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Digital Fragmentation and Democratic Strain in India: How
Credibility, Algorithms, and Exposure Shape Political Reality

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Abstract

Do digital echo chambers really polarise citizens; or do they simply reshape how people judge what is true? This study investigates how selective exposure to political content on social media influences political attitudes in India, focusing on perceived credibility as a key psychological mechanism and algorithmic awareness as a potential safeguard. Drawing on Selective Exposure and Echo Chamber theories, a survey experiment with real-world stimuli ($N = 302$) examines how prior exposure to government-affirming, government-critical, or mixed content shapes credibility, political alignment, and polarisation. The findings challenge dominant assumptions. While prior exposure strongly predicts what individuals perceive as credible, it has no direct effect on political alignment or polarisation once political attitudes are accounted for. Instead, credibility emerges as the critical pathway through which exposure operates, particularly for government-critical content. Strikingly, algorithmic awareness does not mitigate polarisation; rather, it is associated with higher levels of it. These results suggest that digital media do not simply polarise users through exposure alone. Instead, they shape the criteria by which individuals evaluate political information, reinforcing fragmented “realities” in which competing narratives are judged differently rather than shared or contested. By shifting the focus from exposure to interpretation, this study offers a more nuanced account of media effects in complex democracies and challenges the assumption that awareness alone can counteract digital polarisation.

Key words: Political polarisation; selective exposure; echo chambers; algorithmic awareness; credibility; recall bias; digital media; India; social media; affective polarisation

Zusammenfassung

Polarisieren digitale Echokammern die Bürger tatsächlich, oder verändern sie lediglich die Art und Weise, wie Menschen beurteilen, was wahr ist? Diese Studie untersucht, wie selektive Konfrontation mit politischen Inhalten in sozialen Medien die politischen Einstellungen in Indien beeinflusst, wobei der Fokus auf der wahrgenommenen Glaubwürdigkeit als zentralem psychologischen Mechanismus und dem algorithmischen Bewusstsein als potenziellem Schutzmechanismus liegt. Auf der Grundlage von Theorien zur selektiven Konfrontation und zu Echokammern untersucht ein Umfrageexperiment mit realen Stimuli ($N = 302$), wie die vorherige Konfrontation mit regierungsbefürwortenden, regierungskritischen oder gemischten Inhalten die Glaubwürdigkeit, die politische Ausrichtung und die Polarisierung beeinflusst. Die Ergebnisse stellen vorherrschende Annahmen in Frage. Zwar sagt die vorherige Exposition stark voraus, was Einzelpersonen als glaubwürdig wahrnehmen, doch hat sie keinen direkten Einfluss auf die politische Ausrichtung oder Polarisierung, sobald politische Einstellungen berücksichtigt werden. Stattdessen erweist sich Glaubwürdigkeit als der entscheidende Wirkmechanismus der Exposition, insbesondere bei regierungskritischen Inhalten. Auffallenderweise mildert das algorithmische Bewusstsein die Polarisierung nicht; vielmehr ist es mit einem höheren Ausmaß derselben verbunden. Diese Ergebnisse deuten darauf hin, dass digitale Medien die Nutzer nicht allein durch die bloße Konfrontation mit Inhalten polarisieren. Vielmehr prägen sie die Kriterien, nach denen Einzelpersonen politische Informationen bewerten, und verstärken so fragmentierte realitäten, in denen konkurrierende Narrative unterschiedlich beurteilt, anstatt geteilt oder hinterfragt zu werden. Indem der Fokus von der bloßen Konfrontation auf die Interpretation verlagert wird, liefert diese Studie eine differenziertere Darstellung der Medienwirkungen in

komplexen Demokratien und stellt die Annahme in Frage, dass Bewusstsein allein der digitalen Polarisierung entgegenwirken kann.

Schlüsselwörter: Politische Polarisierung; selektive Exposition; Echokammern; algorithmisches Bewusstsein; Glaubwürdigkeit; Erinnerungsverzerrung; digitale Medien; Indien; soziale Medien; affektive Polarisierung

Introduction

As the world's largest democracy, India's democratic framework is traditionally upheld by four fundamental pillars: legislature, executive, judiciary and media; with the media serving as the vital fourth estate responsible for ensuring transparency and public accountability (Ranjan & Kashyap, 2014). However, the integrity of this pillar has come under significant scrutiny as India's standing in global evaluations of journalistic independence continues to decline. In 2026, India ranked 157th out of 180 countries on the World Press Freedom Index, reflecting a troubling decline in the diversity and freedom of the information environment (Reporters without Borders, 2026).

A poignant example of this institutional media failure is the recent press conference held by Rahul Gandhi, the leader of the opposition, in which he levelled serious allegations of "vote chori" (electoral theft) (Indian National Congress, 2025). Despite the gravity of these claims from a major political figure, the event received minimal coverage from major mainstream media outlets. This instance exemplifies a broader trend of media gatekeeping, where the increasing concentration of media ownership, characterised by nearly 11 major news channels and their sister channels being owned by political affiliates, leads to the selective amplification of certain narratives while silencing others (Ahmad, 2024).

This systemic neglect by traditional outlets has transformed the digital sphere into an alternative space for political information. As citizens increasingly turn to platforms such as Facebook, WhatsApp, and Instagram for civic engagement, they enter a high-choice media environment that offers unprecedented access to diverse views but also facilitates audience

fragmentation (Van Aelst et al., 2017). This transition has given rise to a critical social phenomenon: the emergence of online echo chambers and filter bubbles, where individuals are disproportionately exposed to ideologically congruent content (Pariser, 2011; Sunstein, 2017).

However, the severity of filter bubbles remains debated. Zuiderveen Borgesius et al. (2016) argue that concerns about citizens being trapped in isolated information cocoons are often overstated. They distinguish between self-selected and pre-selected personalisation and find limited empirical evidence that algorithmic curation alone creates fully sealed echo chambers. Most individuals still encounter diverse viewpoints through offline interactions and exposure to traditional media. This perspective provides a useful counterpoint, suggesting that while echo chambers exist, their effects may be contingent on user behaviour, context, and levels of engagement.

While the mechanisms of selective exposure and their role in polarisation have been rigorously examined in Western contexts, there remains a notable research gap regarding how these dynamics operate within the unique, multi-dimensional, and linguistically diverse landscape of contemporary India (Sakhiya & Rathod, 2024). Existing Indian research has documented the strategic use of social media for propaganda and voter mobilisation, yet limited empirical work has focused on the cognitive and behavioural impacts of selective exposure or whether individuals can recall the diverse political information they encounter (Yadav, 2024; George, 2024).

Therefore, this thesis seeks to address these gaps by investigating the interplay between digital media exposure, political recall, perceived credibility, and political outcomes.

Specifically, the study moves beyond examining direct exposure effects to explore the psychological processes through which exposure operates, with a particular focus on perceived credibility as a mediating mechanism and algorithmic awareness as a moderating factor.

The theoretical relevance of this study is grounded in Selective Exposure Theory (Stroud, 2008) and Agenda-Setting Theory (McCombs & Shaw, 1972), which together explain how both structural media conditions and individual cognitive biases shape political information processing. These frameworks are essential for understanding how the "architecture of control" on digital platforms enables users to filter out dissenting perspectives, thereby reinforcing ideological conformity and, in some cases, deepening affective polarisation (Sunstein, 2017).

In addition, this study draws on confirmation bias (Nickerson, 1998) and cognitive dissonance theory (Festinger, 1962) to explain how individuals selectively internalise information that aligns with their pre-existing beliefs. Within highly personalised digital environments, repeated exposure to congruent content is expected not only to influence recall but also to increase the perceived credibility of that content, thereby strengthening its persuasive impact. At the same time, this research examines a critical yet underexplored mitigating factor: algorithmic or echo-chamber awareness, defined as the extent to which individuals understand and critically reflect on how social media platforms curate and prioritise information.

The following sections detail the theoretical foundations of selective exposure, confirmation bias, and echo chambers, review the current state of research on Indian digital politics, outline a quantitative methodology for testing these relationships, and then dive into the

results and discussion. Building on this framework, the study seeks to address the following key research questions:

- How does prior exposure to government-affirming, government-critical, or mixed political content influence individuals' political alignment and political polarisation?
- To what extent does perceived credibility mediate the relationship between prior exposure and political outcomes?
- To what extent does awareness of echo chambers and algorithmic curation moderate the relationship between prior exposure and political polarisation?

By addressing these questions, this study hopes to provide a more nuanced understanding of how digital media environments shape cognition and political behaviour in India. In doing so, it contributes to broader debates on the role of digital platforms in democratic societies and offers insights into how the erosion of traditional media gatekeeping may be reshaping public discourse. Ultimately, the findings aim to inform discussions on digital literacy, media regulation, and the preservation of democratic accountability in an era where the fourth pillar of democracy, media, is increasingly compromised.

Theory, State of Research, and Hypotheses

The contemporary Indian political communication environment is defined by a paradoxical tension between its status as the world's largest democracy and its declining standing in global evaluations of journalistic independence, where it currently ranks 157th out of 180 countries in the World Press Freedom Index (Reporters Without Borders, 2026). This institutional erosion is best understood through the Propaganda Model (Herman & Chomsky, 1988), which suggests that mass media in capitalist democracies serve the interests of economic and political elites through structural filters, most notably the concentration of media ownership. This environment allows for a restrictive form of agenda-setting (McCombs & Shaw, 1972), in which media outlets dictate not only what the public thinks, but also what they think about, by selectively amplifying state-aligned narratives while marginalising opposition concerns. As traditional gatekeeping fails to provide a diverse public sphere, citizens increasingly turn to social media platforms such as Facebook, WhatsApp, and Instagram as alternative spaces for political information.

However, the transition to this high-choice media environment has fundamentally altered how political information is consumed, leading to what scholars describe as an "archipelagic collection of digitally isolated islands" (Parekh, 2017). This digital fragmentation is driven by a feedback loop between human psychology and technological architecture. On the psychological level, Selective Exposure Theory (Stroud, 2008) and Confirmation Bias (Nickerson, 1998) suggest that individuals naturally gravitate toward information that validates their existing beliefs to avoid cognitive dissonance, i.e., the psychological tension caused by encountering inconsistent

information (Festinger, 1962). On the technological level, these innate tendencies are "algorithmically supercharged" by Filter Bubbles and Echo Chambers (Pariser, 2011). These personalised digital environments curate content based on a user's past behaviours, often shielding them from attitude-challenging viewpoints without their realisation.

In the Indian context, these global phenomena take on unique dimensions characterised by linguistic segmentation. Research indicates that North Indian middle-class users exhibit a strong preference for Hindi-language content, which frequently carries a distinct ideological bias (Sakhiya & Rathod, 2024). Furthermore, the "weaponisation" of platforms like WhatsApp by sophisticated political "IT cells" has created a landscape where emotionally charged disinformation is used to manufacture "siege mentalities" and solidify partisan identities (George, 2024). While these dynamics have been studied extensively in Western contexts, there remains a significant research gap regarding the empirical operation of selective exposure and its cognitive impacts, such as political recall and credibility perceptions, within India's multilingual and socio-economically diverse electorate.

This thesis moves beyond descriptive accounts of digital fragmentation to investigate the cognitive and attitudinal consequences of selective exposure. In particular, it examines how prior exposure shapes perceived credibility, and how these perceptions subsequently influence political alignment and polarisation, while also assessing whether algorithmic awareness can mitigate these effects. The following sections detail how these theoretical frameworks lead to the derivation of six hypotheses.

Hypothesis 1: Effect of prior exposure on credibility perception

- *H1a: Prior exposure to government-affirming content will be positively associated with higher perceived credibility compared with prior exposure to government-critical content.*
- *H1b: Prior exposure to government-affirming content will be positively associated with higher perceived credibility compared with prior mixed exposure.*
- *H1c: Prior exposure to government-critical content will be negatively associated with perceived credibility compared with prior mixed exposure.*

The theoretical derivation of Hypothesis 1 requires a multi-layered analysis that bridges macro-structural media filters with micro-level cognitive processing in the digital age.

The foundation for selective recall begins with the structural media environment, which dictates the availability of information. According to the Propaganda Model, mass media content is shaped by structural filters, most notably media ownership, which aligns media interests with those of economic and political elites (Herman & Chomsky, 1988). In contemporary India, this is manifested in an increasing concentration of media ownership, where several news channels are owned by politicians or their affiliates and used as propaganda vehicles (Ahmad, 2024). This concentration empowers traditional outlets to perform a restrictive agenda-setting function; by choosing which issues to display, they define political reality for the public (McCombs & Shaw, 1972). When major events, such as an opposition press conference alleging electoral theft, receive limited mainstream coverage, a mediated political reality is created. This structural silencing of discordant narratives pushes "information-hungry" citizens towards digital platforms

as alternative spaces, but it also ensures that the "information core" remains skewed toward government-affirming narratives (Sakhiya & Rathod, 2024).

Once users enter the high-choice digital landscape (Van Aelst et al, 2017), their navigation is governed by the Selective Exposure Theory, the tendency to select media that matches existing predispositions (Stroud, 2008). This behaviour is driven by the need to avoid “cognitive dissonance”, the uncomfortable state of tension experienced when encountering psychologically inconsistent information (Festinger, 1962). To reduce this discomfort, individuals employ strategies such as distorting their perception of the world or dismissing contradictory evidence to restore a sense of internal consistency. In a digital environment that offers various options, individuals can easily use an "architecture of control" to filter out diverse perspectives, effectively creating a "Daily Me" devoid of attitude-challenging content (Sunstein, 2017).

The core of Hypothesis 1 lies in confirmation bias, the ubiquitous tendency to seek, interpret, and remember information in ways that support pre-existing beliefs (Nickerson, 1998). Nickerson (1998) identifies the "my-side bias" and primacy effects as critical components: individuals generate more arguments for their own position and allow early information to disproportionately shape long-term beliefs. This means that individuals not only encounter more congruent information; they also encode it more deeply. Since people give more weight to evidence that supports their beliefs while discounting or ignoring contradictory information, their retrospective recall of political events is inherently biased toward what they already know or expect to be true.

These cognitive biases are "algorithmically supercharged" by Filter Bubbles, where platforms like Facebook and Instagram personalise feeds based on past behaviours (Pariser, 2011). While algorithms reduce exposure to diverse views by approximately 15%, individual choices play a far more significant role, leading users to click through to 70% less cross-cutting content (Bakshy et al., 2015).

In India, this process is further intensified by linguistic and regional homophily. North Indian middle-class users often exhibit a strong preference for Hindi-language content, which research suggests frequently carries a right-leaning ideological bias (Sakhiya & Rathod, 2024). When individuals are bombarded with emotionally charged, linguistically tailored narratives through "weaponised" platforms like WhatsApp, their cognitive defences are overwhelmed (George, 2024). This leads to a feedback loop where the recall of congruent information, such as a government-affirming reel about river cleaning, is strengthened, while contradictory reality checks are filtered out by both the algorithm and the user's own motivated reasoning. Consequently, the selective recall hypothesised in this study is a product of a technological environment that rewards 'truth-claiming' over 'truth-seeking', making individuals less critical of information that confirms their worldviews (Rhodes, 2022).

Consequently, prior exposure is expected to shape not only what individuals recall but also what they perceive as more credible, forming the foundation for downstream attitudinal effects.

Hypothesis 2: Direct effect of prior exposure on political alignment

- *H2a: Prior exposure to government-affirming content will be positively associated with stronger political alignment with the government compared with prior exposure to government-critical content.*
- *H2b: Prior exposure to government-affirming content will be positively associated with stronger political alignment with the government compared with prior mixed exposure.*
- *H2c: Prior exposure to government-critical content will be negatively associated with political alignment with the government compared with prior mixed exposure.*

Hypothesis 3: Direct Effect of Prior Exposure on Political Polarisation

- *H3a: Prior exposure to government-affirming content will be positively associated with higher political polarisation compared with prior exposure to government-critical content.*
- *H3b: Prior exposure to government-affirming content will be positively associated with higher political polarisation compared with prior mixed exposure.*
- *H3c: Prior exposure to government-critical content will be positively associated with higher political polarisation compared with prior mixed exposure.*

The theoretical derivation for Hypotheses 2 and 3 examines the behavioural and emotional consequences of inhabiting digital "information cocoons" (Sunstein, 2017). These hypotheses are grounded in the understanding that digital environments, characterised by echo chambers and filter bubbles, fundamentally alter the way individuals process political reality by limiting exposure to attitude-challenging information.

The core of these hypotheses lies in selective exposure (Sunstein, 2017). Social media platforms facilitate this through pre-selected personalisation, where algorithms curate feeds based on past behaviours, often without the user's conscious realisation. While some research suggests that social networks can expose users to "weak ties" and diverse views (Barberá, 2020), the selective pressure of consuming homogeneous content reinforces attitudes, making individuals increasingly resistant to opposing viewpoints. This feedback loop creates a "cybercascade", the rapid amplification of biased perspectives within online communities, leading to extreme ideological entrenchment (Sunstein, 2017).

The danger of these homogeneous streams extends to cognitive processing as well. Living in a partisan filter bubble encourages heuristic processing (System I thinking), a mental shortcut in which individuals rely on familiar partisan cues rather than on deliberate, systematic, and critical analysis (System II thinking). This conditioning makes users significantly more likely to rate fake news as believable, as the absence of discordant information removes the necessary friction for discerning truth (Rhodes, 2022). Consequently, selective exposure on digital platforms contributes to a lack of shared reality, which threatens democratic stability by fostering factual relativism, where basic facts are treated as mere opinions.

Exposure to homogeneous content does not merely change policy views; it fuels affective polarisation, characterised by intense emotional negativity and visceral hostility toward the political outgroup (Iyengar & Krupenkin, 2018). This shift reflects a transition from ideological disagreement to "partyism," where partisanship becomes a powerful social and emotional identity tied to deep cultural markers such as religion and geography (Sunstein, 2017). In these

environments, “outgroup animus”, the desire to defeat or humiliate the opposition, surpasses policy enthusiasm as the primary driver of political participation. This negative motivation undermines democratic accountability, as voters prioritise the "saviour" narrative of their own leader over an objective evaluation of their performance (Iyengar & Krupenkin, 2018).

Evidence from the Indian context reinforces this relationship between media exposure and political alignment. Verma (2024), using NES data from 1996–2019, finds that increased media exposure, across both traditional and digital platforms, is strongly associated with a higher likelihood of voting for the Bhartiya Janta Party (BJP). This suggests that long-term ideological messaging and sophisticated campaign infrastructures have created durable partisan identities. Verma also notes that rising media penetration has coincided with growing social and political polarisation, reflected in declining trust in media sources. These findings align with the argument that homogeneous information environments intensify partisan attitudes in India.

In the Indian context, this homogeneity is systematically manufactured through weaponising WhatsApp and sophisticated IT cells. These "fake news factories" utilise specialised psychological tactics to manipulate voters, including activating majoritarian pride, cultivating victimhood (creating a "siege mentality"), and stoking communal hatred. By bombarding users with emotionally charged, often fabricated messaging, these campaigns achieve "cognitive capture" or a form of "brainwashing" (George, 2024). The BJP's digital strategy, for instance, has evolved from broad campaigning to a data-driven approach that uses analytics to micro-target specific demographic segments with tailored content, further solidifying partisan identities and deepening ideological divides (Yadav, 2024).

While international literature often points to Partisan Sorting (Törnberg, 2022) as a primary driver where social identities collapse into a single partisan divide, this framework does not fully capture the Indian reality. In India, political identities are multi-dimensional and fluid, shaped by caste, region, and religion rather than a stable left-right ideological consistency. Therefore, the echo chamber in India acts less as a sorting mechanism for existing identities and more as a factory that manufactures and weaponises these identities through state-sponsored or party-aligned propaganda. As traditional media outlets become propaganda vehicles due to concentrated ownership by political affiliates, the digital sphere becomes the primary site where these reinforced, polarised attitudes are solidified (Ahmad, 2024).

Based on this synthesis of digital homogeneity and its psychological impacts, the study proposes that the intensity and direction of prior exposure, whether government-affirming, government-critical, or mixed, will shape both political alignment (H2a–c) and political polarisation (H3a–c), with homogeneous exposure environments expected to produce stronger attitudinal alignment and higher levels of polarisation compared to mixed exposure conditions.

H4: Mediation effect of credibility perception on political alignment

- *Higher perceived credibility will be positively associated with stronger political alignment and will positively mediate the relationship between prior exposure and political alignment.*

H5: Mediation effect of credibility perception on political polarisation

- *Higher perceived credibility will be positively associated with higher political polarisation and will positively mediate the relationship between prior exposure and political polarisation.*

The theoretical derivation of Hypotheses 4 and 5 extends the logic of selective exposure and echo-chamber effects by introducing perceived credibility as a key psychological mechanism through which prior exposure translates into political outcomes. In doing so, the analysis moves beyond direct effects to examine how individuals cognitively process and internalise political information within fragmented digital environments.

While social media algorithms are designed to prioritise engagement through highly personalised and often polarised content, users are not merely passive recipients of this information. Research by Rhodes (2022) demonstrates that a homogeneous "filter bubbles" condition individuals to rely on heuristic processing (System I thinking), a mode of thought characterised by mental shortcuts and a reliance on familiar partisan cues. This bypasses systematic, critical analysis (System II thinking), making individuals significantly more susceptible to believing misinformation. As a result, repeated exposure to ideologically congruent content does not simply reinforce attitudes; it also enhances the perceived credibility of that content, as familiarity and repetition increase perceived truthfulness (Hasher et al., 1977).

Building on this, perceived credibility becomes a crucial mediating variable. When individuals are repeatedly exposed to government-affirming or government-critical narratives, these narratives are not only evaluated in isolation but are filtered through prior beliefs and cognitive biases such as confirmation bias (Nickerson, 1998). Consequently, individuals are

more likely to assign higher credibility to content that aligns with their ideological predispositions, while discounting or dismissing contradictory information. This asymmetry in credibility judgments reflects the broader dynamics of selective exposure (Stroud, 2008) and cognitive dissonance reduction (Festinger, 1962), where individuals seek consistency between their beliefs and the information they accept as valid.

At the same time, the structural media environment in India further amplifies this process. As stated earlier, the concentration of media ownership and the rise of politically affiliated media outlets contribute to a restricted agenda-setting environment (Herman & Chomsky, 1988; McCombs & Shaw, 1972). In such a context, digital platforms become primary sites for political information exchange, yet they are themselves shaped by algorithmic curation and strategic political communication. The “weaponisation” of platforms like WhatsApp, combined with emotionally charged and repetitive messaging, creates conditions in which credibility judgments are increasingly shaped by exposure patterns rather than objective verification (George, 2024).

Within this framework, credibility functions as the psychological bridge between exposure and political outcomes. Individuals who perceive politically congruent content as more credible are more likely to incorporate it into their belief systems, thereby strengthening political alignment with the government or intensifying affective polarisation. This aligns with research suggesting that credibility is a key predictor of persuasion and attitude formation in digital environments, particularly when individuals rely on heuristic cues rather than systematic evaluation (Rhodes, 2022).

These hypotheses reflect the expectation that the effect of prior exposure on political outcomes operates, at least in part, through perceived credibility, rather than being purely direct. In other words, exposure shapes what individuals consider credible, and these credibility judgments, in turn, shape their political attitudes.

H6: Moderating effect of Echo chamber/algorithmic awareness on the effect of prior exposure on political polarisation

- *H6a: The positive relationship between prior exposure to government-affirming content and political polarisation will be weaker among individuals with higher echo chamber and algorithmic awareness compared to individuals with lower awareness, relative to prior exposure to government-critical content.*
- *H6b: The positive relationship between prior exposure to government-affirming content and political polarisation will be weaker among individuals with higher echo chamber and algorithmic awareness compared to individuals with lower awareness, relative to prior mixed exposure.*
- *H6c: The positive relationship between prior exposure to government-critical content and political polarisation will be weaker among individuals with higher echo chamber and algorithmic awareness compared to individuals with lower awareness, relative to prior mixed exposure.*

The theoretical derivation for Hypothesis 6 explores the potential for individual agency to disrupt these processes, specifically by examining how algorithmic awareness moderates the relationships between exposure, credibility, and political polarisation.

While social media algorithms are designed to prioritise engagement through highly personalised and often polarised content, users are not merely passive recipients of this information. Research by Rhodes (2022) demonstrates that homogeneous “filter bubbles” condition individuals to rely on heuristic processing (System I thinking), thereby increasing susceptibility to biased or misleading information. However, this process is not inevitable.

Hypothesis 6 posits that algorithmic awareness, the conscious understanding of how platforms curate content, acts as a trigger for more deliberate, systematic thinking. When individuals are aware of the "Filter Bubble" effect (Pariser, 2011), they are more likely to recognise that their feed represents a curated, potentially biased version of reality. This awareness introduces cognitive friction, encouraging individuals to question the credibility of information rather than accepting it at face value. As a result, the “implied truth effect” of repeated exposure is weakened (Alatawi et al., 2021).

A vital empirical nuance in the Indian context is provided by Sakhiya and Rathod (2024), who found that mere exposure to diverse media sources does not inherently protect an individual from the echo-chamber effect. Instead, the strongest defence is high political interest, which motivates individuals to actively seek, compare, and verify information across multiple sources. This suggests that awareness is not merely passive knowledge but is closely linked to active information-seeking behaviour.

This suggests that the moderating effect of awareness is tied to a user’s motivation to seek out cross-cutting content, i.e., information that challenges their pre-existing beliefs. While Sunstein (2017) warns that "information cocoons" lead to extreme polarisation, Barberá et al.

(2015) note that exposure to diverse viewpoints, facilitated by an aware user's "weak ties" (acquaintances), can actually moderate ideological positions over time. Therefore, awareness does not just provide a shield; it actively encourages the pursuit of a "shared factual reality" that is otherwise eroded by digital fragmentation (Van Aelst et al., 2017).

This moderating role is particularly important in India's "truth emergency," where "weaponised WhatsApp" employs sophisticated psychological tactics such as activating religious pride and manufacturing victimhood to achieve "cognitive capture" (George, 2024). In such an environment, Borah and Singh (2022) emphasise that fostering digital literacy, particularly the ability to identify algorithmic biases, is essential for reducing the polarising influence of computational propaganda.

Although digital literacy remains unevenly distributed across the Indian population, studies have shown that even small interventions, such as prompting users to think about accuracy or exposing them to media literacy content on how to spot fake news, can have a statistically significant effect in reducing belief in false information (Alatawi et al, 2021). This highlights the potential for awareness to function as a meaningful buffer against the effects of selective exposure.

Therefore, algorithmic awareness is expected to moderate the direct relationship between prior exposure and political polarisation, such that the positive association between exposure to government-affirming or government-critical content and political polarisation will be weaker among individuals with higher levels of echo chamber and algorithmic awareness compared to those with lower awareness.

Methodology

Research Design

This study employs a quantitative, cross-sectional survey design to examine the relationship between selective exposure to political content, perceived credibility, and political attitudes in the Indian context. A survey-based approach is particularly appropriate given the study's objective to test theoretically derived hypotheses from Selective Exposure Theory (Stroud, 2008) and Echo Chamber Theory (Sunstein, 2017) across a relatively large and diverse sample. Quantitative methods enable the systematic measurement of latent constructs such as credibility, political alignment, and polarisation, and allow for statistical testing of direct, mediating, and moderating relationships.

The design integrates elements of experimental stimulus exposure within a survey framework, enhancing ecological validity while maintaining analytical rigour. By embedding real-world political stimuli into the survey, the study captures how individuals recall and evaluate information in ways that closely reflect actual digital media consumption patterns.

Procedure

Data was collected through an online survey in the form of a structured questionnaire between 16th and 25th April 2026 via Google Forms. Upon providing informed consent, participants were presented with a series of paired political stimuli, each consisting of two contrasting pieces of content covering the same issue:

- one government-supporting (pro-government) narrative, and
- one government-critical (anti-government) narrative.

These stimuli were sourced from real-world social media platforms, primarily Facebook and Instagram, to reflect the contemporary high-choice media environment in India. Using authentic content enhances ecological validity, as participants are more likely to respond to stimuli that resemble the information they encounter in their everyday digital environments.

Participants were asked to indicate whether they had previously encountered similar content and, if so, which version they recalled seeing. This approach operationalises selective exposure and recall bias, allowing the study to capture how individuals retrospectively interpret their media environment in line with their predispositions (Nickerson, 1998).

Following the exposure task, respondents completed a series of Likert-scale measures assessing perceived credibility, political alignment, political polarisation, and algorithmic awareness, as well as demographic and political background variables.

Sample Characteristics and Sampling Procedure

A total of 302 responses were initially collected through an online survey. The study employed a non-probability sampling strategy, combining convenience sampling and snowball sampling. The survey was first distributed within my immediate personal and professional networks. To increase reach and diversity, participants were encouraged to share the survey further within their own networks. This snowballing process enabled access to a broader and

more heterogeneous pool of respondents across different regions and socio-demographic backgrounds in India.

Regional Classification

To account for political and electoral variation across India, respondents were grouped into four regional blocs based on prevailing party dominance and electoral competition patterns, based on the researcher's own understanding of the results of the 2024 Lok Sabha elections (Election Commission of India, 2024), and the lived history of politics in India for the researcher:

BJP-Dominant Electoral Bloc: Includes states where the Bharatiya Janata Party (BJP) has maintained strong and consistent electoral dominance (e.g., Gujarat, Uttar Pradesh, Madhya Pradesh, Karnataka). These states are characterized by relatively stable single-party dominance at the national level.

Coalition-Dependent States: Includes states where electoral outcomes are typically shaped by coalition politics and shifting alliances (e.g., Maharashtra, Bihar, Jharkhand). These regions often exhibit competitive multiparty systems without a single dominant actor.

Regional Party-Dominant Bloc: Comprises of states where strong regional parties play a central role in governance and electoral outcomes (e.g., Tamil Nadu, West Bengal, Telangana). Political dynamics in these states are often driven by state-specific identities and leadership.

Multi-Party Competitive & Fragmented Peripheral Bloc: Includes smaller or peripheral states and union territories where electoral competition is fragmented and less predictable (e.g.,

North-Eastern states such as Assam, Manipur, and others). These regions often have diverse political landscapes with multiple actors.

This classification allows for a more nuanced analysis of political context, capturing structural differences in party systems that may influence political attitudes.

Data Quality and Filtering Process

Following data collection, a series of data quality checks were applied. After applying these filters, the final analytical sample consisted of $N = 236$. The filtering process included:

- Retaining only participants who provided informed consent,
- Removing respondents who failed the attention check, and
- Excluding incomplete responses on key variables.

An attention check was embedded within the survey to ensure respondent attentiveness and data reliability. Specifically, after participants viewed four pairs of media clips, they were asked a simple recall-based question about the content they had just seen. This question required participants to correctly identify or describe what they had been exposed to. Responses that failed to meet this criterion were considered indicative of inattentiveness, and those participants were excluded from the final dataset.

Sample Characteristics and Descriptive Overview

The sample reflects a broad segment of the Indian electorate, with variation in age, gender, education, and regional background. While the study does not claim full national

representativeness, it captures a politically engaged population relevant to digital media consumption patterns.

The demographic characteristics of the sample are presented in Table 1. The sample was relatively balanced by gender, with 55.9% identifying as men and 41.9% as women. Participants had a mean age of 42.83 years ($SD = 14.61$), with ages ranging from 18 to 89 years. The sample was highly educated, with the majority holding a Master's degree or above (57.2%), followed by Bachelor's degree holders (38.9%). Regionally, most respondents belonged to the BJP-dominant electoral bloc (56.4%), with smaller proportions across coalition-dependent, regional party-dominant, and fragmented blocs. In terms of political orientation, a majority of participants (69.4%) reported a pro-government voting preference.

Table 1:

Sample Characteristics (N = 236)

Variable	Category	%
Gender	Man	55.95
	Woman	41.85
Variable	Category	%
Education (Highest level)	Prefer not to say	2.20
	High School	3.06

	Bachelor's Degree	38.86
	Master's Degree or above	57.21
	PhD	0.87
Region	BJP-Dominant Electoral Bloc	56.36
	Coalition-Dependent States	10.59
	Multi-Party Competitive & Fragmented	5.93
	Peripheral Bloc	
	Regional Party-Dominant Bloc	7.63
	Other / Blank	19.49
Political Preference	Pro-government	69.36
	Anti-government	30.64

Note. The mean age of participants was $M = 42.83$ years ($SD = 14.61$), with ages ranging from 18 to 89 years.

Measures

Independent Variable: Prior Exposure

Prior exposure was operationalised as a categorical variable capturing the dominant type of content participants recalled encountering prior to the study. Across multiple stimulus items,

participants indicated whether they had previously seen pro-government (Clip A), anti-government (Clip B), or both types of content. These responses were aggregated to classify participants into one of three exposure categories: pro-government exposure, anti-government exposure, or mixed exposure.

The final exposure variable reflects the dominant exposure type for each participant, with the mixed exposure category serving as the reference group in all regression analyses.

Mediator: Perceived Credibility

Perceived credibility was measured separately for pro-government and anti-government content using multiple Likert-scale items. These were combined into two indices:

- Credibility of pro-government content
- Credibility of anti-government content

A difference score (credibility difference) was computed to capture relative credibility evaluations:

$$\text{cred_diff} = \text{cred_pro} - \text{cred_anti}$$

Positive values indicate higher perceived credibility of pro-government content, while negative values indicate higher credibility of anti-government content.

Reliability analysis showed high internal consistency for both scales (Cronbach's $\alpha = .88-.90$), exceeding the recommended threshold of .70 (Peterson, 1994).

Dependent Variable 1: Political Alignment

Political alignment was measured using multiple items assessing agreement with statements about the performance and legitimacy of the current government. Items captured both attitudinal alignment and perceived legitimacy.

Example items included:

- “I feel politically aligned with the current ruling party”
- “I generally agree with the political positions of the current ruling party”
- “I believe the current government is performing well”

Responses were averaged to create a composite index, where higher scores indicate stronger alignment with the ruling government. The scale demonstrated excellent reliability ($\alpha = .96$).

Dependent Variable 2: Political Polarisation

Political polarisation was operationalised as affective and attitudinal extremity toward political outgroups. The scale captures hostility, perceived misinformation, and attitudinal rigidity in political beliefs. Example items included:

- “I feel negatively toward supporters of political parties I disagree with”
- “People who support opposing political parties are misinformed”
- “On most political issues, I believe only one position is correct”

Items were averaged into a composite scale, with higher values indicating stronger polarisation. The scale demonstrated strong reliability ($\alpha = .84$).

Moderator: Algorithmic Awareness

Algorithmic awareness was measured using a multi-item scale assessing participants' understanding of how digital platforms curate political content. The scale captured awareness of social media algorithms, echo chambers, and content personalisation.

Example items included:

- “Social media platforms show me content based on my past behaviour.”
- “I am aware that I may be in an ‘echo chamber’ online”
- “I think social media can narrow the range of political views I encounter”

Responses were averaged to form a composite index, with higher scores indicating greater awareness. The scale demonstrated high internal consistency ($\alpha = .93$).

This construct reflects theoretical expectations that awareness may mitigate selective exposure effects (Pariser, 2011; Alatawi et al., 2021).

Reliability of Measures

All multi-item constructs demonstrated good to excellent internal consistency. Credibility measures for both pro- and anti-government content were reliable ($\alpha = .88$ and $\alpha = .90$, respectively). Similarly, the scales for political alignment ($\alpha = .96$), polarisation ($\alpha = .84$), and

algorithmic awareness ($\alpha = .93$) all exceeded the acceptable threshold of .70 (Nunnally, 1978), indicating that the measures used in subsequent analyses were robust. (See Table 2)

Table 2:

Reliability of Study Variables

Scale	Std α	95% CI	Mean	SD
Credibility (Pro)	.88	[.85, .90]	4.50	1.50
Credibility (Anti)	.90	[.88, .92]	4.30	1.60
Political Alignment	.96	[.95, .97]	3.80	1.80
Political Polarisation	.84	[.81, .87]	3.70	1.50
Algorithmic Awareness	.92	[.91, .94]	4.70	1.60

Validation of Exposure Measure

To validate the exposure classification, a one-way ANOVA was conducted comparing self-reported exposure across the three exposure groups (pro, anti, mixed). Results indicated no statistically significant differences between groups, $F(2, 229) = 0.49, p = .613$.

Although group means followed the expected directional pattern (pro: $M = 4.34$; mixed: $M = 4.00$; anti: $M = 3.90$), the lack of statistical significance suggests that the exposure categorisation does not strongly differentiate participants' perceived exposure levels. This limitation should be considered when interpreting subsequent findings.

Control Variables

The following control variables were included to account for potential confounding factors: age, gender, education level, region, political interest, vote preference (pro- vs anti-government), strength of political support, language of media consumption (social media and television; categorical).

Including these controls aligns with prior research demonstrating that political attitudes are shaped by demographic, behavioural, and attitudinal factors (Iyengar & Krupenkin, 2018).

Analyses Strategy

All analyses were conducted in R using relevant statistical packages.

Regression Analysis

To test direct effects (H1–H3), linear regression models were estimated, including all control variables. Pairwise comparisons between exposure groups were conducted using estimated marginal means to assess group differences across exposure conditions.

Mediation Analysis

Hypotheses H4 and H5 were tested using structural equation modelling (SEM) via the *lavaan* package (Rosseel, 2012). The model estimated:

- The effect of exposure on perceived credibility,
- the effect of credibility on political outcomes, and

- indirect (mediated) effects.

Bootstrapping with 5,000 resamples was used to obtain robust standard errors and confidence intervals.

Moderation Analysis

Hypothesis H6 was tested using moderated regression, including an interaction term between exposure and algorithmic awareness. Simple slopes analysis was conducted to interpret significant interaction effects.

Ethical Considerations

Given the sensitive nature of political attitudes in India, the study adhered to strict ethical guidelines. Participation was voluntary and anonymous, with no personally identifiable information collected. Respondents were informed of the study's academic purpose and their right to withdraw at any time.

This methodological approach combines theoretical rigour with ecological validity, enabling a nuanced examination of how selective exposure, credibility perceptions, and algorithmic awareness interact to shape political attitudes in India's digital media environment. By integrating survey methods with real-world stimuli and advanced statistical modelling, the study provides a robust empirical test of key theories in political communication beyond Western contexts.

Results

Effects of Prior Exposure on Credibility (H1)

Hypothesis 1 proposed that prior exposure to political content would influence perceived credibility. To test this, a regression analysis was conducted predicting credibility difference while controlling for vote preference, support strength, age, interest, gender, education, region, and language variables (Table 3).

Table 3:

Regression Predicting Credibility Difference (H1)

Predictor	b	SE	t	p
Exposure (Pro vs Mixed)	0.30	0.54	0.56	.576
Exposure (Anti vs Mixed)	-2.13	0.77	-2.75	.007**
Vote Preference (Anti)	-2.36	0.42	-5.59	<.001***
Support Strength	0.39	0.12	3.34	.001**

Note. Model fit: $R^2 = .54$, Adj. $R^2 = .45$, $F(22,115) = 6.10$, $p < .001$, $N = 138$

Emmeans pairwise comparison

Contrasts	b	SE	t	p
Mixed – Pro	-0.31	0.54	-0.56	.841

Mixed – Anti	2.13	0.78	2.75	.019*
Pro – Anti	2.43	0.91	2.67	.023*

Results for H1: Effect of prior exposure (IV) on credibility perception (M)

- H1a: Prior exposure to government-affirming content will be positively associated with higher perceived credibility compared with prior exposure to government-critical content.

Pairwise comparisons show that individuals in the pro exposure condition report significantly higher credibility difference scores than those in the anti exposure condition, ($b = 2.43$, $SE = 0.91$, $p = .023$), indicating that pro-exposure shifts credibility toward pro-government content, whereas anti-exposure shifts credibility toward anti-government content.

- H1b: Prior exposure to government-affirming content will be positively associated with higher perceived credibility compared with prior mixed exposure.

We find no significant effect of pro exposure ($b = 0.30$, $SE = 0.54$, $p = .576$), suggesting that pro exposure does not significantly shift credibility relative to mixed exposure.

- H1c: Prior exposure to government-critical content will be negatively associated with perceived credibility compared with prior mixed exposure.

We find a significant negative effect of anti-exposure on credibility difference, ($b = -2.13$, $SE = 0.75$, $p = .007$), indicating that individuals exposed to anti-government content

perceive anti-government messages as more credible relative to pro-government messages compared to those in the mixed exposure condition.

Among controls, vote preference emerges as a strong predictor ($b = -2.36, p < .001$), alongside support strength ($b = 0.39, p = .001$), indicating that political predispositions play a central role in shaping credibility judgments.

These findings support Hypothesis 1 and suggest that prior exposure shapes how individuals evaluate political information.

Effects of Exposure on Political Alignment (H2)

Hypothesis 2 predicted that greater exposure to homogeneous political content would be associated with stronger political alignment.

To test this hypothesis, a regression analysis was conducted. The results are presented in Table 4.

Table 4:

Regression Predicting Political Alignment (H2)

Predictor	b	SE	t	p
Exposure (Pro vs Mixed)	0.14	0.41	0.33	.740
Exposure (Anti vs Mixed)	-1.00	0.58	-1.72	.088

Predictor	b	SE	t	p
Vote Preference (Anti)	-1.18	0.32	-3.71	<.001***
Support Strength	0.26	0.09	2.94	.004**
Interest	0.22	0.08	2.66	.009**
Region (Coalition-dependent)	0.96	0.44	2.18	.031*

Model fit: $R^2 = .46$, Adj. $R^2 = .35$, $F(22,115) = 4.37$, $p < .001$, $N = 138$

Emmeans pairwise comparison

Contrasts	b	SE	t	p
Mixed – Pro	-0.14	0.41	-0.33	.941
Mixed – Anti	1.00	0.58	1.72	.202
Pro – Anti	1.14	0.68	1.66	.223

Results for H2: Direct effect of prior exposure (IV) on political alignment (DV1)

- H2a: Prior exposure to government-affirming content will be positively associated with stronger political alignment with the government compared with prior exposure to government-critical content.
- H2b: Prior exposure to government-affirming content will be positively associated with stronger political alignment with the government compared with prior mixed exposure.

- H2c: Prior exposure to government-critical content will be negatively associated with political alignment with the government compared with prior mixed exposure.

We find no significant direct effect of prior exposure on political alignment, with neither pro exposure ($b = 0.14$, $SE = 0.41$, $p = .740$) nor anti exposure ($b = -1.00$, $SE = 0.58$, $p = .088$) significantly predicting alignment.

Instead, we find that pre-existing political attitudes strongly predict alignment, with vote preference ($b = -1.18$, $SE = 0.32$, $p < .001$), support strength ($b = 0.26$, $SE = 0.09$, $p = .004$), and political interest ($b = 0.22$, $SE = 0.08$, $p = .009$) emerging as significant predictors.

Additionally, a regional context variable (Coalition-dependent) is significant ($b = 0.96$, $SE = 0.44$, $p = .031$), suggesting that political geography shapes alignment patterns.

Thus, Hypothesis 2 is not supported at the exposure level, suggesting that prior exposure alone may not directly influence political attitudes when existing beliefs are taken into account.

Effects of Prior Exposure on Political Polarisation (H3)

Hypothesis 3 predicted that prior exposure to political content would be associated with increased political polarisation. To test this hypothesis, a regression analysis was conducted predicting polarisation while controlling for vote preference, support strength, age, interest, gender, education, region, and language variables (Table 5).

Table 5:*Regression Predicting Political Polarisation (H3)*

Predictor	b	SE	t	p
Exposure (Pro vs Mixed)	-0.31	0.35	-0.88	.379
Exposure (Anti vs Mixed)	-0.27	0.50	-0.54	.593
Vote Preference (Anti)	0.54	0.28	1.93	.056
Support Strength	0.18	0.08	2.33	.021*
Language (Tamil TV)	-3.75	1.86	-2.02	.046*

Model fit: $R^2 = .39$, Adj. $R^2 = .27$, $F(22,114) = 3.32$, $p < .001$, $N = 137$

Emmeans pairwise comparison

Contrasts	b	SE	t	p
Mixed – Pro	0.31	0.35	0.88	.652
Mixed – Anti	0.27	0.50	0.54	.854
Pro – Anti	-0.04	0.59	-0.07	.997

Results for H3: Direct effect of prior exposure (IV) on political polarisation (DV)

H3a: Prior exposure to government-affirming content will be positively associated with higher political polarisation compared with prior exposure to government-critical content.

H3b: Prior exposure to government-affirming content will be positively associated with higher political polarisation compared with prior mixed exposure.

H3c: Prior exposure to government-critical content will be negatively associated with political polarisation compared with prior mixed exposure.

We find no significant direct effect of prior exposure on political polarisation, with neither pro exposure ($b = -0.31$, $SE = 0.35$, $p = .379$) nor anti exposure ($b = -0.27$, $SE = 0.50$, $p = .593$) significantly predicting polarisation.

Instead, polarisation is significantly predicted by support strength ($b = 0.18$, $SE = 0.08$, $p = .021$), indicating that stronger political commitment is associated with higher polarisation. A marginal effect is also observed for vote preference ($b = 0.54$, $SE = 0.28$, $p = .056$), indicating alignment with anti-government preference and higher polarisation.

Thus, Hypothesis 3 is not supported at the exposure level, suggesting that polarisation is more strongly driven by pre-existing political dispositions and contextual factors than by exposure alone.

Mediation effects of credibility on political alignment (H4) and political polarisation (H5)

Hypotheses 4 and 5 proposed that perceived credibility would mediate the relationship between prior exposure and political attitudes. To test this, a structural equation model was estimated (Table 6).

Table 6:*Mediation Model (SEM) Predicting Alignment and Polarisation (H4 & H5)*

Path	b	SE	p	Std. β
Anti-Exposure → Credibility	-2.50	0.81	.002**	-0.23
Credibility → Alignment	0.38	0.05	<.001***	0.56
Credibility → Polarisation	0.15	0.05	.003**	0.26
Controls				
Vote Preference → Credibility	-2.51	0.47	<.001***	-0.41
Support Strength → Credibility	0.33	0.12	.006**	0.22
Vote Preference → Polarisation	0.53	0.27	.047*	0.16
Indirect Effects				
Effect	b	SE	p	
Anti → Credibility → Alignment	-0.96	0.34	.004**	
Anti → Credibility → Polarisation	-0.36	0.18	.049*	

Note. Model fit: CFI = 1.00, TLI = 1.00, RMSEA = .00, SRMR = .00, N = 143

Results for H4 & H5

H4: Mediation effect of credibility perception (M) on political alignment (DV1)

- Higher perceived credibility will be positively associated with stronger political alignment and will positively mediate the relationship between prior exposure and political alignment.

We find that credibility significantly predicts political alignment ($b = 0.38$, $SE = 0.05$, $p < .001$), supporting the proposed mechanism.

However, the indirect effect of prior exposure on alignment through credibility is significant only for exposure to government-critical content ($b = -0.96$, $SE = 0.34$, $p = .004$), and not for government-affirming content ($b = -0.18$, $SE = 0.19$, $p = .343$).

Thus, H4 is partially supported, with mediation occurring only for government-critical exposure.

H5: Mediation effect of credibility perception (M) on political polarisation (DV2)

- Higher perceived credibility will be positively associated with higher political polarisation and will positively mediate the relationship between prior exposure and political polarisation.

We find that credibility significantly predicts political polarisation ($b = 0.15$, $SE = 0.05$, $p = .003$).

The indirect effect is significant for exposure to government-critical content ($b = -0.36$, $SE = 0.18$, $p = .047$), but not for government-affirming content ($b = -0.07$, $SE = 0.08$, $p = .384$).

Thus, H5 is partially supported, with mediation effects limited to government-critical exposure.

Controls for both H4 and H5: We find that anti-exposure significantly reduces credibility difference ($b = -2.50$, $SE = 0.81$, $p = .002$), while vote preference also strongly predicts credibility ($b = -2.51$, $SE = 0.48$, $p < .001$), indicating that individuals with anti-government preferences perceive anti-government content as more credible.

Furthermore, we find that vote preference also directly predicts polarisation, ($b = 0.53$, $SE = 0.27$, $p = .047$), suggesting that political predispositions remain influential even when accounting for mediation.

These findings provide partial support for Hypotheses 4 and 5, indicating that credibility acts as an important mechanism linking exposure to political attitudes, particularly in response to government-critical content.

Moderation Analysis: Algorithmic Awareness (H6)

Hypothesis 6 predicted that algorithmic awareness would moderate the relationship between exposure and polarisation, such that higher awareness would reduce polarisation.

A moderation analysis was conducted, and the results are presented in Table 7.

Table 7:*Moderation Model Predicting Polarisation (H6)*

Predictor	b	SE	t	p
Awareness	0.40	0.10	3.90	<.001***
Exposure × Awareness (Pro)	0.22	0.21	1.02	.311
Exposure × Awareness (Anti)	0.47	0.22	2.13	.035
Support Strength	0.11	0.07	1.68	.096
Region (Coalition-Dependent States)	-0.70	0.34	-2.08	.041*
Language (English Social Media Consumption)	3.65	1.74	2.10	.038*
Language (Hindi Social Media Consumption)	4.05	1.81	2.24	.027*
Language (English TV Consumption)	-2.17	1.21	-1.80	.075
Language (Hindi TV Consumption)	-2.20	1.26	-1.74	.084
Language (Tamil TV Consumption)	-2.77	1.62	-1.71	.090

Note. Model fit: $R^2 = .56$, Adj. $R^2 = .46$, $F(25,111) = 5.71$, $p < .001$, $N = 138$

Emtrends pairwise contrasts

Contrasts	b	SE	t	p
Mixed – Pro	-0.22	0.21	-1.02	.568
Mixed – Anti	-0.47	0.22	-2.13	.089
Pro – Anti	-0.25	0.28	-0.91	.636

Results for H6: Moderating effect of Echo chamber/algorithmic awareness on the effect of prior exposure (IV) on political polarisation (DV2)

- H6a: The positive relationship between prior exposure to government-affirming content and political polarisation will be weaker among individuals with higher echo chamber and algorithmic awareness compared to individuals with lower awareness, relative to prior exposure to government-critical content.
- H6b: The positive relationship between prior exposure to government-affirming content and political polarisation will be weaker among individuals with higher echo chamber and algorithmic awareness compared to individuals with lower awareness, relative to prior mixed exposure.
- H6c: The positive relationship between prior exposure to government-critical content and political polarisation will be weaker among individuals with higher echo chamber and algorithmic awareness compared to individuals with lower awareness, relative to prior mixed exposure.

We find a significant positive effect of awareness on polarisation ($b = 0.40$, $SE = 0.10$, $p < .001$), indicating that individuals with higher algorithmic awareness report higher levels of political polarisation, contrary to the proposed hypotheses.

The interaction between anti-exposure and awareness is also significant ($b = 0.47$, $SE = 2.22$, $p = .035$), indicating that awareness strengthens, rather than weakens, the relationship between exposure and polarisation under anti-government exposure conditions. In contrast, the interaction between pro exposure and awareness is not significant ($b = 0.22$, $SE = 0.21$, $p = .311$).

Simple slopes analysis further shows that awareness is positively associated with polarisation across all exposure conditions, with the strongest effect observed in the anti-exposure condition.

Among control variables, region (Coalition-Dependent States) is significant ($b = -0.70$, $SE = 0.34$, $p = .041$), indicating lower levels of polarisation compared to the reference category. Additionally, language-based social media consumption variables (English: $b = 3.65$, $SE = 1.74$, $p = .038$; Hindi: $b = 4.05$, $SE = 1.81$, $p = .027$) are significant predictors, suggesting that media consumption patterns are associated with higher polarisation.

Overall, these findings do not support Hypothesis 6, as awareness does not attenuate the relationship between exposure and polarisation. Instead, awareness appears to amplify polarisation, particularly when exposed to government-critical content.

Summary of Findings

Overall, the results provide strong evidence that prior exposure influences credibility perceptions, supporting the role of selective exposure. However, its direct effects on political alignment and polarisation are limited when controlling for political predispositions. Instead, credibility emerges as a key mediating mechanism, particularly for government-critical content. Algorithmic awareness, while significantly related to polarisation, does not appear to moderate the effects of exposure in the expected direction.

Discussion

This study examined how prior exposure to politically homogeneous content influences political attitudes in India and whether perceptions of credibility and algorithmic awareness shape these effects. Drawing on Selective Exposure Theory (Stroud, 2008), Confirmation Bias (Nickerson, 1998), and research on filter bubbles and echo chambers (Pariser, 2011; Sunstein, 2017), the findings provide nuanced evidence on how digital media environments interact with cognitive processes in a politically complex and rapidly evolving context.

The results provide strong evidence that selective exposure shapes credibility perceptions. Individuals previously exposed to government-critical (anti) content perceived it as significantly more credible than government-supporting content. This aligns with Confirmation Bias theory, which posits that individuals are more likely to accept and internalise information that is congruent with their pre-existing beliefs (Nickerson, 1998). Importantly, the findings extend beyond simple exposure effects by showing that prior exposure influences *relative* evaluations of competing narratives, reinforcing parallel informational “realities” in a fragmented media ecosystem (Ahmad, 2024). In India’s increasingly polarised digital sphere, credibility becomes a key interpretive lens through which individuals make sense of political information.

Contrary to expectations, prior exposure did not exert strong direct effects on political alignment or polarisation once controls were included. Although descriptive patterns suggested that exposure to government-critical content was associated with lower alignment with the current government, these effects were not robust across models.

This challenges assumptions that echo chambers automatically produce attitudinal extremity (Sunstein, 2017). Instead, the findings suggest that political attitudes, particularly in India, are anchored in long-standing social, cultural, and partisan identities (Sakhiya & Rathod, 2024). Exposure alone may not be sufficient to shift these deeply rooted orientations.

One important explanation lies in the nature of self-reported political attitudes. Individuals may not consciously perceive or report themselves as polarised or strongly aligned, even when their information environments are highly homogeneous. This is particularly relevant in politically sensitive contexts, where social desirability may influence responses. As a result, the absence of strong direct effects should not be interpreted as an absence of influence, but rather as an indication that such effects may operate more subtly or indirectly.

The mediation analyses provide clearer evidence of how selective exposure operates. Credibility perceptions significantly mediated the relationship between exposure and both political alignment and polarisation, but only for exposure to government-critical content.

This asymmetry is theoretically meaningful. It suggests that exposure to counter-attitudinal or opposition content may require greater cognitive processing, making credibility evaluations more consequential in shaping downstream attitudes. In contrast, exposure to congruent (pro-government) content may be accepted more automatically, requiring less mediation through perceived credibility.

These findings align with dual-process theories of information processing (Rhodes, 2022), in which congruent information is processed heuristically, whereas incongruent information triggers more systematic evaluation. In the Indian digital ecosystem, where

politically motivated messaging is often emotionally charged and strategically targeted (George, 2024), credibility may serve as a critical filter determining whether such content influences attitudes.

The moderation results show that algorithmic awareness is positively associated with polarisation, and that this relationship holds across exposure conditions. However, there is no strong evidence that awareness reduces the impact of exposure on polarisation.

This finding challenges the assumption that awareness of algorithms necessarily mitigates their effects (Alatawi et al., 2021). Instead, awareness may coexist with, or even reinforce, polarisation. One possible explanation is that politically engaged individuals are both more aware of algorithmic processes and more likely to hold stronger political attitudes. This aligns with research suggesting that political interest, rather than mere exposure diversity, is a key driver of engagement with political content (Sakhiya & Rathod, 2024).

In this sense, awareness may not function as a neutral corrective mechanism but rather as part of a broader pattern of political engagement. Individuals who are more aware of algorithmic curation may also be more motivated to seek, interpret, and defend politically consistent information, thereby reinforcing existing attitudes.

Across models, voting preference and support strength emerged as strong and consistent predictors of both credibility perceptions and political attitudes. Individuals with pro-government voting preferences were significantly more likely to rate pro-government content as credible and report higher alignment.

This finding underscores the importance of pre-existing political identities in shaping media effects. Rather than being passive recipients of information, individuals actively interpret content through the lens of their political orientations (Stroud, 2008). In the Indian context, where political communication is increasingly shaped by sophisticated digital strategies and targeted messaging (Yadav, 2024), these predispositions play a central role in determining how information is received and processed.

Taken together, these findings highlight a critical challenge for democratic discourse. While digital platforms provide access to diverse information, the combination of selective exposure, credibility bias, and strong political predispositions can lead to fragmented informational realities.

In a context where traditional media institutions are under scrutiny, and concerns about media independence persist (Reporters Without Borders, 2026), the digital sphere has become a primary arena for political communication. However, rather than resolving issues of bias and gatekeeping, this shift may reproduce them in new forms, through algorithmic curation and user-driven selection.

The results suggest that the key risk is not simply increased polarisation, but the erosion of a shared basis for evaluating political information. When individuals systematically perceive different sources as credible, meaningful democratic deliberation becomes more difficult.

This study was designed to examine the intersection of digital media architecture and political psychology within the contemporary Indian context, moving beyond Western-centric assumptions about echo chambers and polarisation. By employing real-world social media

stimuli and focusing on a multilingual, ideologically fluid electorate, the analysis provides empirical insight into how individuals navigate high-choice digital environments in which traditional media gatekeeping is increasingly replaced by algorithmic curation.

The findings partially support the theoretical expectations derived from Selective Exposure Theory (Stroud, 2008) and Echo Chamber Theory (Sunstein, 2017), but also highlight important contextual nuances. While selective exposure clearly shapes credibility perceptions, its effects on political attitudes are more indirect and mediated than commonly assumed. This suggests that in complex democracies such as India—where political identities are not strictly aligned along a single ideological axis—the effects of digital “information cocoons” may operate less through immediate polarisation and more through subtle reinforcement of interpretive frameworks, particularly credibility judgments.

Furthermore, the results indicate that algorithmic awareness does not necessarily mitigate these effects in a straightforward manner. Instead, awareness appears intertwined with political engagement, reinforcing the idea that cognitive and motivational factors play a central role in shaping individuals' responses to digital media environments. This finding contributes to ongoing debates about the limits of echo chamber effects (Zuiderveen Borgesius et al., 2016) and suggests that awareness alone may be insufficient without deeper forms of critical media literacy.

Limitations and Future Research

This study has several limitations that should be considered when interpreting the findings.

First, while the sample includes a higher proportion of pro-government respondents, this reflects broader electoral realities in India and therefore captures an important segment of the population rather than constituting a bias in itself. However, it may also influence how political attitudes are reported, particularly if individuals are less likely to perceive or acknowledge their own polarisation or ideological alignment.

Second, the study relies on self-reported measures of political attitudes and exposure. Such measures are inherently subjective and may be influenced by recall biases, social desirability, or limited self-awareness. Future research could complement these measures with behavioural data, such as actual media consumption patterns or experimental exposure designs.

Third, the cross-sectional design limits causal inference. While the analyses are theoretically grounded, longitudinal or experimental studies would be better suited to establish causal relationships between exposure, credibility, and political attitudes.

Finally, operationalising exposure as categorical (pro, anti, mixed) simplifies a highly complex media environment. Future studies could explore more fine-grained measures of exposure, including intensity and frequency.

Conclusion

This thesis set out to investigate how exposure to politically homogeneous content on social media influences political attitudes in India, and whether credibility perceptions and algorithmic awareness shape these relationships. Grounded in Selective Exposure Theory (Stroud, 2008) and Echo Chamber Theory (Sunstein, 2017), the study aimed to extend existing research beyond Western contexts by examining these dynamics within a multilingual, multi-identity democracy characterised by rapid digital transformation and increasing reliance on social media for political information.

The findings demonstrate that prior exposure to political content significantly shapes how individuals evaluate information, particularly in terms of perceived credibility. Individuals exposed to government-critical content were significantly more likely to perceive it as credible than opposing narratives, demonstrating the operation of confirmation bias (Nickerson, 1998) in digital environments. This underscores that individuals do not passively consume information but actively interpret it through pre-existing beliefs.

At the same time, the results challenge simplified assumptions about the direct effects of exposure on political attitudes. Once political predispositions and demographic factors were accounted for, exposure alone had limited influence on alignment or polarisation. Instead, credibility emerged as a key mediating mechanism, particularly for government-critical exposure, highlighting that the influence of digital media is often indirect and cognitively mediated.

The study also finds that algorithmic awareness does not function as a straightforward corrective mechanism against polarisation. Rather than reducing polarisation, awareness was positively associated with it, suggesting that individuals who are more engaged and aware of digital media processes may also hold stronger political attitudes. This finding highlights the importance of distinguishing between awareness and effective critical engagement, and supports the argument that cognitive and motivational factors are central to understanding media effects.

Overall, these findings suggest that the impact of digital media in India is best understood not as a direct driver of polarisation, but as systems that structure how individuals interpret and internalise political information. In a context where concerns about journalistic independence continue to rise (Reporters Without Borders, 2026), digital platforms have become central to political communication. Yet rather than resolving issues of bias and gatekeeping, they may reproduce them through algorithmic curation combined with user-driven selective exposure.

This research contributes to the broader literature on digital media and political behaviour by providing empirical evidence from the Global South, demonstrating that while mechanisms such as selective exposure and confirmation bias remain relevant, their effects are shaped by India's linguistic diversity, regional variation, and fluid political identities. The findings challenge the universality of Western-centric models such as partisan sorting and suggest that echo chamber effects may be more subtle, mediated, and context-dependent than often assumed. Methodologically, the study advances political communication research by integrating real-world social media stimuli into a survey-based design, enhancing ecological validity.

The practical implications of these findings are significant. Strengthening democratic engagement requires more than expanding access to information; it demands improving citizens' ability to critically assess credibility. While algorithmic awareness is often promoted as a solution, this study suggests that more comprehensive forms of digital literacy, emphasising critical thinking, source evaluation, and exposure to diverse perspectives, are essential for navigating fragmented information environments. In India, where digital platforms play a central role in political communication and voter mobilisation (Yadav, 2024), such efforts are crucial for sustaining democratic accountability.

Ultimately, this thesis highlights the complex interplay between technology, cognition, and political behaviour in contemporary India. Digital media environments offer unprecedented access to information, yet they also create conditions that enable individuals to selectively interpret and reinforce their existing beliefs. The central challenge for democratic discourse lies not merely in the existence of echo chambers, but in the ways credibility and political identities interact within them. Addressing this challenge requires a deeper understanding of how individuals engage with political information and a recognition that the future of democratic accountability depends not only on the availability of information, but on how it is perceived, evaluated, and trusted.

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Appendix A

Data Collection and Analysis

All materials related to data collection and analysis for this study are available via the Google Drive folder titled  Appendix of MSc Thesis - Bhumika Gupta (<https://drive.google.com/drive/folders/1LFkJS6IM666wBIhUJAIG55iwgxVk49p5>).

The folder contains the following files:

1. MSc Thesis Survey Questionnaire - Media Exposure and Perceptions of News Content – Full survey instrument used for data collection.
2. Thesis data.xlsx – Raw dataset collected from the survey questionnaire.
3. Data Analysis - MSc Thesis.Rmd – R Markdown file containing the complete data analysis code and procedures.
4. Data-Analysis---MSc-Thesis.html – HTML output generated from the R Markdown file, presenting the results of the analysis.

These materials are provided to ensure transparency and enable full reproducibility of the study's findings.

Appendix B

Aid Disclosure

According to the University of Vienna's guidelines on citing and labelling AI, these are the following tools that have been used in the preparation of this Master's thesis. These tools were only used as auxiliary sources, and the responsibility lies with the researcher to check the final text and all the interpretations. The author has checked and edited all the content, after any use of these aids.

Aid	Function
DeepL	Translating abstract to German
Grammarly Pro	Support in checking grammar, spelling and punctuation; rephrasing and tone adjustment.
Master's Seminar Final Proposal	Thesis based on research proposal submitted in the Master's Seminar in semester 3