Journal of Informatics Education and Research

ISSN: 1526-4726 Vol 5 Issue 3 (2025)

Beyond Engagement: A Survey-Driven Model of Misinformation Diffusion Examining Socio-Cultural and Historical Intersections

Dr Vijayta Taneja¹, Dr Vandana Gaur², Ms. Richa Chandi³, Mr. Ayush Bhardwaj⁴

Abstract

This research study introduces a model that uses surveys to analyse the spread of false information, with a specific focus on the influence of social and cultural factors as well as historical connections. The study uncovers a notable change in the consumption of digital news, highlighting the need for companies and news providers to modify their media strategy in order to effectively connect with an audience that heavily relies on social media. Evidence suggests that there is a prevailing doubt about the credibility of social media content, emphasising the urgent importance of fact-checking and verifying information. The study also examines the interpersonal interactions within groups on the evaluation of information, observing diverse reactions and the influence of social approval on the articulation of conflicting perspectives. Moreover, the study highlights the impact of cultural and historical significance on the level of involvement on social media and the swift dissemination of cultural and historical falsehoods. The research concludes by emphasising the significance of educational resources and heightened awareness in countering the dissemination of false information and improving public comprehension.

Keywords: Misinformation Diffusion, Digital News Consumption, Social Media Misinformation, Socio-Cultural Impact

1.Introduction

A cacophony of "likes" and shares erupts online, each click carrying the potential for truth or a pernicious lie. Misinformation, the viral contagion of the digital age, transcends mere engagement—it thrives on a complex web of social, political, and historical forces. The misinformation or disinformation have originated from the concept of information, which Dretske's Representational Theory defines as an entity's representation of another entity. (Sahu, 2023). This philosophical view sees information as something that stands for or signifies something else. Seeking information for various needs constitutes an information behavioural activity, which has been studied through various research contexts such as for general life or within a specific context. (Du Preez, n.d.)

The communication through social media platforms often comprises of information in the form of rumours, mal-information, misinformation or disinformation attributing the factors

¹Associate Professor, Department of Journalism and Mass Communication Delhi Institute of Higher Education, Greater Noida West

²Associate Professor, Department of Management, Delhi Institute of Higher Education, Greater Noida West

³Assistant Professor, Department of Journalism and Mass Communication, Delhi Institute of Higher Education Greater Noida West

⁴Assistant Professor, Department of Journalism and Mass Communication, Delhi Institute of Higher Education, Greater Noida West

like ease of access and use, speed, and inability of people to debunk the fake information.(Muhammed T & Mathew, 2022) Through various research studies conducted on information disorder, various definitions for these terms have been developed. The differences are on the basis of intention, i.e. the extent of deliberately misleading the audience and facticity, i.e. dependency of information on various facts. (Chen et al., 2023) Wardle & Derakhshan, (2017) have developed various definitions for these concepts by identifying them as part of information disorder. They, in their report write: (1) "Disinformation" is defined as false information that is intentionally produced to cause harm, such as reporting news that contains manipulated statistics; (2) "Misinformation" is defined as false information that is spread without the intent to mislead, such as accidentally spreading a story that contains outdated information; and (3) "Malinformation" is defined as true information that is propagated to cause harm, such as circulating a statement outside of its original context to mislead the audience. (Wardle & Derakhshan, 2017) Rumour can be the kind of information or story, for which the element of accuracy is mostly at stake and which may prove to be genuine, somewhat true, or completely untrue (Zubiaga et al., 2016). Fake news can be defined as an information that is not true and has been reformed with the intention of imitating the form of authentic news.

Although the misinformation is always defined within the context of being unintentional, but still the flow of unauthenticated information increases with its availability. The question now a days relates to the usage of internet around the globe. As per online platform Statista, the internet has assumed an important role in everyone's day to day live with number of internet users increasing to two thirds of the total population of the world or 5.3 billion people in 2023. (cycles & Text, n.d.) This rapid increase in the number of internet users has also contributed towards the user's dependence upon the online sources. These users comprise the people of all age groups including children, adolescents or adults. The main purposes of this medium include connection with friends, communities or peer groups.(Anderson, 2018). Also, another notable point is that social news involvement has a limited effect on the connection between social news consumption and online citizen engagement, although public affairs knowledge does not have a substantial impact on either measure(Macnamara, 2021). In such a complex scenario, the tendency to share misinformation is leading to the crimes like mob lynching and disturbance of communal harmony.

The potential of sharing misinformation increases with crisis emerging in a particular stream. For e.g. sharing of more Health-related misinformation during Covid-19 crisis. Text accompanied either with photograph or with video seemed to be the most used source to share misinformation. The study found mainstream media responsible in circulating political fake news while other kind of misinformation was mostly circulated by online media. It also focused on the finding that misinformation shared on social media revolves around six major themes of politics, crime, health, entertainment, religion and miscellaneous (Al-Zaman, 2021)

The impact of rumours on the citizenry is worth consideration. A study conducted by Zubiaga et. Al in 2016 by collecting data on 330 rumour threads related to 9 events on Twitter was able to find out that the true rumours spread faster than the false ones. Sometimes, the political motives also lead to the circulation of fake news. The research conducted in USA found that one's political affiliation has an impact on how trustworthy they consider news sources to be and how they interpret humour in false news. (Wu & Garrison, 2023) People usually struggle to spot unverified rumours, often supporting them regardless of truth. Reputable sources like news outlets can inadvertently fuel false rumours with unverified

information. It highlights the need for real-time rumour verification tools to combat misinformation in the age of social media.(Zubiaga et al., 2016)

Also, the pandemic lead to another global challenge in the form of uncontrolled flow of misinformation/ disinformation related to the virus's origin, causes, remedies. In such a scenario, even after the development of vaccines, the hesitancy with respect to the vaccines was also because of the factors like false information on social media platforms, lack of adequate information, lack of trust in public and government agencies as well as the religious factors.(Kanozia & Arya, 2021). Also, there is a significant relationship between the exposure to fear appeal shared through messages of Covid 19 transmitted through social media platform like Facebook and perceptions related to the severe threats, vulnerability to disease, self efficacy as well as the responses.(Abdul Wahab, 2024). In addition to it, the propagation of fake news is a result of a lack of trust, political polarisation, and the interplay between mainstream and social media, rather than being caused by algorithmic sorting. This phenomenon is indicative of filter bubbles and the way people engage on social media.(Flew, 2019). In such a scenario, the present research makes an attempt to study the information seeking, perception and information sharing behaviour of the users. Based on the survey, a model has been developed to study the same.

1.1 Objectives

- 1. Social media has replaced authentic information sources in this era of iinformation technology. The objective is to know about the impact of Social Media Usage on user perception.
- 2. The social-cultural and historical factors play an important role in determining the perception of the misinformation among people. The objective is to understand the impact of Social Cultural and Historical Factors on perception of users.
- **3.** The perception and information sharing behaviour of people are closely related. The objective is to study the relation between the perception and information sharing behaviour.

1.2 Hypotheses

- 1. Social media usage impacts the perception of the users.
- 2. There is significant impact of Socio-Cultural factors on Perception of the users
- 3. There is substantial influence of historical factors on Perception of the users
- 4. There is significant impact of perception of the users on their information sharing behavior

2. Review of Literature

The reviewed literature on this topic focuses on the broad themes of source, perception, verification and sharing. So, the review of literature will focus on the studies related to these dimensions

2.1 Social Media as source of Information & Knowledge Exchange

The importance of social media to disseminate the information at the time of crisis is well known. A study conducted in Jordan looked at how social media aided in the dissemination of false information during COVID-19 outbreak using survey as a research tool. The findings showed that social media was crucial in providing users with COVID-19 information updates. According to the respondents, social media was a major source of information and knowledge exchange on COVID-19 updates. Along with this, it was also used to disseminate the unverified information. For these two reasons, behavioural intention continued to play a

prominent and important role. The study also implied that more control of internet content is necessary in Jordan to stop the spread of false information. (Habes et al., 2023)

2.2 Source Rating as an important task

The research conducted previously supports the fact that the amount of fake information being encountered by the common public has been increasing continuously and the fact check initiatives are not sufficient to stop the flow. The simultaneous facility of fact checking at the time of news consumption can be of great help for the social media users. (Wilson, 2017) As Mark Twain noted "a lie can travel halfway around the world while the truth is putting on its shoes" The Here, the main factor is the point of view, along with the confirmation bias, which leads to faster spread of the message.

2.3 Human is the main source of spread

For the netizens, false news introduced an element of newness in comparison to true news, which accounted for its faster spread. The factors like fear, revulsion, and astonishment in responses in case of false stories and aspects like keenness, dejection, delight, and belief for true stories made common people to share both but false stories with more interest. Divergent to orthodox understanding, robots enhanced the blowout of true and false news to the same degree, implying that false news spreads more than the truth because humans, not robots, are more likely to spread it (Vosoughi et al., 2018)

2.4 Factors responsible for the sharing of Fake News

The tendency of the people to share the fake information can be attributed to the factors like usage of social media with hedonic mindset (for relaxation, fun and timepass), the power of social media communication to countless people in the hands of users and the inability of the people to select their source on social media. (Kim et al., 2019) The sharing of the fake information is also expedited by the same psychological motivations that also led to other forms of prejudiced behaviour, including sharing one sided news from traditional and trustworthy news sources. Thus, individuals who are against the people belonging to a particular political party have a tendency to share disinformation against them with a particular purpose of defaming them. (Osmundsen et al., 2021) Logical thinking is used to evaluate the believability of headlines, irrespective of whether the stories are reliable or unreliable with one's partisan viewpoint. The findings of the study emphasize on this point that vulnerability to fake information is driven more by lazy thinking than it is by opinionated prejudice, a behaviour that leads to potential for the spirit to fight fake news. (Pennycook & Rand, 2019)

Individuals who believed the misinformation to be plausible or who held preconceived notions supporting it were the ones who expressed the highest propensity to spread it. They probably already knew the content from before. In all four investigations, there was a modest and inconsistent correlation between self-reported likelihood of sharing and personality traits (greater Extraversion and Neuroticism, lower Agreeableness and Conscientiousness, and lower male gender), as well as demographic characteristics (lower age and education). These results have consequences for fighting misinformation in social media techniques that are more or less likely to be effective.(Buchanan, 2020)

Individuals who come upon the content have the option to distribute it among their personal social circles, acquaintances, and relatives. A social network's algorithms may boost

the visibility of content even if users don't intentionally share it by engaging with it in other ways, like "liking" it. Its prominence can increase exponentially if successive viewers share it on their own social networks. According to research, a comparatively small percentage of people—possibly less than 10% of social media users—actively spread misleading information they come across online. In addition, people over 65 shared almost seven times as many stories from fake news websites on average as users in the younger age group. (Guess et al., 2019)

A study conducted on the information sharing behaviour of people of Pakistan at the time of Covid 19, emphasized on some recommendations to curb the infodemic such as need to put more resources into Perception Management Initiatives to address misleading content from social media, allocation of funds to train media workers so that they may identify and check the fake content from social media platforms, awareness initiatives by all traditional mediums to promote right sources of information, focus on creating associations with social media giants to remove misleading content and take media and health literacy initiatives to general public.(Ittefaq et al., 2020)

2.5 Review of Literature on Misinformation Models

Weiss et. al (2021) framed a model on the misinformation based on the relationship between the two main components of the communication process, i.e. the creator and the consumer of fake news. This model proposes a procedure to check the likeliness of the users to share the fake news with others. This model emphasizes on the seven main elements, which can influence the users i.e. level of online trust, level of self-disclosure online, amount of social comparison, level of FOMO anxiety, level of social media fatigue, concept of self and role identity and level of education attainment. (Weiss et al., 2021)

Another study focused on research model was developed using the honeycomb framework and the third-person effect hypothesis using age and gender as variables. The findings of the study indicate that rapid news sharing for awareness-raising has a beneficial impact on the spread of fake news because of time constraints and religious beliefs. However, because of time constraints and religious beliefs, verifying news before spreading it had little impact on the spread of false information. The findings of the study also imply that social media users who actively take remedial action are less likely to spread false information online since they are pressed for time. (Talwar et al., 2020)

The model developed considering the application of diffusion of innovation theory in the fake news sharing behaviours leads to another model. In this model, while news-based features encode the style, intricacy, and psychological elements of the news headline and body, other studies take into account user interest, behaviour, personality, emotions, and demographics.(Spezzano, 2021)

3.Data Analysis and Interpretation

3.1 Sample Adequacy

Prior to conducting factor analysis, a pre-investigation was undertaken to assess the appropriateness of the sample of 210 netizens from various age groups. Following the recommendation by Comrey (1978), this involved evaluating the sample using the Kaiser-Meyer-Olkin (KMO) test, as outlined by Field (2005) and Kaiser and Rice (1974). Kaiser et al. (1974) proposed a minimum KMO value of 0.5 for factor analysis suitability, and in our

study, the KMO value was found to be 0.616, indicating that the sample is indeed appropriate for factor analysis.

Additionally, Bartlett's Test of Sphericity (Bartlett, 1954) was employed to examine the interrelation among variables. This test evaluates the null hypothesis that the correlation matrix is an identity matrix, implying no association among variables, which would render factor analysis inappropriate. However, a significant Bartlett's test (p<0.01) in our study supports the alternative hypothesis, indicating an association among variables and thereby confirming the suitability of employing factor analysis.

3.2 Exploratory Factor Analysis

Exploratory Factor Analysis (EFA) serves as a valuable multivariate statistical tool for summarizing and reducing data. It aids in achieving a more nuanced theoretical understanding of the considered variables by condensing their information into a smaller set. This reduction is carried out to minimize data loss while retaining the essence of the original variables (Hair et al., 2010).

Principal Component Analysis (PCA) and Factor Analysis (FA) are two commonly used methods within EFA for factor extraction. FA, specifically, is preferred when the goal is to reduce factors to a level where they explain a significant portion of the observed variance, particularly focusing on the larger manifest variables. This method endeavors to identify the core variables that elucidate the underlying patterns of association within the observed variables.

Moreover, FA facilitates the formulation of hypotheses regarding underlying means or the monitoring of variables for subsequent analyses. It plays a crucial role in uncovering the fundamental structure of data, thereby enabling more robust statistical analyses and theoretical interpretations.

3.3 Factor Extraction

During the analysis, the eigenvalues related with all linear component pre and post extraction and post rotation 22 linear components were identified before performing the extraction within the data set. However, analysis is done for fixed number of factors i.e. 9. The eigenvalue related with each factor symbolize the variance elucidated by that specific variable. Total variance explained in terms of percentage by SPSS is 27.167 % of total variance for factor 1. Only 9 factors explained 76.79% of the overall variance and rest of the variance is explained by the remaining factors. The method used for factor extraction is Principal Component analysis. It is a technique used to outline uncorrelated linear combinations of the observed variables. The sequence of components is in a decreasing order where the first variable has the highest variance and the consecutive components depict gradually lesser percentage of variance showing that they are not related with each other. It is used to obtain the initial factor solution.

3.4 Factor loading of items

Factor loadings are portion of the result from factor analysis which serve as a form of reducing data intended to explicate the association among experiential variables using factors. However, loadings of less than 0.5 were excluded and not considered for further analysis. At this stage, all factor loadings were above .50 so all 22 items were taken for further analysis

3.5 Reliability Analysis

Reliability refers to the extent to which a measurement process is free from casual errors (Chawla & Sondhi, 2011). It is used to evaluate the constancy of the ratings that are generated by the scale (Malhotra, 2007; Warner, 2008). Cronbach Alpha technique has been used to compute the reliability of the scales, post testing them through Exploratory Factor Analysis (EFA). If Cronbach's alpha is more than 0.60, the scale reliability is good in the present analysis Cronbach's alpha is 0.808 which is substantial with 22 items in the scale. The composite Cronbach's Alpha of items is 0.808.

3.6 Confirmatory Factor Analysis (CFA): Proposed Model

The CFA measurement model (Figure 3.1) contains the entire variables retained after Exploratory Factor Analysis and Reliability Test. For model fit assessment, reporting of multiple fit indices is recommended (Crowley & Fan, 1997). Indices which are used generally for reporting are CFI, GFI and NFI (McDonald & Ho, 2002) though computation of chi-square statistics, the CFI and RMSEA are advised (Hair et al., 2006). From the hypothesized model, the evaluation has resulted an overall chi-square value of 54741.7 where degree of freedom is 210 & the value of probability is .000. Hence the minimum requirements were met. This infers that the software (AMOS) efficiently ran in providing fairly accurate estimates for each parameter, and thus resulting in convergent solution (Byrne, B. M., et al., 2009).

The present study has adopted Maximum Likelihood Method (MLE) from the variety of methods used for running CFA (Scholz, 1985). As the data in the present case is normal, Generalized Least Square (GLS) Method by Browne (1974) is not appropriate here. Although it is apt for the similar data properties as required in the MLE method. Various methods have been examined by Ullman (2006) and acknowledged the conformity with the dissimilar kind of the datasets. It is required that the data is to be measured on normality indices before running the MLE method. Comparative fit index (CFI, Bentler, 1990), goodness of fit index and adjusted goodness-of-fit index (GFI, AGFI Jo"reskog & So"rbom, 1986), and the root mean square error of approximation (RMSEA, Steiger & Lind, 1980). The range of GFI and AGFI is recommended between 0 and 1, where values close to 1 indicates a good fit. As the values of GFI and AGFI are .91 and .90 respectively in Table 3.1, GFI is in compliant to the recommended value. A good fitting model according to CFI is often indicated with values greater than .9 (Hu & Bentler, 1999). In the present analysis, CFI value is .93. The RMSEA considers the error of approximation in the population & questions —How well would the model, with unknown but optimally chosen parameter values, fit the population covariance matrix if it were available? (Browne & Cudeck, 1993). In the present study RMSEA value is .051

Table 3.1: Fit Indices

Fit Indices	Recommended	Observed		
CMIN/DF	1.5-3.5	1.9		
GFI	>0.9	0.91	0.91	
AGFI >0.9		0.90		
RMSEA	<0.1	0.051		
CFI	>0.9	0.93		

ISSN: 1526-4726 Vol 5 Issue 3 (2025)

SCF3

SCF3

SCF3

SCF3

SCF3

SCF1

SMU2

SMU2

SMU2

SMU3

PF4

PF3

PF2

PF1

ISB3

Figure 3.1: CFA Measurement Model

Source: Author's Compilation (AMOS)

Table 3.2 SEM Results

Independent	Dependent	Hypothesis	(S.E)	Construct	(P)	Result
Variable	Variable			Reliability		
SMU	PF	H ₁ 1.1	.185	1.802	***	Positive and Non Significant
SCF	PF	$H_11.2$	0.196	3.414	***.	Positive and Significant
HF	PF	$H_11.3$	0.207	2.810	.005	Positive and Significant
PF	ISB	H ₁ 2.1	0.205	8.969	***	Positive and Significant

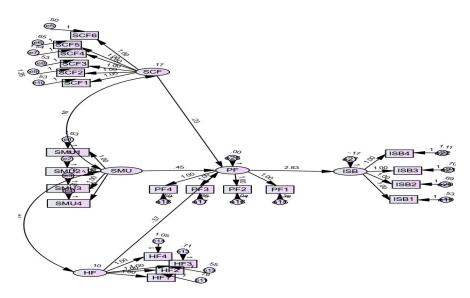
3.7 Impact of Independent Variables on Dependent Variable

The investigation of the Structural equation modeling (SEM) stipulates the connection between the latent variables. It is also known as causal analysis, analysis of covariance structures, simultaneous equation modeling, causal modeling, or CFA (Ullman, 2006). The current study was conducted using different models and the model with higher fit indices value was adopted.

Figure 3.2: The Structural Equation Model (SEM)

Journal of Informatics Education and Research

ISSN: 1526-4726 Vol 5 Issue 3 (2025)



Source: Author's Compilation (AMOS)

4. Results and Discussions based on SEM

The results of each hypothesis are discussed below to derive meaningful conclusions.

4.1 Impact of Social Media Usage on Perception of Users

Results show that Social Media Usage has a positive impact on Perception of Users (S.E=0.185) and this impact is not statistically significant (P=<0.05). Therefore hypothesis H1.1 is supported.

4.2 Impact of Social Cultural Factors on Perception of Users

It was found that Social Cultural Factors has a positive impact on Perception of users (S.E=0.196) and this impact statistically significant (P=<0.05). Therefore hypothesis H1.2 is supported.

4.3 Impact of Historical Factors on Perception of Users

It was found that Historical Factors has a positive impact on Perception of Users(S.E=0.207) and this impact is statistically significant (P=<0.05). Therefore hypothesis H1.3 is supported.

4.4 Impact of Perception of Users on Information Sharing Behaviour

It was found that Perception of Users has a positive impact on Information Sharing Behaviour(S.E=0.121) .However, this impact is statistically significant (P=>0.05). Therefore hypothesis H2.1 is supported.

5. Findings and Conclusion

5.1 Impact of social media usage on perception of users

- A majority of respondents, accounting for 60.5%, expressed a preference for Instagram, WhatsApp, and YouTube when it comes to consuming news that involves visual material and user engagement. WhatsApp's dominant market share of 45.2% places a high emphasis on private messaging. LinkedIn and Telegram have lower levels of popularity, with LinkedIn being more suitable for receiving professional news. The majority of respondents selected numerous options.
- Approximately 70.9% of the participants hold the view that social media has a dominant influence on news consumption, especially among young people. Nevertheless, a minority of individuals (2.3%) disregard social media as a reliable source of news because of worries over its veracity. Furthermore, the level of comfort among members of the social circle regarding criticism of information is intricate, with around 33.8% expressing comfort with this behaviour.

- The study findings indicate that 31.4% of respondents strongly disagree or disagree (26.2%) with the idea of disseminating factual news on social media. Additionally, 49.5% of respondents expressed neutrality, suggesting a level of scepticism about trustworthy news sources. Nevertheless, a mere 19% of individuals expressed faith in social media platforms when it comes to delivering reliable news, while also recognising the prevalent problem of disinformation.
- The poll on the reliability of social media information yielded diverse perspectives. Specifically, 41.4% of respondents expressed doubts regarding the validity of the content, while 56.2% viewed social media as predominantly utilised for recreational purposes. Conversely, 13.4% disagreed with this notion. A neutral answer signifies a state of doubt or ambivalence regarding the principal purpose of the platforms.
- The research findings reveal that 43.3% of participants express significant disagreement or disagreement on the authenticity of social media information shared by their family, friends, and neighbours. Additionally, 33.8% of respondents remain neutral, indicating a state of ambivalence possibly influenced by varying personal experiences or the context in which the information is presented.
- The survey indicates that 21.4% of participants have confidence in the social media content shared by their personal connections, but just 6.2% feel at ease in offering critical evaluations of such information. 27.6% of individuals experience a sense of ease, while an equal percentage feel discomfort. The remaining 38.1% have a neutral response. Merely 0.5% of individuals experience substantial pain while providing criticism on information, suggesting that the majority of people do not feel overwhelmed by this discomfort.

5.2 Impact of Socio-Cultural factors on Perception of Users

- According to the findings, a small percentage of respondents (3.4%) feel left out or excluded when expressing opposing ideas, while a significant minority (13.6%) face social repercussions. Approximately 45.6% of individuals have occasional feelings of exclusion, whereas 23.3% seldom experience such feelings, and 13.1% never experience them. This suggests a certain degree of inclusiveness within a significant number of social groups.
- The poll indicates that a substantial proportion of participants hold the belief in their political autonomy, whereas 28.6% express disagreement, and 35.2% maintain a neutral stance. Nevertheless, a notable 25.2% of individuals acknowledge that their political viewpoints are influenced by social contacts, with an additional 2.4% strongly affirming this, so highlighting the substantial importance of their social environment.
- Approximately 20% of participants hold the belief that verifying social circle information is necessary, demonstrating a dedication to precision and recognition of the dangers of disinformation. 13.4% frequently authenticate information from reliable acquaintances, whereas 43.1% occasionally verify information. Only 12.9% of individuals seldom find it necessary to verify information, while 11% never feel the need to verify information from reliable sources.
- The survey found that 47.3% of respondents strongly disagree that cultural affiliation affects their social media attention. 5.4% of responses are neutral, indicating a small number of people have not decided. However, 47.3% of people agree or strongly agree that cultural affinity motivates social media use. This shows that a large proportion values cultural significance in their consumption. The equal disagreement and agreement (47.3% vs. 47.3%) highlights a balanced view on cultural affinity and social media participation.
- Most respondents (57%) disapprove or strongly disagree with believing culturally sensitive material without checking its legitimacy, expressing caution. Many (22.9%) are

neutral, indicating uncertainty. A minority (1.9%) thinks cultural sensitivity important for information accuracy. There are 18.2% people who share the culturally sensitive material without verification.

- The survey found that 35.1% of respondents communicated culturally inaccurate information. 47.8% have never seen such information, and 17.1% are uncertain about sharing it. Many people encounter and share disinformation in cultural contexts, as shown by the evidence.
- Around 64.8% of individuals concur that knowledge pertaining to culture spreads more rapidly than other categories, suggesting swift circulation of cultural material. Nevertheless, a small proportion (6.9%) has a dissenting view, contending that it is not fundamentally speedier. There is a balanced perspective (28.3%) that suggests the rapid spread of cultural knowledge is seen as important and relevant in social and media settings.

5.3 Impact of Historical factors on perception of users

- The vast majority of respondents (73%) said they regularly see false information about history being published on social media. A lesser proportion (26.5%) infrequently comes across such disinformation, while a negligible 0.5% state that they never encounter it. The results emphasise the necessity for heightened monitoring and meticulous assessment of historical material.
- Approximately 20.3% of individuals express extreme disagreement or disagreement with the accuracy of historical information disseminated on social media, while a majority of 53.5% have a neutral stance. Remaining 26.2% individuals agree about the accuracy of the history related information available through social media.
- The research indicates varying opinions on the reliability of historical information on social media. 26.3% of individuals have the belief that it is consistently accurate, whilst 41.5% are of the opinion that it results in distortion. 32.5% of the individuals exhibit a neutral stance, indicating a state of uncertainty.
- Misinformation is prevalent on social media, according to the majority (77.7%), while 18.3% are neutral. Merely 4% express strong disagreement, suggesting a widespread agreement that disinformation is a noteworthy problem on social media sites.
- The survey reveals that 40.8% of participants consistently refrain from sharing historical disinformation without verifying its accuracy, while 20.8% admit to occasionally making such mistakes. 25.4% acknowledge spreading dubious information, while 7% acknowledge regularly sharing. 6% consistently disseminate historical disinformation without proof, demonstrating a lack of care for fact-checking.

5.4 Impact of Perception of users on Information sharing behaviour

- The data indicates that 45.2% of respondents engage in the act of sharing information from different sources on social networking platforms. Additionally, 27.6% of respondents routinely share information, while 27.1% do not engage in sharing. This suggests a balanced distribution of sharing behaviours, with almost half of the respondents occasionally participating in sharing activities.
- Over half of the participants (55.2%) engage in the active process of verifying information before sharing it, which indicates their dedication to ensuring correctness and dependability. Nevertheless, 27.1% of individuals exhibit a lack of consistency or awareness,

while 17.6% fail to check information, suggesting a possible danger of disseminating unverified or erroneous content.

- Concerning false information, 48.1% of respondents said they do not check information before sharing it. 32.9% of individuals are unsure about the process of validating information, whereas 19% constantly make efforts to confirm its legitimacy. This prevalent problem heightens the likelihood of spreading false or inaccurate information.
- 72.1% of the respondents possess awareness of internet fact-checking tools, whereas 27.9% lack this expertise, suggesting a deficiency in their capacity to authenticate the authenticity of information. Nevertheless, a significant number of individuals require more training or access to resources.
- Approximately 74.8% of the participants exhibit a significant degree of care when dealing with questionable material, whilst 25.2% do not, indicating a possible danger of disseminating unverified or ambiguous information. Their main focus is on verifying information and they refrain from distributing it until its veracity has been validated.

6.Conclusion

The findings suggest a change in culture towards the consumption of digital news, which has important consequences for media strategy in several industries. Businesses and news sources should adapt their advertising efforts and content distribution techniques to effectively connect with customers who are increasingly dependent on social media for news. This transition gives rise to significant arguments regarding the possible ramifications, such as the proliferation of false information, the establishment of echo chambers as a result of algorithmic filtering, and the influence of these elements on societal matters and political environments.

The increasing dependence on social media for news calls for a thorough assessment of the manner in which news is both provided and consumed in the era of digital technology. Most respondents saw social media as mostly utilised for recreational purposes; however, a significant minority recognises its potential for more meaningful interactions. The findings demonstrate a widespread lack of confidence in social media posts related to personal relationships, as seen by significant levels of disagreement that reflect prevalent scepticism. The research indicates that it is important to engage critically with social media content, placing emphasis on the importance of fact-checking and verifying information, even when it comes from reliable sources. The cautious dissemination of information among family, friends, and neighbours has the potential to mitigate the spread of false information and enhance the quality of information on social media platforms.

The replies reveal a vast range of ideas about the act of critiquing information inside social groups, with varying degrees of disagreement and agreement, reflecting competing viewpoints. The study highlights the need of maintaining a balance between honesty and the dynamics of connection when debating the credibility of information. The answer distribution reveals diverse social dynamics pertaining to counterviews in social gatherings, with the majority of individuals experiencing occasional or infrequent feelings of exclusion. This suggests that several social groups are open to different viewpoints, while some may face difficulties in maintaining social acceptance when expressing opposing opinions.

The complete spectrum of responses provides a complex and varied perspective on the impact of social circles on political biases. The study emphasises the significance of comprehending the impact of personal autonomy and social influence on political ideas, since social interactions can elucidate political prejudices and the role of social circumstances in shaping public opinion. Fact-checking is becoming more widely acknowledged as essential in

addressing concerns about misinformation, since individuals attribute different levels of importance to accuracy and reliability in social contexts. The level of cultural closeness has an impact on the extent to which individuals engage with content on social media platforms. While some individuals highly prioritise cultural relevance, others may be unsure or not influenced by it.

The study emphasises the challenge of navigating misinformation within cultural narratives and underscores the importance of heightened awareness and attentiveness in verifying cultural knowledge prior to dissemination. There is a general consensus on the rapidity with which cultural information spreads, highlighting the influence and ability of this information to resonate throughout communities and media channels. The study also emphasises the widespread occurrence of historical misinformation on social media platforms, necessitating increased fact-checking and awareness to mitigate its impact on public understanding and discourse surrounding history. Thorough examination and confirmation of information are crucial since different viewpoints might affect its reliability.

The findings illustrate a wide array of methods for sharing historical information on social media, with certain individuals emphasising the need of verification while others display varying degrees of carelessness. Users employ a varied strategy when sharing information online, with some exercising prudence and others adopting either an aggressive or cautious approach. The results underscore the necessity for increased awareness and education on the significance of verifying information prior to sharing it. A considerable number of participants either do not verify information or are unsure about their verification methods, which poses a potential threat for the spread of incorrect information. Facilitating the dissemination of educational resources and providing access to methods for verifying information can help close the gap in knowledge and contribute to the mitigation of misinformation.

References

- 1. Abdul Wahab, S. (2024). COVID-19 in social media: The effect of fear appeal messages in Facebook on users' perception of hygienic measures to prevent contracting the disease. *Media Asia*, 1–22. https://doi.org/10.1080/01296612.2023.2299106
- 2. Al-Zaman, M. S. (2021). Social Media Fake News in India. *Asian Journal for Public Opinion Research*, 9(1), 25–47. https://doi.org/10.15206/ajpor.2021.9.1.25
- 3. Anderson, A. S. and M. (2018, March 1). Social Media Use in 2018. Pew Research Center: Internet, Science & Tech. https://www.pewresearch.org/internet/2018/03/01/social-media-use-in-2018/
- 4. Bartlett, M. S., (1954). A note on the multiplying factors for various x2 approximations. Journal of the Royal Statistical Society. Series B (Methodological), pp: 296–298.
- 5. Bentler, P. M., (1990). Comparative fit indexes in structural models. Psychological Bulletin, Vol. 107(2),pp: 238–246.
- 6. Browne, M. W. (1974). Generalized least-squares estimators in the analysis of covariance structures. South African Statistical Journal, Vol. 8, pp 1–24
- 7. Browne, M. W., & Cudeck, R., (1993). Alternative ways of assessing model fit In K.A. Bollen & J. S. Long (Eds.), Testing structural equation models (pp. 136–162). Beverly Hills: Sage.
- 8. Buchanan, T. (2020). Why do people spread false information online? The effects of message and viewer characteristics on self-reported likelihood of sharing social media disinformation. *PLoS ONE*, *15*(10), e0239666. https://doi.org/10.1371/journal.pone.0239666

ISSN: 1526-4726 Vol 5 Issue 3 (2025)

- 9. Byrne, B. M., (2009). Structural equation modeling with AMOS: Basic concepts, applications, and programming. Taylor & Francis, Vol. 2.
- 10. Chen, S., Xiao, L., & Kumar, A. (2023). Spread of misinformation on social media: What contributes to it and how to combat it. *Computers in Human Behavior*, *141*, 107643. https://doi.org/10.1016/j.chb.2022.107643
- 11. Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. Psychometrika, 16, p297-334.
- 12. Crowley, Susan & Fan, Xitao. (1997). Structural Equation Modeling: Basic Concepts and Applications in Personality Assessment Research. Journal of personality assessment. 68. 508-31. 10.1207/s15327752jpa6803 4.
- 13. Cycles, T. text provides general information S. assumes no liability for the information given being complete or correct D. to varying update, & Text, S. C. D. M. up-to-D. D. T. R. in the. (n.d.). *Topic: Internet usage worldwide*. Statista. Retrieved January 10, 2024, from https://www.statista.com/topics/1145/internet-usage-worldwide/
- 14. Du Preez, M. (n.d.). *Collaborative Information Seeking: The Art and Science of Making the Whole Greater than the Sum of All* (Vol. 37). https://www.emerald.com/insight/content/doi/10.1108/OIR-04-2013-0084/full/html
- 15. Flew, T. (2019). Digital communication, the crisis of trust, and the post-global. *Communication Research and Practice*, 5(1), 4–22. https://doi.org/10.1080/22041451.2019.1561394
- 16. Guess, A., Nagler, J., & Tucker, J. (2019). Less than you think: Prevalence and predictors of fake news dissemination on Facebook. *Science Advances*, 5(1), eaau4586. https://doi.org/10.1126/sciadv.aau4586
- 17. Habes, M., Elareshi, M., Mansoori, A., Pasha, S., Salloum, S. A., & Al-Rahmi, W. M. (2023). Factors Indicating Media Dependency and Online Misinformation Sharing in Jordan. *Sustainability*, 15(2), Article 2. https://doi.org/10.3390/su15021474
- 18. Hair, J. F., Black, W., Babin, B., & Anderson, R..(2010). Multivariate data analysis(7th ed.)
- 19. Hu, L. T., & Bentler, P. M.(1999). —Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives, Structural equation modelling: a multidisciplinary journal, 6(1), pp:1–55.
- 20. Ittefaq, M., Hussain, S. A., & Fatima, M. (2020). COVID-19 and social-politics of medical misinformation on social media in Pakistan. *Media Asia*, 47(1–2), 75–80. https://doi.org/10.1080/01296612.2020.1817264
- 21. Joreskog, K. G., & Sorbom, D. (1986). LISREL6 computer program. Moorseville: IN, Scientific Software.
- 22. Kaiser, H. F. Rice J. (1974). Educational and Psychological measurement. volume: 34(1) pp: 111-117
- 23. Kanozia, R., & Arya, R. (2021). "Fake news", religion, and COVID-19 vaccine hesitancy in India, Pakistan, and Bangladesh. *Media Asia*, 48(4), 313–321. https://doi.org/10.1080/01296612.2021.1921963
- 24. Kim, A., Moravec, P. L., & Dennis, A. R. (2019). Combating Fake News on Social Media with Source Ratings: The Effects of User and Expert Reputation Ratings. *Journal of Management Information Systems*, 36(3), 931–968. https://doi.org/10.1080/07421222.2019.1628921
- 25. Macnamara, J. (2021). Challenging post-communication: Beyond focus on a 'few bad apples' to multi-level public communication reform. *Communication Research and Practice*, 7(1), 35–55. https://doi.org/10.1080/22041451.2021.1876404

ISSN: 1526-4726 Vol 5 Issue 3 (2025)

- 26. Malhotra, N. K.(2007). Marketing research an applied orientation, Pearson Education India.
- 27. McDonald, R. P., & Ho, M.-H. R. (2002). Principles and practice in reporting structural equation analyses. Psychological Methods, 7, 64-82. doi:10.1037/1082-989X.7.1.64
- 28. Muhammed T, S., & Mathew, S. K. (2022). The disaster of misinformation: A review of research in social media. *International Journal of Data Science and Analytics*, 13(4), 271–285. https://doi.org/10.1007/s41060-022-00311-6
- 29. Osmundsen, M., Bor, A., Vahlstrup, P. B., Bechmann, A., & Petersen, M. B. (2021). Partisan Polarization Is the Primary Psychological Motivation behind Political Fake News Sharing on Twitter. *American Political Science Review*, 115(3), 999–1015. https://doi.org/10.1017/S0003055421000290
- 30. Pennycook, G., & Rand, D. G. (2019). Lazy, not biased: Susceptibility to partisan fake news is better explained by lack of reasoning than by motivated reasoning. *Cognition*, 188, 39–50. https://doi.org/10.1016/j.cognition.2018.06.011
- 31. Sahu, M. K. (2023). Dretske's Naturalistic Representationalism and Privileged Accessibility Thesis. *Philosophia*, 51(2), 933–955. https://doi.org/10.1007/s11406-022-00578-w
- 32. Scholz, F. W. (1985). Maximum likelihood estimation. Encyclopedia of statistical sciences.
- 33. Spezzano, F. (2021). Modeling Misinformation Diffusion in Social Media: Beyond Network Properties. 2021 IEEE Third International Conference on Cognitive Machine Intelligence (CogMI), 168–171. https://doi.org/10.1109/CogMI52975.2021.00030
- 34. Steiger, J. H., & Lind, J. (1980). Statistically-based tests for the number of common factors. Paper presented at the Annual Spring Meeting of the Psychometric Society, Iowa City, IO.
- 35. Talwar, S., Dhir, A., Singh, D., Virk, G. S., & Salo, J. (2020). Sharing of fake news on social media: Application of the honeycomb framework and the third-person effect hypothesis. *Journal of Retailing and Consumer Services*, 57, 102197. https://doi.org/10.1016/j.jretconser.2020.102197
- 36. Ullman, J. B., (2006). —Structural equation modeling: Reviewing the basics and moving forward, Journal of personality assessment, 87(1), pp. 35–50.
- 37. Vosoughi, S., Roy, D., & Aral, S. (2018). The spread of true and false news online. *Journal*, *359*(6380), 1146–1151. https://doi.org/10.1126/science.aap9559
- 38. Wardle, C., & Derakhshan, H. (2017). *INFORMATION DISORDER: Toward an interdisciplinary framework for research and policy making*. Council of Europe. https://rm.coe.int/information-disorder-toward-an-interdisciplinary-framework-for-researc/168076277c
- 39. Warner, R. M. (2008). Applied statistics: From bivariate through multivariate techniques. Sage Publishing.
- 40. Weiss, A. P., Alwan, A., Garcia, E. P., & Kirakosian, A. T. (2021). Toward a Comprehensive Model of Fake News: A New Approach to Examine the Creation and Sharing of False Information. *Societies*, 11(3), Article 3. https://doi.org/10.3390/soc11030082
- 41. Wilson, L. (2017). *The Emergence and Development of News Fact-checking Sites*. https://doi.org/10.1080/1461670X.2015.1052537
- 42. Wu, Y., & Garrison, B. (2023). Falsehood and satire on social media: Does partisan-motivated reasoning influence fake news sharing? *Communication Research and Practice*, 9(3), 290–308. https://doi.org/10.1080/22041451.2023.2217074

Journal of Informatics Education and Research

ISSN: 1526-4726 Vol 5 Issue 3 (2025)

43. Zubiaga, A., Liakata, M., Procter, R., Hoi, G. W. S., & Tolmie, P. (2016). Analysing How People Orient to and Spread Rumours in Social Media by Looking at Conversational Threads. *PLOS ONE*, *11*(3), e0150989. https://doi.org/10.1371/journal.pone.0150989