety in sources, frequency of news consumption) and so on (Knobloch-Westerwick, et al., 2017).

Looking at (pre)election periods specifically, the dynamics surrounding media messages and consumption patterns are impacted by informational utility, where the definition of what is useful takes on a new character: placing personal opinions in the larger context of political outcomes (Mullainathan & Washington, 2006). Research has pointed to informational utility overriding the need for confirmation bias in election periods due to the increased perceived value of political information when it could inform audiences regarding major policy upheavals that accompany changes in government (Knobloch-Westerwick & Kleinman, 2012). However, these consumption patterns can differ among audiences of different political orientations, leading to an asymmetry in
confirmation bias. For example, individuals whose preferred party is expected to lose an election do not show strong confirmation biases and are more inclined to consume content that is incongruent with their beliefs i.e. from the opposing side, to prepare themselves for incoming changes in government (Knobloch-Westerwick & Kleinman, 2012). On the other hand, individuals whose preferred party is likely to come to power show a greater confirmation bias than their counterparts due to not needing to adapt to an attitude-dissenting environment.

Applying this to the Indian context, wherein the incumbent right-wing Modi and BJP were expected to – and did – return to power, the asymmetry in confirmation bias caused by informational utility in election periods is tested through the following hypotheses:

*Hypothesis 2a*: Right-leaning individuals are likely to find attitude-congruent messages more useful than attitude-discrepant messages.

*Hypothesis 2b*: Left-leaning individuals are likely to find attitude-discrepant messages more useful than attitude-congruent messages.

### 2.5. Selective exposure: polarization and partisanship

#### 2.5.1. Attitude polarization and selective exposure

Selective exposure harkens back to the phenomena of an abundance of information causing individuals to selectively allocate their attention to certain messages by demonstrating preference and avoidance based on a variety of intersectional factors (Stroud, 2010) – one of which is the previously mentioned theory of confirmation bias. If individuals are motivated in their selection of information by a confirmation bias, this leads to a polarizing effect – especially on the internet where it is possible to completely avoid attitude-discrepant messages (Knobloch-Westerwick & Kleinman, 2012). This becomes all the more relevant in the case of political messages, where selective attention to attitude-affirming information can impact opinion formation, reduce political tolerance, and lead to greater polarization of personal opinions and in the larger public imagination (Knobloch-Westerwick & Meng, 2009). This assumes significance when considering how online environments are increasingly becoming important sources of information and sites for political debate (Ireton & Posetti, 2018).

This further lends to Bennet and Iyengar’s (2008) theory of the internet ushering in a ‘new era of minimal effects’, arguing that if individuals can easily avoid dissonant messages, then they will
– thus magnifying polarizing patterns of biased exposure. However, other scholars argue that the characteristics of the online media environment (i.e. easy access to abundant information) which allows for confirmation-guided search are the same characteristics that allow individuals access to a variety of views if confirmation biases are not a motivating factor (Holbert, Garrett, & Gleason, 2010).

An individual’s personal attitudes are central to the studies in the previously mentioned theories but only a few explore how varying degrees of attitude intensity lead to a differently pronounced relationship with information. Knobloch-Westerwick and Meng (2009) use the works of Brannon, Tagler and Eagly (2007) as a foundation to explore how greater attitude strength influences the preference for attitude-consistent information, suggesting that extreme attitudes create greater cognitive dissonance and therefore, lead to higher avoidance. Extending this to the case of disinformation, individuals holding extreme political attitudes would experience more dissonance and more readily dismiss the information as being false. In the case of individuals with more moderate attitudes, being presented with attitude-discrepant information might not evoke as strong a dissonance reaction – as compared to their more extreme attitude holding counterparts – and the need for confirmation bias would be less likely to override their critical filter. Additionally, political polarisation in India has also manifested in the level of trust individuals show in news media;

“India displays a different pattern, where trust among both those respondents who identify with the BJP and those who identify with parties currently or recently aligned with the UPA generally trust the news more than those respondents who do not identify as partisans, perhaps suggesting some discontent with the perceived relations between much of the political establishment and the news media covering it.”

(Aneez, et al., 2018, page 18)

This points to moderate, non-partisan and disengaged individuals expressing less trust in news media – adding a critical layer in how political information is interpreted. This theorisation is tested through the following hypothesis:

_Hypothesis 3:_ Individuals with moderate political attitudes are more likely to accurately identify disinformation messages than their more politically extreme counterparts.

Applying this relationship to the Indian context, the left-leaning identity and attitudes are less consolidated and radicalised as their right-leaning counterparts (Chakrabarti, et al., 2018), and therefore would not experience a dissonance to the same degree. Furthermore, disinformation
ecosystems in the right have been observed as being more organized and producing a larger volume of disinformation – which was previously seen narratives present in the bulk of political disinformation (Chakrabarti, et al., 2018). Additionally, if the theorisation backing the previous hypothesis holds true in the Indian context as well, then extreme-right leaning individuals would experience the most dissonance when confronted with attitude-discrepant information. This leads to the following hypotheses:

**Hypothesis 4a:** Left-leaning individuals are more likely to accurately identify attitude-congruent disinformation than their right-leaning counterparts.

**Hypothesis 4b:** Extreme right-leaning individuals are less likely to identify attitude-congruent disinformation than extreme left-leaning counterparts.

### 2.5.2. Polarization and partisan media

Another important question is the relationship between partisan media and audience polarisation: do partisan media lead to polarised attitudes or does it simply attract already polarised audiences? It is increasingly believed that the growing variety and availability of news sources encourages greater consumer selectivity which – when guided by a confirmation bias – leads to political polarised attitudes (Bennet & Iyengar, 2008). However, this correlation has also been challenged by scholars who subscribe to the ‘limited effects’ model which posits that media consumption does not cause attitude changes but can bolster pre-existing attitudes (Mutz & Martin, 2001). There is an additional requirement of more context-specific research outside of the US Presidential system (Knobloch-Westerwick et al., 2015) and those challenging correlation as a simplistic understanding of polarisation by attributing it simple to the changing media landscape. For example, Knobloch-Westerwick & Kleinman (2012) argue that, unlike traditional media, which – if polarized – pushes information, online media is sought out and necessary information is pulled by individuals.

Stroud’s (2010) research into selective exposure provided evidence that consistently points to selective exposure (from partisan media) leading to increased polarisation, which gives the power of media influence greater importance. This is not to say that media effects are identified as the singularly fuelling polarised attitudes – as personal predisposition can moderate the effect certain media discourses – but challenges the limited effects perspective which underplayed the impact media images have on audiences (Bennet & Iyengar, 2008; Gerber, Huber, & Washington, 2009). Stroud further points to the importance of considering the characteristics of both the media and the audience before classifying the political effects of the former. This becomes an especially important
factor to keep in mind for this study, which sets out to test the relationship between media messages and personal beliefs.

Analysing the media is one way of addressing this debate – as it forms the lens through which information is communicated to the public – especially considering how a diversified or polarised information environment gives news outlets greater economic motives to cater to consumers polarised news preferences (Bennet & Iyengar, 2008). However, that does not adequately consider the media consumption patterns of the individual audiences. Partisanship – both from the media and the audience – is strongly correlated with attitudes (Gerber et al., 2009). However, when considering the variety of factors that influence media behaviour and the contentious nature of the relationship between media effects, one can keep in mind that “on one hand, partisan selective exposure and polarization may spark more political participation—a democratically desirable goal. [...] On the other hand, partisan selective exposure and polarization may engender a less tolerant and more fragmented public” (Stroud, 2010, p 551).

One such factor that can override the confirmation bias fuelled selective exposure is media consumption habits. Studies (e.g. Knobloch-Westerwick & Kleinman, 2012), provide evidence that habitual online news consumption overriding a confirmation bias; the inverse – that individuals with infrequent consumption show significant confirmation bias – is also confirmed. The role of news consumption behaviour is explored through the following hypothesis:

**Hypothesis 5:** Individuals who are frequent news consumers are more likely to accurately identify disinformation.

As mentioned earlier, many theorisations in this field emerge from US-based studies, which bring into question their applicability to India. However, there are certain commonalities between the American and Indian media and political systems – exemplified by their classification as Liberal models – which allow for some extrapolations from one context to another. For example, though both countries have different systems of governance, India has also historically seen two major parties compete in the national elections (Consuelo, 2015), creating a dichotomy similar to that as with Republicans and Democrats (Gerber et al., 2010). It should also be noted that voter behaviour in India is similar to the US in the sense that an individual’s political orientation is often defined in support or opposition to a certain political party (Benoit, 2007), though in India the right is more affiliated with a singular party i.e. the BJP, and the left is unified more by its opposition to the right (Chakrabarti et al., 2018). This provides adequate grounds to believe that theorised relationships from studies based in the US could be extended to the Indian context; however, the larger number
of facets – and therefore confounding factors – in the Indian socio-political identity require these observations to be tested rather than assumed.
3. Methodology

3.1. Research Method and Justification

Given the nature of this thesis’ topic and the goals the study, quantitative methods were selected to execute data collection and analysis. Quantitative methods allow for the objective measurement of observable social phenomenon by a detached researcher (Neuman, 2014), which is something that qualitative research does not permit due to its inherently subjective nature. Maintaining objectivity and transparency is an important concern for this research, as delving into political topics in the current climate of polarization and sensitivity in India has led to studies being criticized and questioned based on perceptions of certain political agendas being favoured – an example of which is the right-wing take down of the BBC Beyond Fake News report (News Laundry, 2018). Additionally, quantitative methods are chosen when a research needs to study a large set of subjects, which is essential for this thesis to be representative of the sub-section of the population it studies. In any case, given the size and diversity of India’s population, a large sample is necessary for the results to be statistically significant and generalizable.

The subject of fake news is a broad and highly complex topic but the recency of its identification in India as a significant socio-political problem has led to the present scenario, wherein only a few context-specific qualitative studies have been undertaken. The aspect of the fake news phenomenon this thesis explores is the relationship between disinformation and political attitudes, as a review of existing literature (e.g. Chakrabarti, et al., 2018; Aneez, et al., 2018) has revealed that political identity is a key factor – especially in the process of individual engagement. This relationship is then examined using the previously mentioned theories of selective exposure and confirmation biases. As well-established theories are extended to conditions that have not yet been academically tested, this study has elements of both explanatory and exploratory research (Neuman, 2014).

As the overarching research question is tested through causal hypotheses, experiments were identified as the most appropriate method to execute this study. Experimental designs derive principles typically found in natural science research methods, lending it the tag of being more logical and ‘scientific’ amongst social science research methods and highly effective for explanatory research (Neuman, 2014). Guided by a well-focused research question, using experimental methods affords the researcher a high degree of control to determine conditions for causality to be observed by minimizing interference of non-tested variables and gather powerful evidence to establish a relationship between variables (Neuman, 2014). In other words, with experiments this thesis can test the influence of political attitudes on engagement with disinformation through exposure to
carefully constructed stimuli in a controlled setting, while also allowing for the consideration of other variables.

In methodological terms, experimental research designs are strongly preferred over methods that rely on self-reporting as individual users are not typically aware of the exact motivations behind their media selection choices. Extending this logic to this study, individuals cannot be relied upon to accurately assess their engagement with disinformation, especially because distributing or believing these messages are not conscious decisions for the average individual (Chakrabarti, et al., 2018). With experimental research providing an objective, unbiased, scientific approach to study this complex social phenomenon (Babbie, 2014), this study benefits from executing its research through this method. Furthermore, previous studies on political polarisation and confirmation bias have also been conducted through experimental designs, with experiments being a common characteristic of research in the paradigm of selective exposure (Knobloch-Westernick, 2015).

As this thesis assesses the attitudes and responses of individuals to political (dis)information presented in the form of textual stimuli, research is carried out through an online survey experiment. Surveys allow the researcher to construct a regulated and standardized experimental design with flexibility in gathering a mix of self-reported and observed data. A survey also arouses less suspicion from participants over the study being an experiment and makes the cover story more effective in its believability. Given the scope and resources available for a master’s thesis, an online survey eases the process of administration for a researcher who is not situated in the country where the sample is drawn from. Furthermore, online administration enables the collection of a higher number of responses (Neuman, 2014) without being restricted to a specific geographic region. The drawback of online data collection restricting a sample to internet users does not arise for this thesis, as the sub-set of the Indian population that is being studied are internet-using, English speaking audiences. Therefore, online experimental survey research has been identified as the ideal method to achieve the goals of this study.

This study was constructed as a within-subject experiment with a 2x2 factorial design. A factorial design indicates the testing of two factors at two levels each – with four treatment conditions in total (Ryan, 2007). The treatment conditions in this study are short news messages, of which two factors are messages that express either a pro-left or pro-right political slant, and the levels being factually incorrect/fake or factually correct/real news. A within-subjects experiment indicates that each respondent is exposed to all the experimental conditions, which in this case would be the news message. Therefore, the treatment will be sets of 4 stimuli, each of which is a
short message with politically slanted fake or real news, which are then presented to each respondent in a randomised order

This survey was designed on the online survey software Qualtrics as a within-subject experiment with four treatment conditions, which means that each participant was exposed to all four conditions. The experimental design will be detailed further in later sections.

3.2. Sampling

3.2.1. Target population

As the research question is concerned with political attitudes and disinformation, a certain degree of engagement with or awareness of the current Indian political landscape is essential to the study. Therefore, the target population for this study are Indians who are currently residing in the country, in order to limit the influence of confounding variables and yield the most valid results. The only other consideration for the sample is that of age, wherein the minimum age of participants must be 18 years, which is the legal voting age in India. Additionally, research has shown voter eligibility as contributing to the strengthening of polarisation of political opinions (Mullainathan & Washington, 2006). Due to the language of the survey and its method of distribution, an expected characteristic of the sample is that participants will be English-speaking individuals with access to internet services. This means that the sample will not be representative of the entire population of adult resident Indians but will be restricted to the sub-set of English language media consumers with internet-access. Previous studies have also shown that this sub-section of the population is not equally distributed along demographic lines, with a skew towards affluent, male, and educated individuals (Aneez, et al. 2018).

According to the Methodological Guidelines 2018-19 of the Department of Media and Communication of Erasmus University Rotterdam, a master thesis executed through a survey requires between 150 to 250 respondents, and an experiment requires a minimum of 30 participants per condition. Based on these recommendations from the Methodological Guidelines, while also keeping in mind that this thesis uses a within-subjects experimental survey design to study a large population, the sample size of this research should be a minimum of 200 participants. A sample of this size – which excludes respondents surveyed during the pre-test and pilot phases – would have enough power to measure and find relevant effects.
3.2.2. Sampling method

Ideally, the sample would be determined by non-purposive sampling as is done with most quantitative research (Babbie, 2014). However, this thesis relies on a mix of purposive, convenience and self-selection sampling due to time and monetary constraints given the scope of this thesis. Furthermore, due to the sensitive nature of political disinformation as a research topic and its administration in the days leading up to election results, the survey was not distributed by the researcher herself in order to maintain a level of anonymity. Instead, specific individuals were identified – hereafter called ‘distribution channels’ – and recruited to share the survey within their personal and professional networks.

The most significant aspect of the sample is political attitudes, with the number of left and right leaning respondents needing to be as close to a 50-50 ratio as possible. However, it was deemed difficult to screen respondents based on their political attitudes before they fill out the survey – especially since doing so might hint at what the survey is testing. Therefore, distribution channels were recruited based on the networks they have access to, with a focus on accessing age groups older than 30, different educational levels, varied professional backgrounds, metropolitan cities other than Delhi and Mumbai, and areas beyond North India. By aiming for a demographically diverse sample, the researcher expected to yield variations in political attitudes as well.

Purposive sampling refers to a sample that is selected based on certain population characteristics and objectives of the study (Lavrakas, 2008), which in this case was guided by the need for distribution channels who could create a more diverse sample and potentially providing more-or-less equal variation in political stance. There is an element of convenience sampling, as the distribution channels recruited were ones accessible to the researcher (Battaglia, 2011); however, a bulk of the respondents are individuals approached by the distribution channel and unknown to the researcher. Finally, as most respondents were contacted by the distribution channels, there would have been situations where the survey was shared but respondents either do not respond or outrightly refuse. This is the case of self-selection sampling, wherein the participation by a potential respondent is determined by their own voluntariness (Sterba & Foster, 2011), which could interfere with the sample being varied enough to produce statistically significant results (Olsen, 2011). It is likely that individuals approached by the distribution channels exercised their right to not participate – or abandon participation during the survey – given the topical and sensitive nature of the survey. However, self-selection sampling comes with the benefit of voluntariness to participate being motivated by interest in the topic, which in this case would benefit the research. On the flipside,
individuals who are not necessarily interested in political news topics are still likely to come across and engage disinformation messages (on social media, at least).

The distribution channels were provided an anonymous link to the Qualtrics survey on the 20th of May 2019 and asked to share it within their networks immediately so that responses could be collected before election results were announced on the 23rd of May. A short data collection period was chosen so that the news information the participants were exposed to were not prominently debunked, dated or irrelevant news topics in English media discourse – especially as politically aware and motivated individuals increase engagement with news in the period leading up to vote counting and announcement of the election results.

3.2.3. Sample characteristics

In total, 369 responses to the survey were recorded by Qualtrics, of which 347 were filled out through anonymous links provided to the distribution channels and 22 from the social media of the researcher. From this set of responses 128 were partially filled, of which 123 were omitted for reasons of providing incomplete profiles of participants and potentially skewing the results. It should be noted that the 5 partial responses that are included in the final dataset are considered because the respondents had filled the survey up until and including the statement set on political attitudes. This means that the only block missing in these responses were the questions on news consumption, and as that block is of importance only to test Hypothesis 5, the researcher chose to include them in the final dataset. An additional 4 complete responses were omitted as they were filled out by individuals aged below 18 years, which was the previously established minimum age requirement for respondents.

The number of incomplete responses could be attributed to the politically sensitive nature of some questions, as 63.4% of the partial responses recorded showed that the participant was exposed to at least one of the political news messages before abandoning the survey. This brings back the previously expressed concern of the researcher that the sensitivity of the topic would dissuade participation; this is further exemplified through the feedback received by a few distribution channels over the nature of some questions – especially those about Modi and the BJP – making them uncomfortable. For example, one participant expressed, “Apologies […] I had to quit the survey midway. All questions popping up for me turned out to be on Modi and BJP and current situation. Without any exception! […] I have asked group members to contribute and 3 of them confirmed [what happened with] me. I will attempt later if similar queries don't pop up”. The same individual attempted the survey again and sent follow-up feedback: “I suspended it after two
queries. I may be overthinking […] but […] she should be aware […] the queries are a little too close to what is happening in India politics today which I personally believe is little sensitive”. However, this is not to say that political sensitivities are the only dissuading factor; the length of the survey and complexity of certain questions could also be a factor, as 23.4% abandoned the survey after being exposed to all the political news messages, at which point questions became more complex in their structure and about 30% of survey was still remaining.

After omitting the non-valid responses, the final dataset consisted of 242 responses, exhibiting a response rate of 65.6% and meeting the minimum sample size requirement for this thesis. Between the first and last recorded response of this dataset, the data collection period was from 21st to 26th of May, extending a few days beyond the election results day. However, 95% of the responses were recorded in the crucial period before the 24th May.

The sample was not disproportionately skewed towards one gender, with 50% identifying as male, 48.8% as female, and 1.2% preferring not to disclose their gender. The average age of the respondent was 34 years (\(M=34.65, SD=13.36\)), with 38.4% aged below 25 years, 18.6% between the ages of 25 and 34 years, 13.6% between 35 and 44 years, 14.9% between 45 and 54 years, and 12.8% over the age of 55 years. Most of the respondents had studied up to a collegiate level, with 50% having obtained a Bachelors/under-graduate degree, followed by 42.6% holding a Masters/post-graduate degree, and 5% had a Ph.D./Doctorate degree. Of the remaining, 1.7% studied up to grade 12th and 0.8% chose the ‘other’ option. Regarding status of employment, 57.8% are employed – 35.1% in the private sector and 22.7% in government/public sector – and 2.9% are unemployed, and 1.2% are retired. Of the remaining, 32.2% are students and 5.8% chose the ‘other’ option (e.g. consulting, freelance work).

Regarding political attitudes of respondents, 22.7% were identified as holding extreme left-leaning attitudes, 17.8% as left, 22.3% as moderate, 14% as right, and 23.1% as extreme right-leaning. Regarding a respondent’s self-identification with being a news consumer, 5.8% said they never consider themselves to be news consumers, 39.7% said sometimes, 16.5% feel so about half the time, 24% most of the time, and 13.6% always. Among these respondents, 7% claim to never actively search for news, while 49.2% claim to search sometimes, 18.2% do it about half the time, 18.2% do it most of the time, and 7% always search. Coming to verification of news content, 14% claim to never double-check the news they consume, 46.3% do it sometimes, 13.6% do it about half the time, 17.4% do it most of the time, and with the lowest, 8.3% of respondents claim that they always verify news content.
Regarding language in which news is consumed, 87.6% of respondents identified English as the primary language in which they consume news – which was expected as the online survey was in English. For the remaining, Hindi was the primary language for 5%, Malayalam for 2.9%, 0.8% each for Gujarati and Marathi, and 0.4% each for Assamese and Telugu. It should be clarified that the primary language in which news is consumed should not be confused with the respondent’s first or native language. 56% of respondents indicated secondary languages in which they consume news, with 31% of the total sample having indicated Hindi, 10.3% indicated English, 7% indicated Malayalam, 1.7% indicated Gujarati, 1.2% each for Bengali and Tamil, 0.8% indicated Marathi, and the remaining distributed between French, German, Norsk, Odia, Telugu and Urdu.

The demographics of this sample are more-or-less representative of the target population of this study. As mentioned earlier, studies conducted on English-speaking internet using samples skewed towards the male, affluent, well-educated. Apart from gender – which sees an almost equal distribution – in this sample 97.6% of respondents have at least obtained or are in the process of obtaining an under-graduate degree, and only 2.9% are unemployed.

3.3. Operationalisation and measures

In social science research, it is imperative that abstract social phenomena and concepts are clearly defined into measurable units called variables. The first critical step in establishing a causal hypothesis is identifying the independent and dependent variables (Neuman, 2014). This research primarily explores the influence of the independent variable of personal political attitudes on the dependent variable of engagement with disinformation. However, the relationship between the two cannot be broken down to a direct cause-and-effect, as there are other factors which could also impact this relationship. Amongst these other factors, this study will account for few relevant independent variables while trying to limit the influence of confounding variables that weaken the causal relationship between the studied variables. This study will also control for demographic variables if statistically significant variations arise during data analysis.

3.3.1. Independent variable: political attitudes

The first and most significant independent variable is political attitudes, referring to the opinions of an individual regarding a socio-political ideology, issue, party and/or politician. This study adopts three approaches to measure socio-political leanings, of which two allow respondents to self-report their political orientation and the third extrapolates political attitudes based on the respondent’s
response to a set of questions. For the purpose of this academic study, political attitudes are
understood as a manifestation of an individual’s socio-political identity and these political attitudes
are used to test the hypotheses. This study positions these political attitudes against the backdrop of
national politics and particularly in relation to the BJP and PM Modi, whose growing power and
influence since 2014 has aligned with some major changes in the socio-political sphere.

Explicit self-reported political leanings are not exclusively used to test the hypotheses for
various reasons. Firstly, the researcher had cause to believe that respondents might hesitate to
reveal or incorrectly indicate their leanings, especially in the case of right-leaning or extreme
attitude holding respondents. Secondly, a respondents’ understanding of their socio-political identity
might not align with the researcher’s conceptualization for the purpose of this study. Therefore, the
survey includes a third approach to measure only political attitudes and uses the self-reported
political orientation to enrich the results and discussion process.

This third – and primary – approach to assess political attitudes utilizes two sets of
statements about politics and society, where respondents indicate their level of agreement to each
statement on a 5-point Likert scale (Brill, 2011) ranging from strongly disagree to strongly agree. The
first set comprises 5 statements about general society, derived from the Political Compass
questionnaire (politicalcompass.org), which tests social attitudes with regards to individual
engagement with the government or state i.e. predispositions towards libertarianism or
authoritarianism. Testing socio-political rather than economic-political orientation was deemed
more important, given the way in which socio-political identities in India have crystallised more
around nationalistic lines. The second set comprises 8 statements about the current national
political environment, with these statements being directly positioned against the narratives in the
treatment messages. These statements are essential for the categorization of individuals based on
their political attitudes, as it enables the testing against attitude-consistent and attitude-discrepant
messages. The statements in this set range from self-identification with the national political parties
(e.g. supporter of BJP, Congress or no party), opinions on these parties and their functioning (e.g.
Congress as the best alternative to the BJ), and some factually oriented statements (e.g. Congress is
left-leaning, BJP is right leaning).

Based on the responses to these two sets of statements, the categorical independent
variable of political attitudes was created. The variable of political attitudes was then presented in
three different ways, depending on the hypothesis that was being tested. Firstly, politically slanted
attitudes were expressed with three categories: left, centre, and right. Secondly, politically extreme
attitudes created to dichotomy of moderate attitudes and extreme attitudes. Thirdly, extreme
politically slanted attitudes represent both politically slanted and politically extreme attitudes through five categories: extreme-left, left, centre, right, and extreme-right.

It should be noted, that similar levels of agreement to each statement do not reflect one political slant. Therefore, certain statements were reverse coded; however, this process will be explained in further detail in the sub-section on reliability and validity.

3.3.2. Independent variable: frequent news consumers

The other categorical independent variable this study uses is of frequent news consumers, positing that habits of frequent news consumption leads to more accurate identification of fake news despite the individuals’ political attitudes (Knobloch-Westerwick, et al., 2012). Frequent news consumption can be conceptualized in many ways depending on what is being measures. For the purpose of this study, it is kept in mind that questions need to be framed within the Indian context of information consumption. Firstly, the online news consumption habits of Indian are marked more by distributed discovery via various online channels rather than direct search for news. Secondly, disinformation proliferation in India is a rapid process, partly due to unverified sharing via ordinary internet users, who often become unwitting distributors due to certain news information by-passing the normal critical news engagement filters.

Therefore, frequent news consumers are identified in this survey through self-reported data from respondents, who are asked to indicate whether they consider themselves to be news consumers, whether they actively search for news, and whether they verify the news they engage with.

3.3.3. Dependent variable: identification of fake news messages

The first dependent variable is concerned with the identification of fake news messages, which directly assesses whether respondents identify the presented news messages as ‘fake’ or ‘real’ news. This categorical variable is measured through the first question that is presented after exposure to each of the four treatment messages, which is “is this fake news” with the option of answering either with a ‘yes’ or ‘no’. Previous studies into disinformation have presented a third option of ‘maybe’ or ‘I do not know’; however, as this study treats identification as a dependent variable which is affected by other factors e.g. political attitudes, the researcher felt that compelling respondents to make a decision – even if they are not sure – would provide more significant insights into why they made their decision.
Though measured through the same question, there is a distinction drawn in how the dependent variable is understood, leading to the formulation of two dependent variable. In one case, the dependent variable is framed as the correct identification of fake news messages and is therefore, concerned with the accuracy with which respondents holding can distinguish fake news messages from real news messages. In the other case, the dependent variable is framed as perception of falsity of news messages and is more concerned with which news messages were identified as fake and real, rather than if they were correctly identified.

3.3.4. Dependent variable: usefulness of news messages

Apart from the context in which this study takes place, the time period in which it takes place is also of significance. As mentioned earlier, this study investigates (dis)information in the run-up to the national elections results. In these intensive time periods, political information assumes greater importance as they can become tools to deal with a potentially changing socio-political environment. Therefore, it would be interesting to delve into how useful the news messages are perceived to be by respondents, regardless of their falsity.

Therefore, the categorical variable of usefulness of news messages is measured through the fourth question presented after exposure to each of the four treatment messages, which is “how useful is this information to you”. Responses are then given on a 5-point Likert scale, ranging from extremely useful to extremely useless.

3.3.5. Control Variables

This study also controls for demographic variables, by collecting demographic information that is not directly tested in the hypothesis but allows for the testing of any statistically significant variations in the variables along demographic lines.

Gender is framed as a categorical independent variable, which the answer groups of ‘male’, ‘female’, ‘other’ and ‘rather not say’. Theory has not

Age is framed as a continuous independent variable, collected through a text-entry field where respondents are asked to indicate their birth year. The responses were then recoded to indicate their age, and further categorized into the age groups of below 25 years, 25 to 34 years, 35 to 44 years, 45 to 55 years, and 55 years and above.

Highest obtained educational level was a categorical independent variable, with the response categories studying up to grade 10th, up to grade 12th, up to a Bachelors/under-graduate
degree, up to a Masters/post-graduate degree, up to a Ph.D/Doctorate degree, and an ‘other’ option. Current status of employment is 57.8% are employed – 35.1% in the private sector and 22.7% in government/public sector – and 2.9% are unemployed, and 1.2% are retired. Of the remaining, 32.2% are students and 5.8% chose the ‘other’ option (e.g. consulting, freelance work).

Language of news consumption was a categorical independent variable, collected through two open entry fields where respondents must indicate the primary language in which they consume news and an optional response of indicating what secondary/other languages they consume news in. The survey gathered information regarding language as linguistic profiles are a more complex aspect of personal identity but can yield interesting results in this phenomenon. English is spoken by around 125 million (11% of the population), with almost all English speakers being bilingual and concentrated in urban areas (Nagarajan, 2018; www.censusindia.gov.in). Though only 227,000 consider it a first language (Kroulek, 2017), the number of people who use English for social communication and consume English-heavy content is much higher (Masani, 2012). These numbers assume importance because the discourse surrounding the disinformation crisis features most prominently in English language news, and English reading audiences are more aware and warier of disinformation than their regional language counterparts (Chakrabarti et al., 2018). Therefore, the survey will also gather details on languages in which news content is consumed as well as languages spoken.

Finally, this study also accounts for whether treatment messages have been seen before. News message seen before is a categorical independent variable which asks respondents to indicate either with a ‘yes’ or ‘no’ whether they have encountered the presented news message before. This would be especially important for real news messages, whose correct identification could then be an offset of the respondent having seen the information before rather than their own decision-making process.

3.3.6. Hypotheses Testing

H1a: Individuals are more likely to accurately identify disinformation when the message is incongruent with their political attitudes.

H1b: Individuals are less likely to perceive a message as disinformation when it is congruent with their political attitudes

To test Hypothesis 1a & 1b, the identification of fake news messages is tested against the politically slanted attitudes of the respondents by running a test of independence Chi-square. A Chi-square test
was identified as the most appropriate test as it explores whether the two variables are related, with both tested variables being nominal in nature. While, both hypotheses are tested using the same variables and through the same test, there is a distinction drawn in the framing of the dependent variable. In the case of H1a, the dependent variable is the correct identification of fake news messages, and in the case of H1b, the dependent variable is perception of falsity of news messages.

**H1c: Individuals are likely to perceive a message as ‘real news’ faster when it is congruent with their political attitudes.**

To test Hypothesis 1c, the speed of identification of news messages is tested against the politically slanted attitudes of the respondents by running a one-way ANOVA test. An ANOVA test was identified as the appropriate test as it explores whether there are any substantial differences between respondents with different political attitudes in how fast they identify a news message as ‘fake’ or ‘real’, and whether more decision-making time was expended on attitude-discrepant messages. This test also allows for the testing for a continuous dependent variable i.e. time.

**H2a: Right-leaning individuals are likely to find attitude-congruent messages more useful than attitude-discrepant messages.**

**H2b: Left-leaning individuals are likely to find attitude-discrepant messages more useful than attitude-congruent messages.**

To test H2a & 2b, the usefulness of news messages is tested against the politically slanted attitudes of the respondents by running a repeated measures ANOVA. In the case of H2a, only the right-leaning political attitude group is tested to assess whether there is a difference in which news messages are perceived as useful based on attitude-congruency and discrepancy. In the case of H2b, only the left-leaning political attitudes group is tested with the similar expectation that there is a difference in perceived usefulness of a message based on its attitude-congruency or discrepancy.

**H3: Individuals with moderate political attitudes are more likely to accurately identify disinformation messages than their more politically extreme counterparts.**
To test Hypothesis 3, the identification of fake news messages is tested against the politically extreme attitudes of the respondents by running a test of independence Chi-square. Here, a distinction has been drawn in the formulation of dependent variable, where rather than looking at the which ideology it is slanted towards, we look at how extreme or moderate these attitudes are.

H4a: Left-leaning individuals are more likely to accurately identify attitude-congruent disinformation than their right-leaning counterparts.

H4b: Extreme right-leaning individuals are less likely to identify attitude-congruent disinformation than their extreme left-leaning counterparts.

To test Hypothesis 4a & 4b, the identification of fake news messages is tested against the politically slanted attitudes of the respondents by running a test of independence Chi-square. Here, only the 2 fake news messages will be tested against the group which has politically slanted attitudes which are congruent with the political slant of the message. This means that pro-left fake news messages will be tested against left-leaning politically slanted attitudes, and pro-right fake news messages will be tested against right-leaning politically slanted attitudes. In the case of H4b, a similar process will be followed to test the hypothesis, with the slight distinction of pro-left fake news messages being tested against extreme left-leaning politically slanted attitudes, and pro-right fake news messages tested against extreme right-leaning politically slanted attitudes.

H5: Individuals who frequently consume news content are more likely to accurately identify disinformation.

Finally, to test Hypothesis 5, the identification of fake news messages is tested against the frequent news consumers using a test of independence Chi-square. H5 follows the same process as the previous hypotheses using chi-square tests but against a new independent variable.

3.4. Survey Design

This section details the process through which the final survey constructed, and the steps taken to ensure that the design allowed for the correct measurement of every variable while not losing the focus and attention of the respondents due to the heavy nature of the topic. This iterative process
was particularly important as the topic of political disinformation in India has not been researched in this capacity and therefore, many elements of this survey were created by the researcher for the purpose of this study. This section will detail the initial survey design – the elements of which were extrapolated from existing research and literature – and will explain the pre-test and pilot phase which led to the construction of the final survey.

3.4.1. Initial survey construction

The initial survey design contained three blocks: preliminary information, treatment and post-test questions. The first block was to contain questions that collected demographic details and the political orientation of the respondent, the latter of which would be assessed through their self-identified political orientation. The second block would contain the treatment of news messages with left- or right-leaning political slants and would either be real or fake news. The final block would contain questions about news consumption habits and language history. The survey would conclude with a debriefing message presented at the end which would clearly state that the treatment messages were created for the purpose of this study and which messages were false. It was important that the survey would not take more than 10-15 minutes to fill out, as respondents need to complete the survey to receive the debriefing that prevents them from leaving the survey with any misinformation.

The main question that arose during the construction of the initial survey design was in the measurement of an individual’s political orientation. Firstly, it was decided that questions regarding political orientation would be presented after exposure to the treatment, thus shifting it to the last block instead of the first. This was done so that respondents would not draw a connection between the identification of fake news and their own political attitudes. If made to think about their political leanings and then exposure to the treatment could prime them in a way that potentially adds a critical filter in their assessment and subsequent engagement with the news messages. The goal was to expose them to the news messages in conditions where confounding variables could be minimized.

Secondly, political orientations are the result of complex and multi-layered processes that – in India especially – cannot be identified and established in a generalized manner. Furthermore, major shifts in the political landscape in the past decade have led to a reimagining of what socio-political identities in India are, which cannot be broken down to a one-dimensional left to right scale. Additionally, while this study is based more in the changed socio-political identification within the Indian population, that is not necessarily how every respondent would perceive or identify
themselves. Therefore, it was deemed important to assess a respondent’s political attitudes with regards to the definitions laid down within this study rather than solely rely on their self-identification. For this purpose, three approaches were identified to assess political attitudes through the survey. Multiple approaches were adopted as that would allow the researcher to get an in-depth look into the various facets of a respondent’s socio-political identity and relate them appropriately to what the research studies. The validity of these approaches would then be gauged through the pre-test, which would allow the researcher to narrow-down on one approach to assess political orientation.

3.4.2. Pre-test

The survey underwent a pre-test to assess and select the most appropriate news messages from a larger pool of stimuli, while the multiple approaches to gauge political orientation were also tested. The result of the pre-test would lead to the selection of the final treatment and inform the researcher which approach to assess political orientation was the best fit for this research.

For the pre-test of the treatment, 14 short textual news messages were created by the researcher, of which 9 were constructed as headlines and 9 as excerpts. There were 3 messages for each of the four conditions of fake right-leaning, fake left-leaning, real right-leaning and real left-leaning. An additional 2 politically neutral messages were also included, to assess whether the respondents could differentiate between politically slanted and neutral messages as conceptualised by the researcher. Each message was followed by three questions asking respondents to indicate whether they thought it was fake news, whether it is politically neutral, and whether they have seen this item before.

After being shown all 14 news messages, the respondents were asked to plot themselves on a grid which broke down political orientation into the two dimensions of economic and social attitudes. This political orientation grid has been derived from the political spectrum system, which posits that measurement of socio-political identities along a one-dimensional left to right scale does not fully encapsulate the complexities of an individual’s profile (politicalcompass.org), thus leading to the creation of a two-dimensional measurement tool. In this grid, the x-axis measured economic attitudes: ranging from the economic left i.e. regulated or state-planned economy, to the economic right i.e. deregulated or free-market. The y-axis measured social attitudes: ranging from strong central power i.e. state more important than self at the top, to strong individual autonomy i.e. individual freedom more important than the state at the bottom. This created the four potential categorizations of libertarian-left, libertarian-right, authoritarian-left, authoritarian-right. For
reference, the authoritarian-right represents the extreme-right and the libertarian-left represents the extreme-left.

While the grid provides a more multi-faceted and accurate method to measure political orientation, it is a complex exercise which takes more time and effort than some participants might want to expend on a survey. Therefore, in the instructions for the grid question, respondents were given the option of skipping to an alternative method to indicate their political orientation. The alternative method was the second approach, which was a simplified linear scale, with the options of left, centre-left, moderate/centre, centre-right, and right.

The final approach to measure political attitudes was a block of statements to which the respondents had to indicate their level of agreement, on a 5-point Likert-scale ranging from *strongly disagree* to *strongly agree*. This block was broken down into three sets of statements: the first set comprising 6 statements about general society; the second with 5 statements about contemporary India; and the third with 8 statements on the current political environment in India.

The survey concluded with the final block, which consisted of one post-test question. Respondents were asked to rank the three approaches based on which one they thought was the best for them to express their political leanings. The ranking had to be done in descending order of most preferable to least preferable.

There were no sample restrictions in the pre-test phase except that they must be resident Indians, so that the treatment message could be assessed appropriately and critically. The pre-test did not use the previously mentioned distribution channels; instead, it was distributed within the personal networks of the researcher who were not eligible to be in the sample of the final survey. The data collection period for the pre-test survey occurred between May 9th and 15th 2019, with a total of 56 recorded responses. Partial responses were omitted from this dataset, leaving 35 complete responses recorded between May 9th and 11th.

Based on the results of the pre-test survey, one message was selected from the three presented per condition, leading to a final set of 4 treatment messages. The messages were selected based on how clearly the political slant – and which side it was slanted towards – was identified, and in the case of the real news messages, which messages had been seen by the least number of people. These 4 messages were also fine-tuned based on the feedback received from the pre-test respondents, where it was expressed that the language of certain messages could be modified to reflect which political side it was slanted towards more clearly. Only one message was selected per treatment condition as any number more than that would increase the length of the survey, which
was not desirable. The two politically neutral messages were omitted from the final treatment set for the previously mentioned reason, and because most respondents were able to identify which messages had a political slant and which did not.

Regarding which approach was preferred for expressing political orientation, the post-test question revealed that respondents preferred the two-axis grid. This was also indicated by the number of low number of respondents' who skipped to the alternative simplified scale. This was unexpected as the grid was a complex format that required extra effort from the respondent; however, feedback collected from respondents revealed that though it required a little more thinking, many had not seen a grid of this nature and enjoyed plotting themselves on it. Similar feedback was also received from respondents who were in the sample of the final survey.

After the appropriate adjustments were made, the final survey was designed. Before the survey was circulated by the previously mentioned distribution channels, the respondents from the pre-test sample were re-approached to fill the final survey as part of the pilot phase. This pilot was guided by the aim of checking the general structure, flow and language of the survey, the clarity of questions and the amount of time taken to fill the survey. Based on the feedback from the pilot, some final technical and linguistic corrections were made.

3.4.3. Final survey design

The survey was constructed and administered in English through the online survey software Qualtrics and distributed through an online anonymous link. The survey itself comprises eight blocks: Introduction to the Study, Preliminary Demographic Information, Treatment, Fake News and Indian Media, Political Orientation, Society and Politics, News Consumption Habits, and the Debriefing. With the exception of the Introduction and Debriefing – which provide essential information regarding the research and survey – the remaining six are question blocks directly related to collecting data from respondents.

The first block of the survey is a single page/screen introduction which details the basic purpose of study as a Master thesis research at the Erasmus University Rotterdam, explaining the anonymous and academic nature of the data collection, and providing an overview of what to expect from the survey in terms of questions and structure. Instructions are also given to the respondent on how to move forward with the survey, while also establishing that respondents can withdraw consent of participation at any point during the survey. This page also offers the EUR student e-mail
address as contact information; however, the name provided is a pseudonym. This decision was taken to afford a degree of anonymity to the researcher, who felt that her gender and non-Hindu name might make her susceptible to right-wing online trolling. Therefore, the name “M. Mathur” was provided, with the first name being shortened to an initial to keep the gender identity undefined and the last name belonging to a North Indian and upper caste community.

The second block collected preliminary demographic information from the respondents through four questions. The first question presented was an open text field to indicate year of birth, and the second question asked respondents to indicate their gender while also providing the option of rather not say in case they would like to keep it confidential. The remaining two questions gathered information about the highest educational qualifications and the current status of employment of the respondent.

The third block contains the treatment comprising the four news messages, one for each of the four treatment conditions. The two factually incorrect or fake news messages were “...was what you almost missed during his speech: Rahul Gandhi let slip a swear word while talking about the BJP administration.” (pro-right/anti-left slant) and "Celebrated Nobel prize-winning Economist Amartya Sen snubs BJP, hints at possible future with Congress" (pro-left/anti-left slant). The two factually correct or real news messages were "'Modi is a 'Champion of the Earth': first Indian PM to receive UN’s highest environmental award for championing new levels of cooperation on environmental action" (pro-right/anti-left slant), and "... malfunctioning EVM machinery criticised by Opposition Parties, with reports coming in that glitches send votes directly to BJP candidates." (pro-right/anti-left slant). The messages were presented in a randomized order to respondents, by enabling the ‘randomizer’ function on Qualtrics. Randomization of this nature minimizes the chance that the order in which messages are presented affects the perception of whether it is fake news or not.

It should be noted that these messages were finally selected keeping certain considerations in mind, in addition to the factors mentioned in the previous section. Firstly, two messages were headlines and two were excerpts; this was done to ensure equal variation in the format of the news message. Secondly, and more importantly, which narratives were used for the real news and which ones for the fake news messages were chosen with care. The messages which directly refer to the Modi or BJP were chosen as the real news messages because the researcher felt that given the sensitivity that accompanies any critical discourse of the ruling party, it would be better to not present anything – whether for or against – that is factually incorrect, to protect the research from being considered biased and having ‘invalid’ results. Due to this reasoning, the two fake news
messages have narratives that focus on Congress, as audiences have been observed as having less strong feelings about Congress as compared to the BJP.

Each news message was followed by four questions. The first three questions were the same as in the pre-test: is this fake news; have you seen this news before; and is this news politically neutral. A fourth question was added, regarding how useful the information in this news message was for the respondent, to answer H2a & H2b. The first question, regarding identification as fake news, was presented in a separate page than the latter three, which were presented together in a following page. This was done to accurately measure the time it took to identify the falsity of a news message, to answer H1c. Both pages displayed the fake news message at the top.

The fourth block consisted of two questions regarding the current news and media landscape in India. The first question asked respondents to choose what kinds of news content they considered to be fake news, providing the options of factually incorrect information, misleading information, information pushing a political agenda, and clickbait and/or sensational news. An ‘other’ option with an open text entry field was provided, in case respondents had additional conceptualization of what comprises fake news to them. Respondents could select multiple options as answers to this question. The second question in this block was a statement set regarding perceptions on the fake news crisis in India, its use for political propaganda, and perceived political biases in traditional news media. Respondents could indicate their level of agreement to these statements on a 5-point Likert-scale, ranging from strongly disagree to strongly agree. The statements in this question were taken from the two statement sets in the pre-test, about contemporary India and the national political landscape.

The fifth block consisted of two questions – of which respondents only had to answer one – regarding self-identified political orientation. The first option presented was of the previously described political orientation grid with two-axis indicating political and social attitudes. Respondents who found the grid to be too complex where presented with the alternative linear scale to express political orientation from left- to right-leaning. The sixth block consisted of two statement sets about society and politics to which respondents had to indicate their level of agreement on 5-point scale. This block was used to measure the political attitudes of respondents, in direct relation to the content of the treatment message. The first set had 5 statements about general society, and the second set had 8 questions focused on the current national political environment in India.
The sixth block has 7 questions regarding the news consumption habits of respondents. Three questions ask respondents to indicate how often they consider themselves to: be news consumer, actively search for news content, and double-check or verify the news content they consume. The answers to each question are presented as a 5 option frequency, ranging from never to always. One question asks respondents to indicate the types of news topics they consume, with the option to select multiple topics among 12 options. This block also contains to 5-point scaled questions on the source of news and the level of trust they have on the specific source. 7 sources – including but not limited to television, print and digital news, and word of mouth – are provided, asking respondents to indicate how often they get news from it. The following question asks respondents to indicate how trustworthy they find the same 7 sources on a scale from 1 to 5, where 1 indicates not at all trustworthy and 5 indicated completely trustworthy. The survey concludes with the question asking respondents to indicate the primary language in which they consume news content, with the option of indicating any secondary/other languages.

After completing the survey, the respondent is presented with the debriefing message. This debriefing is essential for respondents to see – especially the ones who were exposed to the treatment – as it clarifies which news messages were real and which ones were fabricated. The contact details of the researcher were provided again, in case of any queries or feedback. Finally, three links for resources were provided for respondents to learn more about the fake news phenomena, see Appendix A.

3.5. Reliability and validity

This section details the steps taken by the researcher to maximise reliability and validity with regards to operationalization of variables, measures selected, and the construction of appropriate scales to analyse the data and test the hypotheses. While it is not possible to achieve perfect reliability and validity, it is important that studies are constructed with accuracy and credibility in mind (Neuman, 2014). These aspects as especially important for this research, as most of the design was heavily contextualised from the work of other researchers or created by the researcher herself for this study.

3.5.1. Validity

Various steps were taken to ensure that the measurement of variables was as accurate and valid as possible. As mentioned earlier, the identification of socio-political identities, production of news in digital India, narratives in disinformation messages, conceptualizations of ‘fake news’ were derived from two comprehensive reports regarding the media and political landscape in India: BBC Beyond.
Fake News report (Chakrabarti, et al., 2018), and the Reuters Institute India Digital News Report (Aneez, et al., 2018). These reports informed how the concepts and questions from Western context-based research was applied to the current Indian environment. Furthermore, this research also highlighted the complexity and multi-faceted nature of political identities in India, especially in the way these identities have transformed in the past decade. Therefore, the use of multiple approaches to measure political attitudes and leanings was adopted to provide the researcher in-depth information about a respondents’ socio-political identity. This allowed the researcher to select the most appropriate aspects or manifestations of these identities, which could then be accurately related to the narratives and political slants in the treatment news messages.

It is also recommended that multiple indicators are used to measure a single concept – especially if those concepts or variables are central to the study – as valid measurements should reveal that responses to the same concept are alike or converge (Neuman, 2014). This reasoning backs the previously mentioned example of using multiple approaches to measure political attitudes, but also provides backing for the use of multiple statements to measure the similar attitudes, for example, within a single approach. This is further exemplified in the next section regarding reliability of scales used.

Another important aspect of achieving validity was in limiting the impact of confounding variables, especially with regards to the new messages for the treatment. Firstly, the formulation of news messages was done in a way that minimized the effect any other factor apart from personal political attitudes could have on how an individual engages with the message. The most important aspect of this was in how the news message was visually presented. For example, it was decided that only the text would be presented without indicating the source, because research has indicated that source credibility – especially in terms of social cues like the person or news outlet – play a very important role in what news content is perceived as being real or fake. An additional concern regarding visual construction was that a news message presented as a screenshot of an article would increase the overall believability as actual news item; however, things like the background, font size, colour, and so on, could play a role in how ‘professionally produced’ a respondent would think the new item is. Therefore, it was decided that the news message would be presented as body of text, as that would increase the role the content of the message – rather than its visuals – would play in how respondents would engage with it.
As most of the scales in this survey were constructed by the researcher, it was essential that the reliability of its measurements was checked by conducting factor analyses and reliability checks. Tools for data collection are seen as being reliable when repetitions within the measurement process produce similar results (Neuman, 2014). Results from these checks could also reveal underlying dimensions within the dataset, which would then enrich the data analysis process. Prior to conducting factor analysis, the data that is being tested needs to fulfil the criteria of being a continuous variable and normally distributed, with each scale comprising a minimum of three items. These criteria were met by the two independent variables, and the results of the factor analyses and reliability checks are presented as follows.

**Political attitudes**: This variable was created using two sets of statements about general society and the current national political environment in India, both of which were measured through levels of agreement on a 5-point Likert-scale. 4 statements were taken from each of the general society and the national politics set, based on whether agreement or disagreement with them expressed left or right-leaning political attitudes.

In the case of the general society statement set, 2 of the 4 selected statements had to be reverse coded so that low level of agreement reflected left-leaning attitudes and high level of agreement reflected right-leaning attitudes. Similarly, 2 of the 4 selected statements from the national politics set were reverse coded for the same purpose. These 8 items based on a 5-point Likert-scale, were entered into a factor analysis using Principal Components extraction with Varimax rotation based on Eigenvalues (> 1.00), $KMO = .73$, $\chi^2 (N = 242, 28) = 509.90, p < .001$, revealing a model explaining 55.99% of variance. It was expected that all statements would load onto one factor; however, two of the statements – both regarding Congress – loaded onto a second factor.

Therefore, a new 6-item scale was constructed which excluded the two Congress related statements. A factor analysis using Principal Components extraction with Varimax rotation based on Eigenvalues (> 1.00), $KMO = .74$, $\chi^2 (N = 242, 15) = 335.802, p < .001$, revealed a model explaining 44.35% of variance. Finally, a reliability check was conducted on both scales. This revealed that the 6-item scale had a Cronbach’s $\alpha$ of .743, which proved to be slightly more reliable than the 8-item scale with a Cronbach’s $\alpha$ of .739. Based on these results, the 6-item moderately reliable scale was chosen to formulate the independent variable of political attitudes.

**Frequent news consumers**: This variable was created using two items from the news consumption habits block of the survey: do you consider yourself to be a news consumer; and do
you actively search for news content. Both these questions had a 5-option response category measuring frequency, ranging from never to always. Initially, a third item was also included i.e. do you double check or verify the news content you consume. However, a reliability check on these three items resulted in a Cronbach’s α of .64. The deletion of the aforementioned third item increased the Cronbach’s α to .72, which proved to be a moderately reliable scale.
4. Results and Analysis

This chapter begins with a section which provides relevant descriptive statistics regarding the independent variable of political attitudes, control variables, and some exploratory variables. The remaining sections provide the results of the statistical tests conducted and analysis of the statistically significant results, which are organized and presented according to the order of the 5 hypotheses sets.

4.1. Descriptive statistics

4.1.1. Political attitudes versus political orientation

As detailed in the previous chapter, this survey adopted two main approaches to assess political leanings. The statement set approach, which was used to assess political attitudes in relation to the narratives of the treatment messages, was used to create the primary independent variable of political attitudes. The political orientation approach asked respondents to plot themselves on a two-axis socio-economic grid; however, this approach was not used to analyse data but rather to provide insights into the multi-faceted nature of political identities in India as well as highlighting the gap – if any – between self-reported and extrapolated/observed data.

Depending on the quadrant in which a respondent plots themselves, the political orientation grid leads to four potential categorizations of libertarian-left, libertarian-right, authoritarian-left, authoritarian-right. For reference, the authoritarian-right represents the extreme-right and the libertarian-left represents the extreme-left. Regarding political attitudes, the variable was formulated in three different ways depending on the hypothesis that was being tested. For the purpose of this comparison, the 5-category variable of extreme politically slanted attitudes will be used as it is the most comprehensive of the three formulations and is the most appropriate to compare to the political orientation grid.

As detailed in the sample characteristics section in the previous chapters and in Figure 1, the distribution of respondents between the 5 categories of political attitudes is not too disproportionate. This is especially noticeable when comparing the frequencies of the extreme-left (n=55), centrist/moderate (n=54), and extreme-right (n=56). Interestingly, it was noted that the greatest number of respondents were in the extreme right-leaning political attitudes category.
However, looking at self-identified political orientation Figure 2, one can observe that the authoritarian-right (which is compared with the extreme right-leaning political attitudes) has the least number of points. In fact, there are more respondents who plotted themselves on the libertarian quadrants than on the authoritarian quadrants, thus indicating that more respondents identified with the (social) left than with the (social) right.
The major take-away from these two figures is that there seems to be a gap between socio-political identities and their manifestation in the form of political attitudes. The implications of this gap will be detailed in the following chapter. At this point, however, it can be said that the researcher’s decision to test the hypotheses using political attitudes as an independent variable is given stronger confirmation.

4.1.1. Control variables

Keeping in mind that a multitude of factors can lead to the development of the political attitudes, this research also controls for demographic variables. The third formulation of the independent variable, extreme politically slanted attitudes, will be tested to see whether any statistically significant differences arise along demographic lines. The independent variable of frequent news consumers was also tested for demographic variations; however, all the results were statistically insignificant.

**Age:** The variable of extreme politically slanted attitudes was tested against the age groups of the respondents by running a Chi-square test of independence, which revealed that two variables are related: \( \chi^2 (N=238, 16) = 29.08, p = .023 \). Looking at the percentages, the clearest relation between age and political attitudes is seen with respondents aged between 25 and 34, and 55 and above. In both cases, there is a clear skew towards extreme political attitudes, with the 55 and above group tending more towards the extreme-right and 25-34 year olds tending towards the extreme-left. These results are in line with the general perception of extreme-right supporters being older and more conservative individuals, while extreme-left supporters are perceived more as young and liberal. However, looking at those below 25 also shows the highest percentage of respondents from that group with 24.7% holding right-wing attitudes. Though this goes against the previous assumption, it could also be symptomatic of the appeal of Modi and BJP to younger populations. This will be further explored in the concluding chapter.

<table>
<thead>
<tr>
<th></th>
<th>Below 25</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55 and above</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extreme-Left</td>
<td>21.5%</td>
<td>40.0%</td>
<td>24.2%</td>
<td>19.4%</td>
<td>6.5%</td>
<td>23.1%</td>
</tr>
<tr>
<td>Left</td>
<td>20.4%</td>
<td>20.0%</td>
<td>15.2%</td>
<td>22.2%</td>
<td>6.5%</td>
<td>18.1%</td>
</tr>
<tr>
<td>Centrist/Moderate</td>
<td>23.7%</td>
<td>20.0%</td>
<td>24.2%</td>
<td>16.7%</td>
<td>19.4%</td>
<td>21.4%</td>
</tr>
<tr>
<td>Right</td>
<td>9.7%</td>
<td>13.3%</td>
<td>18.2%</td>
<td>13.9%</td>
<td>25.8%</td>
<td>14.3%</td>
</tr>
</tbody>
</table>
Political attitudes tested against the other demographic variables produced statistically insignificant results, which are reported as follows.

A chi-square test revealed that gender is not related to extreme politically slanted attitudes: $\chi^2 (N=242, 8) = 5.94, p = .654$. This is not unexpected as previous research, though skewed towards male respondents, did not indicate that political attitudes vary significantly across different genders.

A chi-square test revealed that education level is not related to extreme politically slanted attitudes: $\chi^2 (N=242, 16) = 18.861, p = .276$.

A chi-square test revealed that status of employment is not related to extreme politically slanted attitudes: $\chi^2 (N=242, 20) = 28.77, p = .092$.

A chi-square test revealed that primary language of news consumption is not related to extreme politically slanted attitudes: $\chi^2 (N=242, 28) = 26.68, p = .536$.

Theoretically, there are expected variations in political attitudes across education, employment and linguistic lines; however, this sample was heavily skewed towards one category in each of the three variables i.e. college educated, employed or English news consuming respondents. Therefore, the statistically insignificant results are not unexpected given the characteristics of this sample, but these results cannot be used to make a generalized statement or assumption that internet using and/or English news consuming audiences do not differ in their political attitudes across demographic lines.

4.1.2. Exploratory variables

This study also collected information regarding respondents opinions about Indian news media landscape, the discourse surrounding fake news in India, and how it intersects with certain national politics. Though this data was not directly tested in any of the hypotheses, it was included in information collection to enrich the data analysis and discussion, as it could provide insights into overall trends within the sample.

News topics of National news and Politics and Governance received a high number of responses, accounting for 16% and 11.3% of responses. This is not surprising given that the survey
was framed as being about the national politics, and was distributed in the last days running up to vote counting and national election results day.

Table 2.1 Frequencies of news topics

<table>
<thead>
<tr>
<th>Item</th>
<th>Responses N</th>
<th>Responses Percent</th>
<th>Percent of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local/regional</td>
<td>108</td>
<td>8.6%</td>
<td>44.8%</td>
</tr>
<tr>
<td>National</td>
<td>202</td>
<td>16.0%</td>
<td>83.8%</td>
</tr>
<tr>
<td>International</td>
<td>178</td>
<td>14.1%</td>
<td>73.9%</td>
</tr>
<tr>
<td>Politics and governance</td>
<td>143</td>
<td>11.3%</td>
<td>59.3%</td>
</tr>
<tr>
<td>Business and economy</td>
<td>77</td>
<td>6.1%</td>
<td>32.0%</td>
</tr>
<tr>
<td>Sport and entertainment</td>
<td>115</td>
<td>9.1%</td>
<td>47.7%</td>
</tr>
<tr>
<td>Lifestyle and fashion</td>
<td>78</td>
<td>6.2%</td>
<td>32.4%</td>
</tr>
<tr>
<td>Science and technology</td>
<td>135</td>
<td>10.7%</td>
<td>56.0%</td>
</tr>
<tr>
<td>Health and education</td>
<td>129</td>
<td>10.2%</td>
<td>53.5%</td>
</tr>
<tr>
<td>Arts and culture</td>
<td>92</td>
<td>7.3%</td>
<td>38.2%</td>
</tr>
<tr>
<td>Other news topics</td>
<td>4</td>
<td>0.3%</td>
<td>1.7%</td>
</tr>
<tr>
<td>No news</td>
<td>1</td>
<td>0.1%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Total</td>
<td>1262</td>
<td>100.0%</td>
<td>523.7%</td>
</tr>
</tbody>
</table>

Considering that this sample was drawn from internet using audiences, it was expected that digital news would be ranked as the most used source (m=4) amongst respondents. The low use of radio (m=1) and television (m=2) is also not surprising, given how radio is perceived as an obsolete source of news – especially amongst urban internet using audiences – and that platform-based, readily available online sources are overtaking television as a preferred source of news.

Table 2.2 Descriptive statistics of sources of news information (N = 237)

<table>
<thead>
<tr>
<th>Item</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV</td>
<td>1.00</td>
<td>5.00</td>
<td>2.45</td>
<td>1.17</td>
<td>2.00</td>
</tr>
<tr>
<td>Radio</td>
<td>1.00</td>
<td>5.00</td>
<td>1.39</td>
<td>0.64</td>
<td>1.00</td>
</tr>
<tr>
<td>Print news</td>
<td>1.00</td>
<td>5.00</td>
<td>3.04</td>
<td>1.21</td>
<td>3.00</td>
</tr>
</tbody>
</table>
However, the frequency with which sources are used cannot be equated with how trustworthy respondents feel that source is. This can be seen with print news (M=3.32) being perceived as more trustworthy than digital news (M=3.15), which is not surprising given the importance that the print industry assumes as a core element on Indian media. Furthermore, print news – though still perceived as being biased (see Table 2.5) – still has a higher standard of news reporting than the low barrier entry digital news arena.

Online messaging applications such as Whatsapp – which was given as an example in the survey – has received the lowest trustworthiness score. Given the spate of mob-lynching violence that has taken place in the last 2 years due to rumour mongering through Whatsapp, as well as how central this messaging app has become in discussions about technology-enabled fake news, this score was expected. It should be noted that sharing news content through Whatsapp is seen more in terms of the forwards one receives within personal/professional networks in India, as compared to other countries where many established digital news outlets share versions of their news content through a message-based subscription.

<table>
<thead>
<tr>
<th>Item</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV</td>
<td>1.00</td>
<td>5.00</td>
<td>2.72</td>
<td>.99</td>
</tr>
<tr>
<td>Radio</td>
<td>1.00</td>
<td>5.00</td>
<td>2.88</td>
<td>1.01</td>
</tr>
<tr>
<td>Print news</td>
<td>1.00</td>
<td>5.00</td>
<td>3.32</td>
<td>.95</td>
</tr>
<tr>
<td>Digital news</td>
<td>1.00</td>
<td>5.00</td>
<td>3.15</td>
<td>.98</td>
</tr>
<tr>
<td>Social media</td>
<td>1.00</td>
<td>5.00</td>
<td>2.02</td>
<td>.91</td>
</tr>
<tr>
<td>Messaging apps</td>
<td>1.00</td>
<td>5.00</td>
<td>1.51</td>
<td>.75</td>
</tr>
<tr>
<td>Word of mouth</td>
<td>1.00</td>
<td>5.00</td>
<td>2.4</td>
<td>.95</td>
</tr>
</tbody>
</table>

Here, it is interesting to note that a higher number of responses were given to fake news being defined as misleading information than factually incorrect information, with 34.1% and 32.6% respectively. Though the difference is small, it could be an indication of how respondents are
thinking about fake news more in relation to ‘grey area’ of news coverage seen in India right now, where new stories as being perceived as misleading the public due to selective or one-sided coverage. This would be in line with average response to the opinion statements indicating that news media in India is politically biased, and that traditional news media is more biased towards the BJP and Congress.

Table 2.4 Frequencies of types of fake news

<table>
<thead>
<tr>
<th>Item</th>
<th>Responses N</th>
<th>Responses Percent</th>
<th>Percent of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>factually incorrect information</td>
<td>175</td>
<td>32.6%</td>
<td>72.3%</td>
</tr>
<tr>
<td>misleading information</td>
<td>183</td>
<td>34.1%</td>
<td>75.6%</td>
</tr>
<tr>
<td>Information pushing a political agenda</td>
<td>98</td>
<td>18.2%</td>
<td>40.5%</td>
</tr>
<tr>
<td>Clickbait and/or sensational news</td>
<td>77</td>
<td>14.3%</td>
<td>31.8%</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>0.7%</td>
<td>1.7%</td>
</tr>
<tr>
<td>Total</td>
<td>537</td>
<td>100.0%</td>
<td>221.9%</td>
</tr>
</tbody>
</table>

The average response to the statement that India is facing a fake news crisis is of complete agreement, and similarly so for fake news being used for political propaganda. While these are widely accepted in academic discourse, there could be other reasons why the respondents felt this way. Firstly, this survey was framed as being about fake news in India and the elections, which maybe attracted respondents who were engaged in that discourse or at least believe this to be true. Secondly, as mentioned in previous chapters, English language media discourse has been leading the way in critical coverage given to the topic of disinformation and its proliferation across socio-economic and political lines in India. In general, this sample seems to feel that traditional news media is much more biased towards BJP (m=4) than the Congress (m=2). Perhaps these differ across different political attitudes; however, those tests were not run for this study.

Table 2.5 Descriptive statistics of media and fake news opinions in India (N = 242)

<table>
<thead>
<tr>
<th>Item</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Median</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>India is facing a fake news crisis.</td>
<td>1.00</td>
<td>5.00</td>
<td>5</td>
<td>.90</td>
</tr>
<tr>
<td>News media in India is politically unbiased.</td>
<td>1.00</td>
<td>5.00</td>
<td>1</td>
<td>1.11</td>
</tr>
</tbody>
</table>
Fake news is used as a tool for political propaganda.

Traditional news media (eg. news channels, national newspapers) are biased towards the BJP.

Traditional news media (eg. news channels, national newspapers) are biased towards Congress.

4.2. Hypothesis 1

H1a: Individuals are more likely to accurately identify disinformation when the message is incongruent with their political attitudes.

H1b: Individuals are less likely to perceive a message as disinformation when it is congruent with their political attitudes

A test of independence chi-square was conducted on the four treatment conditions, of which tests only the two fake news conditions are analyzed for H1a, while all four are analyzed for H1b. The following are the results of the four chi-squares.

A chi-square test revealed that politically slanted attitudes are related to identification of pro-right fake news messages: \( \chi^2 (N=242, 2) = 17.85, p < .001 \).

<table>
<thead>
<tr>
<th></th>
<th>Left</th>
<th>Centrist</th>
<th>Right</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, fake</td>
<td>75.5%</td>
<td>63.0%</td>
<td>45.6%</td>
<td>61.2%</td>
</tr>
<tr>
<td>No, real</td>
<td>24.5%</td>
<td>37.0%</td>
<td>54.4%</td>
<td>38.4%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

A chi-square test revealed that politically slanted attitudes are not related to identification of pro-left fake news messages: \( \chi^2 (N=242, 2) = 1.43, p = .490 \).

A chi-square test revealed that politically slanted attitudes are not related to identification of pro-right real news messages: \( \chi^2 (N=242, 2) = 3.92, p = .141 \).
A chi-square test revealed that politically slanted attitudes are related to identification of pro-left real news messages: \( \chi^2 (N=242, 2) = 29.12, p < .001 \).

Table 3.2 Crosstabulation of real pro-left message and politically slanted attitudes

<table>
<thead>
<tr>
<th></th>
<th>Left</th>
<th>Centrist</th>
<th>Right</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, fake</td>
<td>15.3%</td>
<td>31.5%</td>
<td>52.2%</td>
<td>32.6%</td>
</tr>
<tr>
<td>No, real</td>
<td>84.7%</td>
<td>68.5%</td>
<td>47.8%</td>
<td>67.4%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

The first significant test condition is regarding correct identification of pro-right messages, and the crosstabulation shows left-leaning or incongruent attitude holders were the most accurate with 75.5% correctly identifying the messages, while only 45.6% of right-leaning or congruent attitude holders correctly identified the message as being fake. Therefore, **H1a is partially accepted**, as results have revealed that one of the two tested conditions are significant.

Similarly, **H1b is partially accepted** as well because results have revealed that two of the four conditions are significant. The first condition that was significant was discussed earlier; however, it is interpreted differently here as we are not concerned with correct identification but rather the perception of falsity of news messages. We can see that with 54.4%, right-leaning attitude holders were least likely amongst the three groups to correctly identify the pro-right message as fake, while left-leaning were most likely to identify it as fake with 75.5%.

The second significant result was for the real pro-left message. Here, a distinction arose between left and right-leaning attitude holders rather than just attitude-congruency and discrepancy. A larger number of right-leaning attitude holders perceived this message as being fake, with 52.2% identifying it as fake and 47.8% as real. Results have shown that the difference between responses of left-leaning attitude holders were greater, with 84% identifying it as real news and 15.3% as fake news.

**H1c**: Individuals are likely to perceive a message as ‘real news’ faster when it is congruent with their political attitudes.

ANOVA revealed a significant main effect for politically slanted attitudes on the speed of identification of real pro-left news messages as real, \( F(2, 160) = 3.10, p = .048 \), partial \( \eta^2 = .037 \). Turkey post-hoc comparisons revealed that participants holding left-leaning attitudes spent
significantly less time identifying the pro-left news message as real ($M = 15.03$, $SD = 3.90$) than participants holding right-leaning attitudes ($M = 31.54$, $SD = 5.41$), $p = .038$.

ANOVA revealed no a significant main effect for politically slanted attitudes on the speed of identification of fake pro-right news messages as real, $F(2, 90) = 1.10$, $p = .336$, partial $\eta^2 = .025$.

ANOVA revealed no a significant main effect for politically slanted attitudes on the speed of identification of fake pro-left news messages as real, $F(2, 102) = 1.87$, $p = .159$, partial $\eta^2 = .035$.

ANOVA revealed no a significant main effect for politically slanted attitudes on the speed of identification of real pro-right news messages as real, $F(2, 100) = .73$, $p = .485$, partial $\eta^2 = .014$.

Only one condition produced statistically significant results, that condition being the one with the real pro-left news message. This message is the most clearly identifiable anti-right among the four and is perhaps the most sensitive, as its content reflects real allegations from Opposition parties that electronic voting machine tampering was done by the BJP. Thus, it is expected that discrepant attitude holders took longer in identifying this message as real news, as this decision was potentially influenced by cognitive dissonance. Therefore, even though only one of the four conditions were significant, **H1c is partially accepted.**

### 4.3. Hypothesis 2

**H2a:** Right-leaning individuals are likely to find attitude-congruent messages more useful than attitude-discrepant messages.

Mauchly’s Test of Sphericity indicated that the assumption of sphericity had been violated, $\chi^2(5) = 21.07$, $p < .001$. Therefore, degrees of freedom were corrected using Greenhouse–Geisser estimates of sphericity ($\varepsilon = .88$ for main effect of usefulness). The repeated measures ANOVA revealed a significant main effect of usefulness to different politically slanted attitudes, $F(2.65, 235.77) = 15.26$, $p < .001$. Four significant differences were found with the Bonferroni Correction between politically slanted attitudes and whether messages were perceived as being useful. Therefore, **H2a is partially accepted.**

Looking at the mean comparisons, it was expected that right-leaning attitude holders would find a pro-right message most useful ($M=3.67$, $SD=1.02$) and a pro-left message the least useful ($M=2.81$, $SD=1.27$). However, it is interesting that one of the pro-left messages was perceived as
being more useful (M=3.19, SD=.935) than a pro-right message (M=2.97, SD=1.17), and that the messages with the highest perceived usefulness are the two fake news messages.

Table 4.1 Reports of Mean and Standard Deviation for usefulness of news messages

<table>
<thead>
<tr>
<th>Message Type</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fake Pro-right message</td>
<td>3.67</td>
<td>1.02</td>
</tr>
<tr>
<td>Fake Pro-left message</td>
<td>3.19</td>
<td>.935</td>
</tr>
<tr>
<td>Real Pro-right message</td>
<td>2.97</td>
<td>1.17</td>
</tr>
<tr>
<td>Real Pro-left message</td>
<td>2.81</td>
<td>1.27</td>
</tr>
</tbody>
</table>

H2b: Left-leaning individuals are likely to find attitude-discrepant messages more useful than attitude-congruent messages.

Mauchly test for sphericity has been met for the main effects of likelihood to listen to the five hip hop songs from the survey, χ²(9) = 12.59, p = .182 The repeated measures ANOVA revealed a significant main effect on the likelihood to listen to differently filtered hip hop songs, F (3, 291) = 84.95, p < .001. Four significant differences were found with the Bonferroni Correction between politically slanted attitudes and whether messages were perceived as being useful. Therefore, **H2b is accepted**.

As expected, left-leaning attitude holders found both pro-right messages to be most useful, with the fake message being the most useful (M=4.17, SD=1.02) and the real message become second most useful (M=3.39, SD =1.28). The pro-left messages were seen as being least useful, with the fake message being second least useful (M=3.17, SD=1.14) and the real message being least useful (M=2.12, SD=1.07) by quite a margin.

It should be added that it is possible that the real pro-left message was considered the least useful and given a much lower score than the others because of the content of this message. The 2019 national election cycle would not be the first time that allegations or reports of voting machine tampering have been made against the BJP and perhaps left-leaning respondents perceived it as being ‘old news’ and not see it as ‘new’ useful information.

Table 4.2 Reports of Mean and Standard Deviation for usefulness of news messages
4.4. Hypothesis 3

H3: Individuals with moderate political attitudes are more likely to accurately identify disinformation messages than their more politically extreme counterparts.

A chi-square test was run using the independent variable of extreme political attitudes to test each of the two fake news treatment messages, all of which yielded statistically insignificant results. Therefore, H3 is rejected. The reports for each test are as follows.

A chi-square test revealed that politically extreme attitudes are not related to identification of pro-right fake news messages: $\chi^2 (N=242, 1) = 1.33, p = .249$.

A chi-square test revealed that politically extreme attitudes are not related to identification of pro-left fake news messages: $\chi^2 (N=242, 1) = 1.17, p = .279$.

The rejection of this hypothesis does not necessarily have to mean that extreme or moderate political attitudes do not influence how an individual engages with disinformation. It could potentially indicate that it is not just about how extreme attitudes are but rather which ideology they are oriented towards. However, this cannot be said based solely on these results; more evidence will be needed on political slant-specific hypotheses.

4.5. Hypothesis 4

H4a: Left-leaning individuals are more likely to accurately identify attitude-congruent disinformation than their right-leaning counterparts.

A chi-square test revealed that politically slanted attitudes are related to identification of attitude-congruent fake news messages: $\chi^2 (N=188, 1) = 4.633, p = .031$. Looking at the Table 5.1,
left-leaning attitude holders accurately identified the pro-left news message as being fake 61.2% of the time, and right-leaning attitude holders accurately identified pro-right news message as being fake 45.6% of the time. Therefore, **H4a is accepted.**

Table 5.1 Crosstabulation of attitude-congruent fake message and politically slanted attitudes

<table>
<thead>
<tr>
<th></th>
<th>Left</th>
<th>Right</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, fake</td>
<td>61.2%</td>
<td>45.6%</td>
<td>53.7%</td>
</tr>
<tr>
<td>No, real</td>
<td>38.8%</td>
<td>54.4%</td>
<td>46.3%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

**H4b: Extreme right-leaning individuals are less likely to identify attitude-congruent disinformation than their extreme left-leaning counterparts.**

A chi-square test revealed that extreme politically slanted attitudes are related to identification of attitude-congruent fake news messages: \( \chi^2 (N=111, 1) = 4.00, p = .046. \) left-leaning attitude holders accurately identified the pro-left news message as being fake 61.2% of the time, and right-leaning attitude holders accurately identified pro-right news message as being fake 45.6% of the time. Therefore, **H4b is accepted.**

The acceptance of this hypothesis ties into the explanation provided previously for why H3 being rejected does not mean that there is no difference between moderate and extreme attitude holders, rather bringing up the possibility of which way these extreme attitudes are slanted playing a role.

Table 5.2 Crosstabulation of attitude-congruent fake message and extreme politically slanted attitudes

<table>
<thead>
<tr>
<th></th>
<th>Extreme-Left</th>
<th>Extreme-Right</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, fake</td>
<td>61.8%</td>
<td>42.9%</td>
<td>52.3%</td>
</tr>
<tr>
<td>No</td>
<td>38.2%</td>
<td>57.1%</td>
<td>47.7%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
4.6. Hypothesis 5

H5: Individuals who are frequent news consumers are more likely to accurately identify disinformation.

A chi-square test was run using the independent variable of frequent news consumers to test each of the four treatment messages, all of which yielded statistically insignificant results. Therefore, H5 is rejected. The reports for each test are as follows.

A chi-square test revealed that frequent news consumers is not related to identification of pro-right fake news messages: $\chi^2 (N=241, 2) = 1.71, p = .425$.

A chi-square test revealed that frequent news consumers is not related to identification of pro-left fake news messages: $\chi^2 (N=241, 2) = 4.1, p = .129$.

A chi-square test revealed that frequent news consumers is not related to identification of pro-right real news messages: $\chi^2 (N=241, 2) = 1.03, p = .597$.

A chi-square test revealed that frequent news consumers is not related to identification of pro-left real news messages: $\chi^2 (N=241, 2) = 1.26, p = .534$.

Theoretically, this is unexpected as these results go against the theorizations from previous studies, which posited that frequent news consumption would override the need for confirmation bias and political attitude-congruency. However, these results are not unexpected as previous studies were not based in the India, which is also why this basic assumption was tested in the context of this study. The insignificance of the results affirms that political attitudes do play a stronger role than frequent news consumption habits in India.

4.6. Hypotheses summary

The following hypotheses were accepted:

Hypothesis 2b: Left-leaning individuals are likely to find attitude-discrepant messages more useful than attitude-congruent messages.

Hypothesis 4a: Left-leaning individuals are more likely to accurately identify attitude-congruent disinformation than their right-leaning counterparts.
**Hypothesis 4b**: Extreme right-leaning individuals are less likely to identify attitude-congruent disinformation than their extreme left-leaning counterparts.

The following hypotheses were partially accepted:

**Hypothesis 1a**: Individuals are more likely to accurately identify disinformation when the message is incongruent with their political attitudes.

**Hypothesis 1b**: Individuals are less likely to perceive a message as disinformation when it is congruent with their political attitudes.

**Hypothesis 1c**: Individuals are likely to perceive a message as ‘real news’ faster when it is congruent with their political attitudes.

**Hypothesis 2a**: Right-leaning individuals are likely to find attitude-congruent messages more useful than attitude-discrepant messages.

The following hypotheses were rejected:

**Hypothesis 3**: Individuals with moderate political attitudes are more likely to accurately identify disinformation messages than their more politically extreme counterparts.

**Hypothesis 5**: Individuals who frequently consume news content are more likely to accurately identify disinformation.
5. Conclusion

This chapter summarises the key results of the study and presents them in relation to the core concepts on which this research is based and how it answers the overarching research question. The major conclusions drawn from this study are presented, along with its implication given the theoretical and contextual background. It is discussed whether the aims of this research were met and if/how does it contribute to this field. The practical limitations of conducting this research are also explained. The ethical aspect of conducting an experiment into a sensitive topic such as political leanings and fake news during a high-intensive election period is also addressed, and the precautions taken during the study are detailed. Based on the conclusions drawn, the results are presented in relation to what it means for future research, and recommendations are provided based on the findings.

5.1. Discussion

The results of the statistical tests and subsequent analyses led to the partial or complete acceptance of all the hypotheses. Except for the rejected Hypothesis 3 and 5, the complete acceptance of H2b, H4a & H4b, and the partial acceptance of H1a, H1b, H1c & H2a has provided enough evidence to accept that political attitudes do play a significant role in how individuals engage with (dis)information messages in India. The rejection of Hypothesis 5 further strengthened these interpretations as frequent news consumption was not seen as a factor that could override political attitudes in how political (dis)information is engaged with.

The rejection of Hypothesis 3 indicated that there was no significant relationship between extreme/moderate attitudes and engagement (dis)information messages. However, this ties in with the acceptance of H4b, which indicates that it is not how extreme the attitudes are but rather which way these extreme attitudes are slanted. The partial acceptance of H1 and H2a also lends support to the interpretation that the experience of being presented with attitude-congruent or attitude-discrepant information is not the same across all political attitudes. Taking a wider view on this argument reveals that right-leaning individuals’ engagement with information is governed more by the need to avoid cognitive dissonance and strive for confirmation bias when presented with attitude-discrepant message than their left-leaning counterparts. Extending this to disinformation, the stronger need for confirmation bias amongst right-leaning individuals has led to a weakening of critical filters that would otherwise aid identification of real from fake news; in other words, right-leaning individuals are more susceptible to believing disinformation than left-leaning individuals in India.
The previous chapter also briefly touched upon the gap between an individual’s political attitudes and their self-expressed political orientations, wherein more respondents had identified themselves on the (social) left but an analysis of the political attitudes revealed that there were far more right-leaning attitude holding respondents than initially thought. This is a result of how the political attitudes were framed with regards to national parties and politicians – especially around BJP – and is line with theory that posited that socio-political identities have transformed and strengthened, especially in the cases of right-leaning identities. Previous studies have indicated a crystallization of socio-political identities around the figure of Narendra Modi; this could be an explanation of why there was a gap between socio-political orientation and attitudes, as the appeal of Modi and the BJP seem to have transcended ideological identities. Furthermore, the strong formulation of right identities around certain political figures or parties is not mirrored in the left, who are more loosely connected not by a shared ideology in their opposition to Modi and/or the BJP. This could be why the need for confirmation bias is not as strong amongst left-leaning individuals, as they do not experience as strong a cognitive dissonance when confronted with anti-left information, due to there not being the same level of personal investment or identification with the ‘left’ as is seen within the right.

The left being better at discerning fake from real news than the right also has a lot to do with the dominant discourses in media and what engagement with it means. Left-leaning individuals are also more likely to engage with attitude discrepant information i.e. right dominated discourses because this information is important considering the current political atmosphere in India. On the other hand, right-leaning individuals are not motivated by a compulsion to engage with opposing discourses as the socio-political atmosphere of the country supports their worldview.

The wide-reaching appeal of Modi and the BJP is particularly visible when looking at the age groups of people with right-leaning attitudes, with a largest number of 18 to 25-year olds in the study being extreme-right. This could be symptomatic of the role digital technologies have also played in the consolidation of political parties in India, as BJP is well-known for their extensive digital media strategies – in both the 2014 and 2019 elections – and Modi is also known for his tech savviness and is referred to as India’s first social media Prime Minister.

5.2. Implications of research

Overall, the aims of the research have been met with regards to establishing a relationship between certain political attitudes and engagement with political information and identification of political disinformation. As expected, results revealed a distinction between how left-leaning and
right-leaning engage with (dis)information. This research confirms what has been extensively spoken about in media discourses, but takes an academic approach at confirming them, backed by the appropriate theories and contextualization.

This study is not novel in what it is trying to prove, as these ideas stemmed from critical media discourse in India right now. However, currently the wealth of academic research into this relationship is lacking and a study of this nature has not been conducted in the Indian context. This is not to say that no research has been conducted into the role of socio-political identities and the disinformation epidemic in India, especially keeping in mind the Beyond Fake News Report that informs a significant chunk of this research. As mentioned earlier, this qualitative report was attacked by right-wing groups who criticized the results of the study. By conducting experimental research, hopefully this study can provide results that cannot be contested on subjective grounds.

5.3. Limitations and future research

The primary limitations placed on the researcher in trying to execute a study of this nature are concerned with the scope of a master’s thesis. Firstly, the topic of political (dis)information and political attitudes is extremely wide in its scope, and this research took one approach at assessing it. Though the results of this study are quite conclusive, they should not be viewed as the final word but rather as grounds to conduct further, more in-depth research using more resources than were available for a master’s thesis.

There are certain limitations inherent in trying to conduct a research of this nature through an online platform, primarily that of its applicability to the Indian population. These results cannot be generalized to any section of the population except for the internet using, English speaking subset. However, this is also the subset that primarily engages with the English language news discourse, which is the ‘elite’ discourse that informs the intellectual underpinnings of socio-political media discourse.

Another limitation of conducting online surveys of this scale is the consideration of the duration of the survey, which needs to be at an ideal time period of 10 minutes (or less) so as to not lose the interest of respondent. This leads to making certain design decisions that prevent one from gathering as much data as would be ideal. Therefore, the researcher has some specific recommendations for future research. Firstly, if conducting a similar experimental research on disinformation, then a larger set of treatment stimuli should be considered. These messages should
reflect as many different layers in socio-political thought as possible, in terms of political slants, specific party/politician slants, source indications, different narratives of content, varying degrees of ‘fake’ news, and so on. The more multi-faceted the treatment is, the easier it would be to establish a clear causal relationship free of confounding factors. Secondly, more information should be gathered to assess political attitudes and orientation and the data collected regarding news consumption habits - which can really inform how individuals engage with online disinformation – should be more comprehensive and in-depth.

Finally, this study collected a lot more data than was used in analysis. Future research could potentially use this dataset as a way of enriching or complimenting their own findings. This research was also conducted in the week before the 2019 General Elections results were announced, and data from that period could be beneficial for comparative studies.
References


Appendix A: Survey Questionnaire

1. INTRODUCTION

Thank you for participating in this survey about fake news in India!

This survey is part of a Master’s Thesis research project at the Erasmus University Rotterdam, Netherlands.

During the survey, you will be shown very short quotes from online articles and asked to indicate whether you think they are fake news. You will also be asked to share your opinions on some statements about politics and society. As there are no "correct" or "incorrect" responses, we request you to answer truthfully and to the best of your knowledge.

Please note:
- It will not take longer than 10 minutes to complete this survey.
- This survey is anonymous. Therefore, the information you share will remain confidential and will only be used for academic research purposes.
- You are free to leave the survey at any point (however, incomplete responses will be excluded from the data).
- By clicking the arrow below, you are consenting to participate in this survey.

If you have any questions or would like further information on this project, you can contact M. Mathur at 482427sm@eur.nl.

2. DEMOGRAPHICS

Q2.1 In which year were you born?

_________________

Q2.2 What is your gender?

- Male
- Female
- Other
- Rather not say
Q2.3 What is the highest level of education you have obtained?

Note: if you are currently a student, you can indicate your ongoing study programme as the highest level.

- Primary education (upto class 8th)
- Secondary Education (upto class 12th)
- Undergraduate/Bachelor's Degree
- Postgraduate/Master's Degree
- Ph.D/Doctorate Degree
- Other ______________________

Q2.4 What is your current status of employment?

- Student
- Unemployed
- Employed: government/public sector
- Employed: private sector
- Retired
- Other ______________________

3. Treatment:

You will now be shown 4 randomly selected quotes from online news articles.

After each quote, you will be asked 4 short questions based on what was shown.

There are no "correct" or "incorrect" responses, as we are interested in your opinions.

Therefore, we urge you not to do an online search of the presented information during the survey, and to answer truthfully and to the best of your knowledge.

[Q4. Fake Pro-right news message]

"...was what you almost missed during his speech: Rahul Gandhi let slip a swear word while talking about the BJP administration."

Q4.1 Is this fake news?

- Yes
- No
"...was what you almost missed during his speech: Rahul Gandhi let slip a swear word while talking about the BJP administration."

Q4.2 Have you seen this news before?
  o Yes
  o No

Q4.3 Is this news politically neutral?
  Note: Here, 'neutral' means neither favouring nor opposing any political agenda, party or politician.
  o No, it is politically slanted in favour of the left (and/or against the right)
  o Yes, it is politically neutral
  o No, it is politically slanted in favour of the right (and/or against the left)

Q4.4 How useful is the information in this news to you?
  o Extremely useful
  o Moderately useful
  o Neither useful nor useless
  o Moderately useless
  o Extremely useless

[Q5. Fake Pro-left news message]

"Celebrated Nobel prize-winning Economist Amartya Sen snubs BJP, hints at possible future with Congress"

Q5.1 Is this fake news?
  o Yes
  o No

"Celebrated Nobel prize-winning Economist Amartya Sen snubs BJP, hints at possible future with Congress"

Q5.2 Have you seen this news before?
  o Yes
  o No
Q5.3 Is this news politically neutral?

*Note: Here, 'neutral' means neither favouring nor opposing any political agenda, party or politician.*

- No, it is politically slanted in favour of the left (and/or against the right)
- Yes, it is politically neutral
- No, it is politically slanted in favour of the right (and/or against the left)

Q5.4 How useful is the information in this news to you?

- Extremely useful
- Moderately useful
- Neither useful nor useless
- Moderately useless
- Extremely useless

[Q6. Real Pro-Right news message]

"Modi is a ‘Champion of the Earth’: first Indian PM to receive UN’s highest environmental award for championing new levels of cooperation on environmental action"

Q6.1 Is this fake news?

- Yes
- No

Q6.2 Have you seen this news before?

- Yes
- No

Q6.3 Is this news politically neutral?

*Note: Here, 'neutral' means neither favouring nor opposing any political agenda, party or politician.*

- No, it is politically slanted in favour of the left (and/or against the right)
- Yes, it is politically neutral
- No, it is politically slanted in favour of the right (and/or against the left)

Q6.4 How useful is the information in this news to you?
"... malfunctioning EVM machinery criticised by Opposition Parties, with reports coming in that glitches send votes directly to BJP candidates."

Q7.1 Is this fake news?
- Yes
- No

"... malfunctioning EVM machinery criticised by Opposition Parties, with reports coming in that glitches send votes directly to BJP candidates."

Q7.2 Have you seen this news before?
- Yes
- No

Q7.3 Is this news politically neutral?
*Note: Here, 'neutral' means neither favouring nor opposing any political agenda, party or politician.*
- No, it is politically slanted in favour of the left (and/or against the right)
- Yes, it is politically neutral
- No, it is politically slanted in favour of the right (and/or against the left)

Q7.4 How useful is the information in this news to you?
- Extremely useful
- Moderately useful
- Neither useful nor useless
- Moderately useless
- Extremely useless
4. Fake News and Indian Media

You will now be presented with questions regarding the media and news in India.

Q8.1 What do you consider to be 'fake news'?

[select all options that apply]

- Factually incorrect information
- Misleading information
- Information pushing a political agenda
- Clickbait and/or sensational news
- Other ______________________

Q8.2 Please indicate your level of agreement to each statement by choosing one of the following options:

*Note: we urge you to avoid using the 'neither agree nor disagree' option as much as possible.*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree (1)</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>India is facing a fake news crisis.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>News media in India is politically unbiased.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fake news is used as a tool for political propaganda.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional news media (eg. news channels, national newspapers) are biased towards the BJP.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional news media (eg. news channels, national newspapers) are biased towards Congress.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. Political Orientation

Q9.1 The following is a grid which uses two dimensions to measure political orientation.

The x-axis/horizontal line measures economic attitudes: ranging from the economic-left (i.e. regulated or state-planned), to the economic-right (i.e. deregulated or free-market).

The y-axis/vertical line measures social attitudes: ranging from strong central power (i.e. state more important than self) at the top, to strong individual autonomy (i.e. individual freedom more important than the state) at the bottom.

Please click your cursor/tap your finger to drop a point on the coloured grid which you feel best represents your current political orientation.

[single click/tap=drop point, double click/tap=remove point]

Note: if you feel this grid is too complex, click only the button at the bottom of the screen. You can then indicate your political orientation on a simplified scale, ranging from left to right-leaning.

Q9.2 Please indicate your current political orientation on the following scale:

- Left
- Centre-left
- Centre/Moderate
- Centre-right
- Right
6. Society and Politics

You will now be presented with statements regarding society and politics.

Q10.1 Please indicate your level of agreement with the following statements about general society:

*Note: we urge you to avoid using the 'neither agree nor disagree' option as much as possible.*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree (1)</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No one chooses their country of birth, so it is foolish to be proud of it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All authority should be questioned.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Making peace with the establishment is an important aspect of maturity.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Societal harmony is more important than economic growth.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will always support my country, whether it is right or wrong.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Q10.2 Please indicate your level of agreement with the following statements regarding your opinions on the current national political environment:

*Note: In the following statements, 'BJP' refers to the Bharatiya Janata Party, 'Congress' refers to the Indian National Congress party, and 'Modi' refers to PM Narendra Modi.*

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree (1)</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am a supporter of the BJP.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am a supporter of Congress.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I do not support any political party.

In the past 5 years, the BJP has done more good for the country than bad.

I feel Congress is the best alternative to the BJP to form the national government.

I feel that Congress is a left-wing party.

I feel that the BJP is a right-wing party.

I feel that Modi and the BJP have become synonymous.

7. News Consumption Habits:

You will now be presented with some questions regarding your news consumption habits.

Q11.1 Do you consider yourself to be a news consumer?

- Never
- Sometimes
- About half the time
- Most of the time
- Always

Q11.2 What kind of news topics do you consume? [select all options that apply]

- Local/Regional news
- National news
- International news
- Politics and Governance
- Business and Economy
- Sports and Entertainment
- Lifestyle and Fashion
Science and Technology
Health and Education
Arts and Culture
Other _____________________
None

Q11.3 Do you actively search for news content?
Never
Sometimes
About half the time
Most of the time
Always

Q11.4 Do you double-check or verify the news content you consume?
Never
Sometimes
About half the time
Most of the time
Always

Q11.5 How often do you get news from the following sources?

<table>
<thead>
<tr>
<th>Source</th>
<th>Never (1)</th>
<th>Sometimes</th>
<th>About half the time</th>
<th>Most of the time</th>
<th>Always (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Television</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Print news (newspapers, magazines, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Digital news (e-newspapers, apps, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Social media platforms (Facebook, Twitter, etc.)
Online messaging platforms (Whatsapp, etc.)
Word of mouth (friends, family, etc.)

Q11.6 How trustworthy do you find the news from these sources?

*Note: 1=not at all trustworthy, 5=completely trustworthy*

<table>
<thead>
<tr>
<th>Source</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Television</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Radio</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Print news (newspapers, magazines, etc.)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Digital news (e-newspapers, apps, etc.)</td>
<td>o</td>
<td>o</td>
<td>o</td>
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</tr>
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<td>Social media platforms (Facebook, Twitter, etc.)</td>
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<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Online messaging platforms (Whatsapp, etc.)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>Word of mouth (friends, family, etc.)</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

Q11.7 In which language(s) do you consume news?

- Primary language ________________
- Secondary/other language (optional) ________________

8. Debriefing
YOUR RESPONSE HAS BEEN RECORDED
Thank you for participating!

- PLEASE READ THE DEBRIEFING -
During the survey you were presented with both real and fake news quotes. To ensure that you do not leave this survey with misinformation, please read the following clarification:

Fake news quotes:

1. "...was what you almost missed during his speech: Rahul Gandhi let slip a swear word while talking about the BJP administration."
2. "Celebrated Nobel prize-winning Economist Amartya Sen snubs BJP; hints at possible future with Congress"

Real news quotes:

1. "‘Modi is a 'Champion of the Earth'; first Indian PM to receive UN's highest environmental award for championing new levels of cooperation on environmental action"
2. "... malfunctioning EVM machinery criticised by Opposition Parties, with reports coming in that glitches send votes directly to BJP candidates."

If you have any questions or would like to know more about this research project, please contact M. Mathur at 482427sm@eur.nl.

For more information on fake news, check out the following resources:

- [Top 5 Questions about Media Literacy and Fake News](#)
- [AltNews](#) (Indian non-partisan fact-checking website)
### APPENDIX B: Pre-test treatment messages

<table>
<thead>
<tr>
<th></th>
<th><strong>Factually incorrect information</strong> (fake news)</th>
<th><strong>Factually correct information</strong> (real news)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pro-right</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>(or anti-left)</strong></td>
<td>&quot;...was what you almost missed during his rally speech: Rahul Gandhi used an abuse while talking about the BJP administration.&quot;</td>
<td>&quot;&quot;Champions of the Earth&quot;: Modi receives UN’s highest environmental award for championing new levels of cooperation on environmental action&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;... granted bail on health grounds, BJP candidate Sadhvi Pragya has been acquitted of Malegaon blast terror charges&quot;</td>
<td>&quot;Congress IT cell head tweets photoshopped image drawing a parallel between PM Modi and Hitler&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;Give me 42 seats and I will show you how to make the Hindus cry: Mamata Banerjee&quot;</td>
<td>&quot;With the Indian economy growing at a faster rate under the BJP Government...&quot;</td>
</tr>
<tr>
<td><strong>Pro-left</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>(or anti-right)</strong></td>
<td>&quot;... in a statement, Yogi Adityanath asserts that former Goa Chief Minister Manohar Parrikar 'died of cancer because he allowed beef consumption in the state.'.&quot;</td>
<td>&quot;50 Lakh People Lost Jobs Since Demonetisation in 2016, According to Azim Premji University Report&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;BJP MLA booked after video uncovered of dalit youth being beaten up&quot;</td>
<td>&quot;...malfucntioning EVM machinery under fire from Opposition Parties, with cases of glitches leading to votes for the BJP candidates.&quot;</td>
</tr>
<tr>
<td></td>
<td>&quot;Nobel-winning Economist Amartya Sen hints at possible future with Congress&quot;</td>
<td>&quot;Mayawati appeals to BSP-SP alliance workers in Amethi, Rae Bareli to vote for Congress&quot;</td>
</tr>
<tr>
<td><strong>Neutral</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;Lok Sabha elections 2019: 33% nominees from main parties have only finished school&quot;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>&quot;India’s Anti-Satellite Missile Test Leaves World Divided, NASA unhappy&quot;</td>
</tr>
</tbody>
</table>