

The Role of Cognitive Biases in Fake News Belief and Sharing Behaviour: A Quantitative Study of the General Population

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Abstract

This paper examines how cognitive biases influence sharing behaviour of fake news with a special interest in the mediating influence exerted by emotional response. The study is based on the existing psychological theories and considers four major cognitive biases, such as confirmation bias, availability heuristic, anchoring bias, and overconfidence bias, and their impact on the desire of people to share unchecked information over the Internet. A questionnaire with 18 items was conducted with a sample size of 272 respondents and the data were analysed with SPSS through reliability test, principal component analysis (PCA), descriptive statistical analysis and mediation analysis. In the findings, the respondents show moderate cognitive bias, emotional responsiveness, and fake news sharing behaviour, which indicates that there is a tendency to be misinformed but not overwhelming. The mediation analysis shows that the role of emotional response is central and important in forecasting fake news sharing behaviour. Namely, confirmation bias and overconfidence bias were found to have a full mediation by the emotional response and the implication of this is that the effects of the two on sharing behaviour are mediated by affective reactions. The effects of anchoring bias indicate a direct and indirect impact indicating partial mediation but the availability heuristic does not indicate any significant effect. These findings highlight the role of emotional processing in misinformation dissemination, which means that cognitive biases cannot be solely relied upon to understand fake news sharing behaviour. The research adds to the current

body of literature because it includes cognitive and emotional approaches to the issue, providing an in-depth explanation of the misinformation processes.

Keywords – fake news, cognitive, bias, behaviour, digital.

1. Background

The high rate of development of digital media and social networking sites has essentially changed how people read and share information (Lal & Sharma, 2021). Although these platforms have improved the access to news, they have contributed to the spread of misinformation and fake news, which have very often had severe implications to society (Sarkar & Lal, 2023). The increasing interest in fake news is the subject of articles like (Aïmeur et al., 2023; Olan et al., 2024), which discovered that fake news is transmitted faster and covers a larger area than factual information on social media (Singh et al., 2021). This occurrence poses serious questions to the psychological processes involved in making individuals believe and share unverified information (Saika et al., 2021).

Here, cognition biases such as systematic tendencies of not making rational decisions, have become a major explanatory variable (Berthet, 2022; Liu & Azzopardi, 2024).

Cognitive biases affect the way an individual processes information, and more often than not, it results in selective exposure, reliance on mental shortcuts, and resistance to corrective evidence (Singh et al., 2022). As an example, confirmation bias causes people to give preference to information that fits with their pre-existing beliefs, whereas the availability heuristic leads to the judgement of the credibility of information depending on ease of recall (Tversky & Kahneman, 1974). Anchoring bias also strengthens preliminary impressions, and it is hard to change people in their beliefs even when they receive some new information, and overconfidence bias causes people to overestimate their capability of identifying misinformation (Rahman et al., 2022). All these biases lead to poor information processing, which makes it more susceptible to fake news (Lal, 2023). Nevertheless, recent studies indicate that cognitive biases do not fully account as the causes of fake news sharing behaviour (Kumar & Lal, 2023).

The emotional aspects are important in determining the manner in which individuals interact with information on the internet (Rahman et al., 2024). Emotional responses like anger, fear or excitement may suppress the process of critical thinking and thus people are more

vulnerable to misinformation and will tend to share them without checking (Bago et al., 2022; Ecker et al., 2022). Nonetheless, there is scanty empirical research that has investigated the mediating impact of emotional response between cognitive biases and fake news sharing behaviour (Aarzo & Lal, 2025).

The current paper fills this gap by combining cognitive and emotional viewpoints to improve knowledge of the mechanisms of fake news sharing (Mane & Lal, 2021). In particular, it explores the direct and indirect effects of various cognitive biases on the sharing behaviour due to emotional response (Jain et al., 2023). In this way, the study will add to a more comprehensive knowledge of misinformation transmission that is not based on cognitive explanations but involves affective aspects (Lal & Rahman, 2013a). There is a pressing need to create effective interventions to counter digital-based misinformation (Lal & Vats, 2016).

Moreover, through the comparison of the relative effects of various cognitive biases, the research gives an idea of the psychological processes that are most important when it comes to influencing fake news behaviour (Lal & Rahman, 2013b). The research objectives that will guide the study based on this background are as follows:

1. To explore the extent to which cognitive biases (confirmation bias, availability heuristic, anchoring bias and overconfidence bias) play a role in fake news sharing behaviour.
2. To understand the impact of emotion response affect fake news sharing behaviour.
3. To analyse the mediating role of emotional response in the relationship between sharing fake news and cognitive bias.
4. To identify the cognitive bias with the most direct and indirect effect on fake news sharing behaviour

These research questions will help to have a full picture of the cognitive and emotional motivators of fake news sharing and thus make contributions to both theoretical and practical interventions in the sphere of misinformation research.

2. Research Methodology

The study here undertakes a quantitative approach based on primary data to estimate the measurable impact of different cognitive biases on fake news belief. A descriptive method of investigation is used where the main purpose of the study is to identify and establish the role

of various cognitive bias factors. Secondary sources of data collected from journal articles, books and reports were utilised to design the conceptual model, while primary sources of data were used to test the relationship among the factors.

The extensive literature review conducted suggested the role of the following cognitive biases in fake news belief. The table below represents the different factors and their role in the study.

Table 1 – List of Factors

Factor Name	Type of Variable	Description
Confirmation Bias	Independent	Confirmation bias is the urge to find, explain, and prefer the information that supports the previous beliefs, attitudes, or opinions and ignores the conflicting evidence. When applied to fake news, this bias has the effect of causing people to be selective in the information they trust and interact with thus making them more vulnerable to misinformation.
Availability Bias	Independent	The availability heuristic is a mental bias used by people in which they assess the credibility or probability of information by assessing how it can be remembered easily or how much they have encountered it. It is in this regard that fake news can be reviewed many times, thereby giving the impression of correctness or truthfulness thus making people more inclined to trust and accept the information as true without further scrutiny.
Anchoring	Independent	Anchoring bias is the tendency to make judgments or decisions based on much more heavily on the initial piece of information that one encounters (the anchor) instead of relying on information that comes before it. The early

		exposure to false or incorrect information in fake news situations may heavily influence beliefs so that it becomes hard to change the views even with the introduction of corrective evidence.
Overconfidence	Independent	The overconfidence bias is the disposition of individuals to overestimate their knowledge, skills, or the accuracy of judgment. This bias, in terms of fake news, makes people think that they can easily recognize misinformation and this fact can decrease their chances of checking the information and make them more susceptible to fake news.
Emotional Response	Mediating	Emotional response: Emotional response describes the affective responses (fear, anger, excitement, or surprise) caused by news contents and it affects how people process and judge the information. High level of emotional involvement may supersede logical reasoning and people may view emotionally charged news as more believable and have a higher probability of believing and sharing.
Fake News Sharing Behaviour	Dependent	Fake news sharing behaviour is described as the inclination of people to share unconfirmed, misleading, or incorrect information via online sources. Such conduct is usually fueled by emotional response, perceived topicality, or unverified information, which adds to the speed of misinformation distribution on the Internet.

The null hypotheses established based on the above factors are as follows –

H₀₁: Confirmation Bias has no significant effect on Fake News Sharing Behaviour.

H₀₂: There is no significant impact of Availability Bias on Fake News Sharing Behaviour.

H₀₃: Anchoring has no significant effect on Fake News Sharing Behaviour.

H₀₄: Overconfidence has no significant effect on Fake News Sharing Behaviour.

H₀₅: Emotional Response has no significant mediating effect on Fake News Sharing Behaviour.

H₀₆: Emotional Response has no significant mediating effect between Availability bias and Fake News Sharing Behaviour.

H₀₇: Emotional Response has no significant mediating effect between Anchoring bias and Fake News Sharing Behaviour.

H₀₈: Emotional Response has no significant mediating effect between overconfidence and Fake News Sharing Behaviour.

In order to establish the conceptual model using the parameters above, a rigorous research methodology framework was designed. The population of the study include residents of India who are above 18 years of age and frequently consume news through digital platforms like social media. To select the sampling units among the population, the study uses judgment sampling method, where every selected respondent must have browsed social media for discovering news in the last two days.

To fulfil the minimum sample size requirement for conducting high-level statistical methods like multiple linear regression, the study uses the minimum sample size requirement of 200 suggested by Kline (2016). A total 272 respondents fulfilling the above established criteria were selected for conducting the final statistical investigation.

The survey instrument used in the study was a structured questionnaire. The instrument investigated about the respondents' age and gender followed by their level of agreement across the six variables in the conceptual model in a 5 Point Likert Type scale. To analyse the collected set of data, principal component analysis (PCA) was used for factor extraction followed by a mediation model estimating both direct and indirect effects of the cognitive biases on fake news belief.

The detailed statistical process and their interpretation are provided in the next section.

3. Data Analysis

The 272 datasets included for the investigation do not include any missing data and are competent for conducting higher order statistical analyses. The datasets were coded and analysed using SPSS and the results are presented in the sub-sections.

The primary datasets include 54.4% female respondents and 45.6% male respondents. There were 25.4% respondents in the age group of 18-24 years, 22.4% in 45 to 54 years, 18% from above 55 years of age, 17.6% in 25 to 34 years of age and lastly 16.5% in 35 to 44 years of age. This showcases the representation across different age groups and include a more holistic group of samples for investigation.

3.1 Establishing the Factors

As the research instrument were designed from existing literature, to establish its effectiveness, the reliability of the questionnaire was tested using Cronbach's Alpha.

Table 2 - Scale Reliability Statistics

	Cronbach's α
scale	0.932

The 18-item scale used in the study generates a Cronbach's Alpha value of 0.932, which exceeds the required levels of 0.7 for establishing reliability (Hair et al., 2006). As the reliability of the scale is established, the factor extraction method using varimax rotation in PCA is conducted. The study uses a threshold of 0.4 for individual factor loadings to be considered effective in representing the underlying factors. However, in the first stage, the sampling adequacy of the datasets are established using KMO and Bartlett's test of sphericity.

Table 3 - Bartlett's Test of Sphericity

χ^2	df	p
3026	153	< .001

The overall KMO value for the items in the scale stands at 0.968 which is more than the 0.7 threshold. Further, the p-value of less than 0.05 in the Bartlett's test represent sampling adequacy levels.

The results generated from the PCA conducted are as follows.

Table 4 - Component Loadings

	Component						Uniqueness
	1	2	3	4	5	6	
I prefer news that supports my existing beliefs.		0.609					0.2732
I trust information that aligns with my opinions.		0.600					0.2257
I ignore information that contradicts my views.		0.595					0.2740
I believe news that I see frequently.			0.572				0.2801
Repeated information seems more credible to me.			0.771				0.1797
I rely on easily recalled information when judging news.			0.966				0.0234
My first impression of a news story strongly influences my belief.	0.542						0.3309
I tend to rely on initial information even after new facts emerge.	0.738						0.2269
I find it hard to change my opinion once formed.	0.658						0.3149
I am confident in my ability to identify fake news.					0.802		0.1239
I rarely doubt my judgment about online information.					0.837		0.1275
I believe I am better than others at spotting misinformation.					0.741		0.2710
I react emotionally to news before verifying it.				0.613			0.3261

Table 4 - Component Loadings

	Component						Uniqueness
	1	2	3	4	5	6	
News that triggers strong emotions feels more believable.				0.672			0.2917
I tend to trust information that makes me feel strongly.				0.626			0.2770
I share news without verifying it.						0.767	0.2714
I forward information that seems interesting or shocking.						0.794	0.2954
I share news based on emotional reactions.						0.748	0.2767

Note. 'varimax' rotation was used

The PCA generated a total of six underlying factors, which have eigenvalues of more than 1. This indicates that the considered factors for investigation maintain favourable dimensionality and can be used for investigating further.

However, before establishing the relationship among the factors, a detailed descriptive analysis of the items is provided for better evaluation of the results.

Table 5 - Descriptives

	N	Mean	Median	SD	Minimum	Maximum
Confirmation Bias						
I prefer news that supports my existing beliefs.	272	3.08	3.00	1.020	1	5
I trust information that aligns with my opinions.	272	3.06	3.00	1.073	1	5
I ignore information that contradicts my views.	272	3.14	3.00	1.038	1	5
Availability						
I believe news that I see frequently.	272	3.14	3.00	1.129	1	5

Table 5 - Descriptives

	N	Mean	Median	SD	Minimum	Maximum
Repeated information seems more credible to me.	272	3.07	3.00	1.129	1	5
I rely on easily recalled information when judging news.	272	3.29	3.00	2.019	1	31
Anchoring Bias						
My first impression of a news story strongly influences my belief.	272	3.14	3.00	1.057	1	5
I tend to rely on initial information even after new facts emerge.	272	3.04	3.00	1.065	1	5
I find it hard to change my opinion once formed.	272	3.18	3.00	1.159	1	5
Overconfidence Bias						
I am confident in my ability to identify fake news.	272	3.23	3.00	1.233	1	5
I rarely doubt my judgment about online information.	272	3.01	3.00	1.160	1	5
I believe I am better than others at spotting misinformation.	272	3.21	3.00	1.241	1	5
Emotional Response to News						
I react emotionally to news before verifying it.	272	3.14	3.00	0.871	1	5
News that triggers strong emotions feels more believable.	272	3.11	3.00	0.866	1	5
I tend to trust information that makes me feel strongly.	272	3.13	3.00	0.831	1	5

Table 5 - Descriptives

	N	Mean	Median	SD	Minimum	Maximum
Fake News Sharing Behaviour						
I share news without verifying it.	272	3.09	3.00	0.778	1	5
I forward information that seems interesting or shocking.	272	3.11	3.00	0.710	1	5
I share news based on emotional reactions.	272	3.07	3.00	0.765	1	5

Descriptive statistics of the scale assessing cognitive bias, emotional reaction, and sharing behaviour of fake news demonstrate a moderate and uniform tendency of all the constructs. Most items mean scores are within a close range of 3.01 to 3.29 on a 5-point scale and the medians are always at 3.00 indicating that respondents are generally neutral to slightly positive regarding these behaviours as opposed to being extreme with agreement or disagreement.

The checked items in confirmation bias record a mean value of 3.06 through to 3.14, which represents that the respondents are slightly inclined to and trust the information that reinforces their already held views. The impulse to dismiss conflicting information (Mean = 3.14) is a bit stronger, which indicates the existence of selective exposure and resistance to opposing opinions, but it is not that strong. The standard deviations are relatively moderate (around 1.02-1.07), which means that there is a reasonable consistency in the responses by the participants.

The items related to availability also indicate moderate agreement (Means \approx 3.073.29), which means that respondents are to some extent affected by repeated exposure and recall ease in determining news credibility. The highest mean (3.29) is indicated in the item I rely on easily recalled information, which means that the accessibility of the memory is a little more important in the decision-making process.

The mean scores of items of anchoring bias range between 3.04 and 3.18, which means that the respondents are moderate in relying on first impressions and it is a bit hard to change

their mind. The marginally greater average on the difficulty of altering opinions (3.18) indicates a tendency of beliefs to stay the same once formed, which means a weak anchoring effect in news evaluation.

The overconfidence bias dimension has a range of mean between 3.01 and 3.23 implying that the respondents have an intermediate degree of confidence concerning their capacity to detect fake news. The perception that the individual is superior to others at detecting misinformation (Mean = 3.21) shows that there is a minor level of comparative overconfidence, but not at high level. This average overconfidence also has the potential to lower the fact-checking behaviour.

The emotional response items illustrate means of between 3.11 to 3.14 with a rather lower standard deviation (approximately 0.83-0.87), which means that there is a higher degree of agreement between respondents. These findings indicate that people have a moderate emotional response towards news and they are likely to correlate intensity of emotions with credibility. The smaller variability suggests that the emotional influence is a fairly constant trait within the sample.

The moderate involvement of fake news sharing behaviours is also indicated in the dependent variable with the mean scores between 3.07 and 3.11. The respondents note that sometimes they share unverified content, especially when it is interesting or shocking. The standard deviations are comparatively small (around 0.71-0.78), which means that behavioural tendencies are similar among the participants, which supports the idea that such sharing practices are rather normal but not radical.

In general, the results reveal that respondents exhibit moderate rates of cognitive biases, emotional responsiveness and fake news sharing behaviour. The agreement in the mean and median of the variables indicates an equal but possibly frail cognitive environment, with people neither excessively critical nor excessively susceptible to it, but sometimes biased and affected by feelings.

Table 6 – Descriptives of Overall Factors

	N	Mean	Median	SD	Minimum	Maximum
Confirmation	272	3.09	3.00	0.936	1.00	5.00

Table 6 – Descriptives of Overall Factors

	N	Mean	Median	SD	Minimum	Maximum
Availability	272	3.17	3.00	1.042	1.00	11.33
Anchoring	272	3.12	3.33	0.954	1.00	5.00
Overconfidence	272	3.15	3.17	0.961	1.00	5.00
Emotional Response	272	3.13	3.00	0.744	1.00	5.00
Fake News Sharing Behaviour	272	3.09	3.00	0.645	1.67	4.67

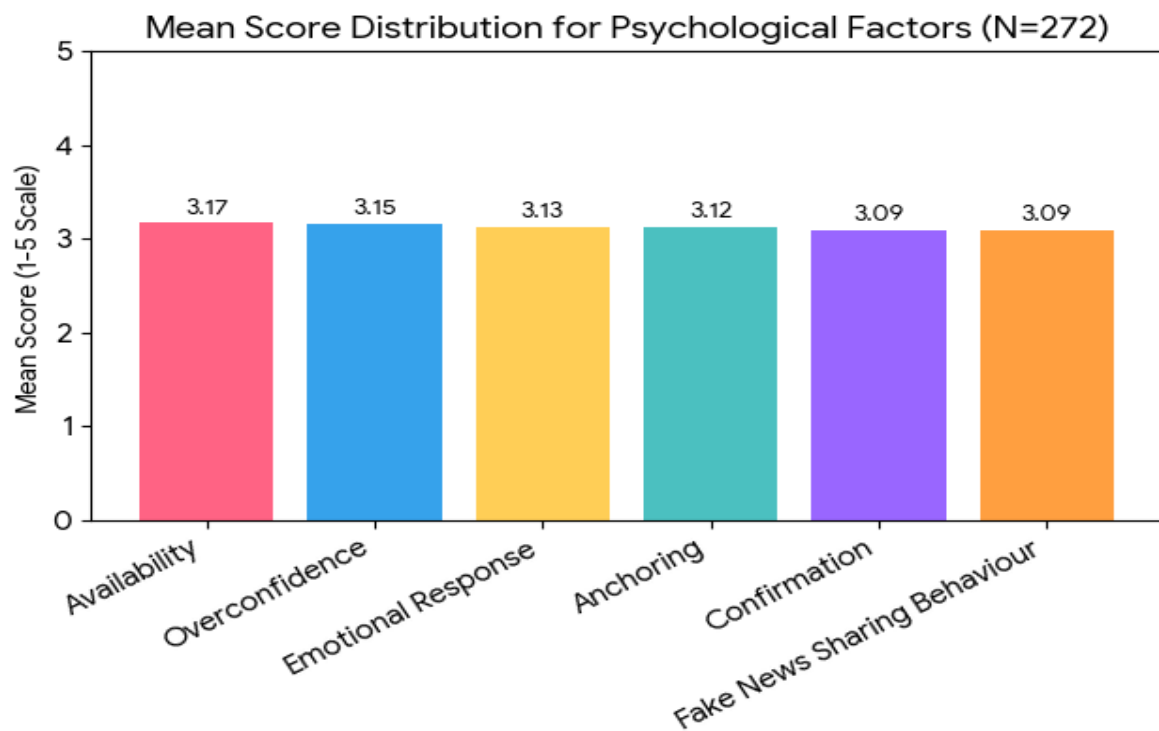


Figure 1 – Mean Score Distribution of Factors

The overall mean scores for the six items show a moderate level with mean scores ranging between 3.09 to 3.15. In the next section, the relationship among the factors would help understand the role played by each.

4.2 Mediation Model

In this section of the investigation, the mediation model understanding the impact of various cognitive biases on fake news sharing behaviour when mediated through respondent's emotional response towards fake news is being generated. The results are as follows –

Table 7 - Models Info

Mediators Models		
	m1	Emotional Response ~ Confirmation + Availability + Anchoring + Overconfidence
Full Model		
	m2	Fake News Sharing Behaviour ~ Emotional Response + Confirmation + Availability + Anchoring + Overconfidence
Indirect Effects		
	IE 1	Confirmation ⇒ Emotional Response ⇒ Fake News Sharing Behaviour
	IE 2	Availability ⇒ Emotional Response ⇒ Fake News Sharing Behaviour
	IE 3	Anchoring ⇒ Emotional Response ⇒ Fake News Sharing Behaviour
	IE 4	Overconfidence ⇒ Emotional Response ⇒ Fake News Sharing Behaviour
Sample size	N	272

Table 8 - Indirect and Total Effects

Type	Effect	Estimate	SE	95% C.I. (a)		β	z	p
				Lower	Upper			
Indirect	Confirmation \Rightarrow Emotional Response \Rightarrow Fake News Sharing Behaviour	0.15419	0.0391	0.07750	0.2309	0.2238	3.940	<.001
	Availability \Rightarrow Emotional Response \Rightarrow Fake News Sharing Behaviour	0.01662	0.0208	- 0.02408	0.0573	0.0269	0.800	0.424
	Anchoring \Rightarrow Emotional Response \Rightarrow Fake News Sharing Behaviour	0.10428	0.0332	0.03912	0.1694	0.1543	3.136	0.002
	Overconfidence \Rightarrow Emotional Response \Rightarrow Fake News Sharing Behaviour	0.07461	0.0266	0.02239	0.1268	0.1112	2.801	0.005
Component	Confirmation \Rightarrow Emotional Response	0.28837	0.0677	0.15576	0.4210	0.3629	4.262	<.001
	Emotional Response \Rightarrow Fake News Sharing Behaviour	0.53472	0.0517	0.43337	0.6361	0.6167	10.341	<.001
	Availability \Rightarrow Emotional Response	0.03108	0.0387	- 0.04480	0.1070	0.0436	0.803	0.422
	Anchoring \Rightarrow Emotional Response	0.19502	0.0593	0.07889	0.3112	0.2501	3.291	<.001
	Overconfidence \Rightarrow Emotional Response	0.13953	0.0480	0.04553	0.2335	0.1803	2.909	0.004
Direct	Confirmation \Rightarrow Fake News Sharing Behaviour	- 0.01578	0.0596	- 0.13258	0.1010	- 0.0229	-0.265	0.791
	Availability \Rightarrow Fake News Sharing Behaviour	- 0.02422	0.0331	- 0.08901	0.0406	- 0.0392	-0.733	0.464
	Anchoring \Rightarrow Fake News Sharing Behaviour	0.16647	0.0515	0.06548	0.2675	0.2462	3.231	0.001
	Overconfidence \Rightarrow Fake News Sharing Behaviour	0.00934	0.0415	- 0.07206	0.0907	0.0139	0.225	0.822

Table 8 - Indirect and Total Effects

Type	Effect	Estimate	SE	95% C.I. (a)		β	z	p
				Lower	Upper			
Total	Confirmation \Rightarrow Fake News Sharing Behaviour	0.13842	0.0682	0.00469	0.2721	0.2009	2.029	0.042
	Availability \Rightarrow Fake News Sharing Behaviour	0.00760	0.0390	-0.08412	0.0689	-0.0123	-0.195	0.846
	Anchoring \Rightarrow Fake News Sharing Behaviour	0.27075	0.0598	0.15364	0.3879	0.4005	4.531	<.001
	Overconfidence \Rightarrow Fake News Sharing Behaviour	0.08395	0.0484	-0.01084	0.1787	0.1252	1.736	0.083

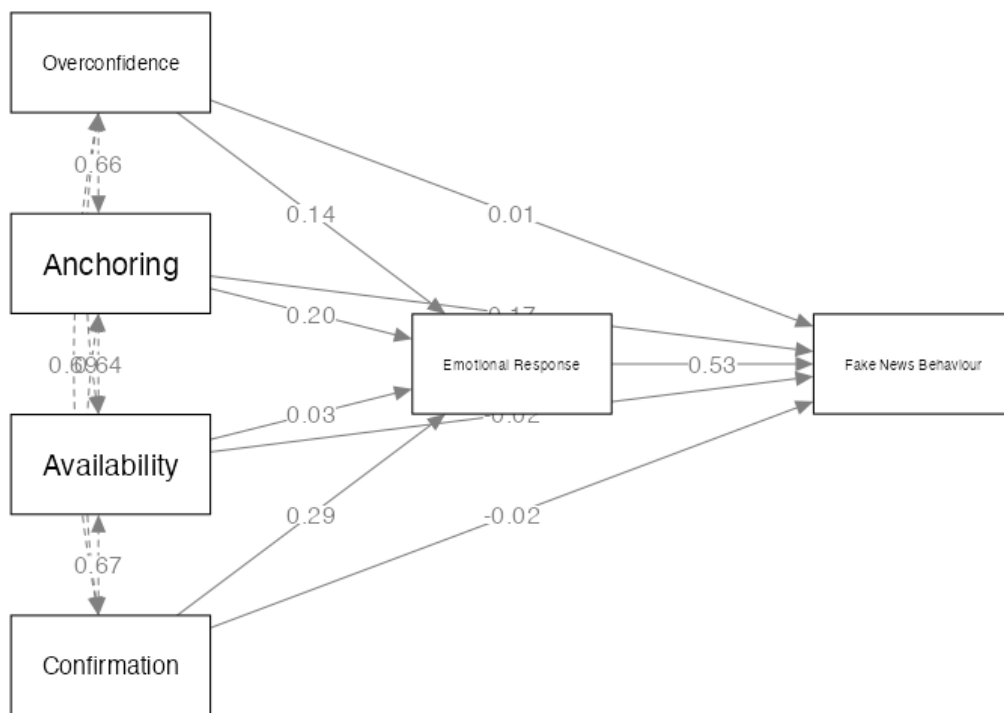


Figure 2 – Mediation Model

The findings suggest that emotional response is central and important in fake news sharing by the fact that the path between emotional response and sharing behaviour is strong and statistically significant ($= 0.6167, p < .001$).

Regarding the confirmation bias, the emotional response has a positive and strongly significant indirect effect ($0.2238, p = <.001$), and no direct effect is significant ($p = 0.791$) on the sharing of fake news. By contrast, the availability heuristic indicates no significant indirect, direct, or overall effects (all $p > 0.05$) indicating no mediation effect. This shows that regular exposure to information or recall-friendliness does not play an important role in the emotional response and fake news sharing behaviour in this model. In the case of anchoring bias, the indirect effect ($0.1543, p = 0.002$) and the direct effect ($0.2462, p = 0.001$) are both statistically significant, and the total effect ($0.4005, p <.001$) is significant. On the same note, the influence of overconfidence bias has an important indirect impact on the emotional response ($0.1112, p$

= 0.005), whereas the direct impact is insignificant ($p = 0.822$), and the cumulative impact is non-significant ($p = 0.083$).

The status of hypotheses testing post the mediation model is summarised in the table below.

Table 9 – Status of Hypothesis Testing

Hypothesis	Estimate	p-value	Status
<i>H₀₁: Confirmation Bias has no significant effect on Fake News Sharing Behaviour.</i>	0.13842	0.042	Rejected
<i>H₀₂: There is no significant impact of Availability Bias on Fake News Sharing Behaviour.</i>	-0.00760	0.846	Not Rejected
<i>H₀₃: Anchoring has no significant effect on Fake News Sharing Behaviour.</i>	0.27075	< .001	Rejected
<i>H₀₄: Overconfidence has no significant effect on Fake News Sharing Behaviour.</i>	0.08395	0.083	Not Rejected
<i>H₀₅: Emotional Response has no significant mediating effect between confirmation bias and Fake News Sharing Behaviour.</i>	0.15419	< .001	Rejected
<i>H₀₆: Emotional Response has no significant mediating effect between Availability bias and Fake News Sharing Behaviour.</i>	0.01662	0.424	Rejected
<i>H₀₇: Emotional Response has no significant mediating effect between Anchoring bias and Fake News Sharing Behaviour.</i>	0.10428	0.002	Rejected
<i>H₀₈: Emotional Response has no significant mediating effect between overconfidence and Fake News Sharing Behaviour.</i>	0.07461	0.005	Rejected

In general, the results indicate that emotional response is a key mediating factor between specific cognitive biases, specifically, confirmation bias and overconfidence bias, and fake news sharing behaviour, whereas anchoring bias has both direct and indirect impacts.

Using the results generated above, a detailed discussion is presented in the next section.

4. Discussion and Implications

The current research aimed at investigating the impact of cognitive biases on the behaviour of sharing fake news, and the role of the mediating variable emotional response. The results have a number of significant theoretical and practical implications. First, the findings indicate that respondents display moderate rates of cognitive bias, emotional responses, and sharing behaviour of fake news, which implies that misinformation vulnerability is not always extreme but rather a part of daily and routine information processing. This is consistent with the previous studies, including those by (Akoglan, 2024; Ma et al., 2020), which indicate that people are not necessarily irrational but tend to apply heuristic-based thinking to online content.

The mean scores are relatively neutral to moderate, which implies that fake news sharing is possible not because of some intentionality, but because of some implicit cognitive predispositions and situational stimuli. One of the main contributions of the research is the fact that the evidence on the primary role of emotional response in the motivation of fake news sharing behaviour is strong and consistent. The mediation analysis indicated that emotional response significantly and significantly influences sharing behaviour, which supports the case that misinformation propagates better when processed affectively than when it is processed cognitively. This observation is similar to what is previously discovered by (Chen, 2023; Yu et al., 2026) who discovered that emotionally arousing material, especially material that arouses anger, fear or surprise, is more likely to be shared. In the same spirit, research on the spread of misinformation is pointing out that misinformation disseminates at a higher rate since it frequently generates more emotional responses (Beauvais, 2022; Sharma et al., 2023). The findings are current extensions of this literature as they empirically confirm that emotional response does not only directly affects sharing behaviour but also serves as a process by

which cognitive bias is put into action. When it comes to a particular bias, confirmation bias was discovered to affect the sharing fake news completely based on emotional reaction, meaning complete mediation. This implies that those who like consistency of information in beliefs are not directly more likely to share fake news unless that information also causes an emotional response.

Therefore, it may not be enough to have biased beliefs, but seem that emotional involvement is the trigger to sharing. The findings of anchoring bias are that it is a partial mediation, and both direct and indirect influences on fake news sharing behaviour. The partial mediation that is present in this research indicates that anchoring is mediated in two ways, which include automatic cognitive fixation and emotional reinforcement. This makes it especially compelling. On the same note, the overconfidence bias had a complete mediation effect on emotional response, but the overall effect was rather weak. This suggests that those who overrate their skills in detecting fake news might not necessarily become more involved in higher sharing behaviour, but the confidence can make them less critical of their judgment and more prone to emotion.

Practically, the findings can play a critical role in the fight against misinformation. First, the intervention should shift its focus not on the informational or fact-checking strategies, but rather on the emotional aspects of news consumption. Examples include social media sites developing algorithms to identify and mark emotionally charged content or create friction (e.g. prompts asking users to pause before posting). Second, media literacy programs must not only be based on the enhancement of critical thinking, but they must also aim at training the person to identify and control their emotional reactions to the news. Third, policymakers and platform designers might come up with measures that mitigate the effects of anchoring, including making the corrective information more salient and at the beginning of the information exposure process. Moreover, the results indicate that overconfidence and confirmation bias should be dealt with indirectly. An example is to foster reflective thinking, expose users to different perspectives and encourage humility in information assessment, which can minimize vulnerability. As these biases are acting based on emotional channels, any intervention based on cognitive debiasing and emotional awareness training is bound to work better.

Altogether, this research adds to the accumulating body of knowledge on fake news by showing that cognitive biases are not a sufficient factor to understand sharing behaviour but instead their influence depends mostly on emotional processing. The findings indicate that a combination strategy that would take into account cognitive heuristics and affective reactions in comprehending and addressing misinformation dispersion is necessary.

5. Conclusion and Future Research Directions

Summing up, the present study proves that the behaviour of sharing fake news is influenced by a combination of cognitive biases and emotional reactions, and the latter factor proves to be the strongest. Though people display moderate confirmation bias, anchoring bias and overconfidence, such biases do not affect sharing behaviour in a homogenous manner. Rather, they are mostly triggered by emotional responses, and this greatly contributes to the probability of posting unverified information. Of the biases considered, confirmation bias and the overconfidence bias work mainly by the effect of emotion as the mediator, but the anchoring bias has both direct and indirect effects. The availability heuristic, however, does not seem to have much of a role to play in this context. These results support the notion that misinformation is transmitted not only due to faulty reasoning but also because of the emotionally charged interaction with information.

Although the study has made contributions, it leaves a number of avenues to be filled by future research. Longitudinal research designs may be investigated further to find out how cognitive biases and emotional reactions change with time and affect the repetition of sharing behaviour. It would be beneficial to extend the model to incorporate other variables like digital literacy, trust in media, or social influence to gain a more detailed picture of the dynamics of misinformation. In addition, future research might investigate platform-oriented behaviours or cultural variations to determine the external validity of these results. Experimental research can also contribute to the formation of causal relationships and evaluate the effectiveness of the interventions directed at the diminishment of the emotionally motivated sharing. All in all, further study is needed to

come up with more specific and efficient ways to curb the proliferation of fake news in a more complicated online world.

References

- Aïmeur, E., Amri, S., & Brassard, G. (2023). Fake news, disinformation and misinformation in social media: a review. *Social Network Analysis and Mining*, 13(1), 30. <https://doi.org/10.1007/s13278-023-01028-5>
- Aarzo & Lal, R. (2025a). Enhancing Advertising Effectiveness Through AIDA, AI, and Data Visualization Integration for Business Strategies. In M. Muniasamy, A. Naim, & A. Kumar (Eds.), *Data Visualization Tools for Business Applications* (pp. 85-102). IGI Global. <https://doi.org/10.4018/979-8-3693-6537-3.ch005>
- Lal, R., & Sharma, G. (2021). Social media influencers for online purchase behaviour: Mediation by brand consciousness. *Journal of Content, Community & Communication*, 13(7), 83-94.
- Sarkar, N., & Lal, R. (2023). Changing Trends of Media Ownership: Marketing Through Community Engagement in Hindi Television News Channels. In *Global Applications of the Internet of Things in Digital Marketing* (pp. 290-309). IGI Global.
- Singh, R. K., Prakash, R., & Lal, R., (2021) Adoption of CAB model for instrument development of effectiveness of crime-based reality-shows, *Journal of Content Community and Communication*, 14 (7) 230–239.
- Shaika, S., Lal, R., & Jonjua, M. (2021). Sustainable Development Goal 3: Case Study of using Folk media as a Potent tool in India. *Journal of Contemporary Issues in Business and Government* Vol, 27(1).
- Singh, R. K., Prakash, R., Lal, R., & Nanda, V. (2022). Mediation Role of Crime-Show Impact Between Creating Awareness About Crime and Novelty in Crime. *Journal of Pharmaceutical Negative Results*, 1255-1262.
- Rahman, Z. T., Lal, R., & Ratna, R. (2022). An Analytical Study on the Significance of Folk and Fairytales on the Psychology of Young Children. *International Journal of Early Childhood Special Education*, 14(5).
- Lal, R. (2023). New Measures of Teaching Learning and Evaluating with Changing Technology. In A. Naim (Eds.), *Accreditation Processes and Frameworks in Higher Education* (pp. 267–287). Nova Science Publishers .
- Kumar, D., & Lal, R. (2023). Technological Advancements in the Media Industry and the Current Job Market in India. In A. Naim (Eds.), *Accreditation Processes and Frameworks in Higher Education* (pp. 289–314). Nova Science Publishers.
- Rahman, Z. T., Lal, R., & Rena, R.(2024) Challenges of Communication with Gen-Z in the Era of Artificial Intelligence-Interceded Digital Economy. In *AI-Oriented Competency Framework for Talent Management in the Digital Economy* (pp. 76-94). CRC Press.
- Mane, N., & Lal, R. (2021). Use of Folk Media to Create Health Awareness about Tuberculosis. *Pragyaan: Journal of Mass Communication*, 12.
- Jain, P., Lal, R., & Raina, G. S. (2023). Portrayal of Characters in a Hindi Film and Audience-Reaction: A Discourse Analysis. *IIS University Journal of Arts*,12 (1&2), 362-377.
- Lal, R., & Rahman, Z. T. (2013). An Analytical Study on the Correlation of Content and Placement Targeting: The Contextual Advertising-A Research Based Descriptive Study. *International Journal of Management Research and Reviews*, 3(4), 2790.

- Lal, R., & Vats, A. (2016). Advertising Effectiveness on Television and Attitude of Youth. *Ahead-International Journal of Recent Research Review*, 1, 60-65.
- Lal, R., & Rahman, Z. T. (2013). An Analytical Study of Building Green Fashion and Lifestyle Brand with Satisfaction based Segmentation. *Anusandhanika*, 5(1/2), 6.
- Akoglan, C. (2024). The Intuitive Trap: Understanding Cognitive Bias in the Digital Age. *Yeni Medya Dergisi*. <https://doi.org/10.55609/yenimedya.1545623>
- Bago, B., Rosenzweig, L. R., Berinsky, A. J., & Rand, D. G. (2022). Emotion may predict susceptibility to fake news but emotion regulation does not seem to help. *Cognition and Emotion*, 36(6), 1166–1180. <https://doi.org/10.1080/02699931.2022.2090318>
- Beauvais, C. (2022). Fake news: Why do we believe it? *Joint Bone Spine*, 89(4), 105371. <https://doi.org/10.1016/j.jbspin.2022.105371>
- Berthet, V. (2022). The Impact of Cognitive Biases on Professionals' Decision-Making: A Review of Four Occupational Areas. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.802439>
- Chen, M. (2023). Angry Friends, Happy Crowd: How the Emotionally Charged Content Influences Online Behavior. *Lecture Notes in Education Psychology and Public Media*, 3(1), 775–784. <https://doi.org/10.54254/2753-7048/3/2022331>
- Ecker, U. K. H., Lewandowsky, S., Cook, J., Schmid, P., Fazio, L. K., Brashier, N., Kendeou, P., Vraga, E. K., & Amazeen, M. A. (2022). The psychological drivers of misinformation belief and its resistance to correction. *Nature Reviews Psychology*, 1(1), 13–29. <https://doi.org/10.1038/s44159-021-00006-y>
- Hair, J. F., Black, W., Babin, B., Anderson, R., & Tatham, R. (2006). *Multivariate Data Analysis* (6th ed.). Pearson Education.
- Kline, R. B. (2016). *Principles and Practice of Structural Equation Strategy* (4th ed.). The Guilford Press.
- Liu, J., & Azzopardi, L. (2024). Search under Uncertainty: Cognitive Biases and Heuristics: A Tutorial on Testing, Mitigating and Accounting for Cognitive Biases in Search Experiments. *Proceedings of the 47th International ACM SIGIR Conference on Research and Development in Information Retrieval*, 3013–3016. <https://doi.org/10.1145/3626772.3661382>
- Ma, C., Au, N., & Ren, L. (2020). Biased minds experience improved decision-making speed and confidence on social media: a heuristic approach. *Information Technology & Tourism*, 22(4), 593–624. <https://doi.org/10.1007/s40558-020-00184-0>
- Olan, F., Jayawickrama, U., Arakpogun, E. O., Suklan, J., & Liu, S. (2024). Fake news on Social Media: the Impact on Society. *Information Systems Frontiers*, 26(2), 443–458. <https://doi.org/10.1007/s10796-022-10242-z>
- Sharma, P. R., Wade, K. A., & Jobson, L. (2023). A systematic review of the relationship between emotion and susceptibility to misinformation. *Memory*, 31(1), 1–21. <https://doi.org/10.1080/09658211.2022.2120623>
- Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases. *Science*, 185(4157), 1124–1131. <https://doi.org/10.1126/science.185.4157.1124>
- Yu, Y., Huang, S., Liu, Y., & Tan, Y. (2026). Emotions in Online Content Diffusion. *Information Systems Research*, 37(1), 398–415. <https://doi.org/10.1287/isre.2022.0611>