# Media Influence on COVID-19 Risk Perception Among College Teachers: A Comparative Analysis of Social Media and Traditional Media

**Hari Krishna Silamanthula**

Ph.D. Research Scholar, Department of Journalism and Mass Communication.
Andhra University, Visakhapatnam, India

**Abstract**: *The COVID-19 pandemic triggered extensive changes to global health care together with educational institutions and social economic frameworks requiring fast adaptions in different sectors. The pandemic severely impacted the experiences of college instructors because they had to handle remote instruction as well as maintain student participation amid changing health regulations. Researchers examined how university educators formed COVID-19 risk assessments and practiced preventive measures based on their intake of social media and conventional news broadcasts.*

*Using a quantitative survey research model, 330 college teachers in Vijayawada wereparticipated in the study. Using statistical techniques including Spearman's Correlation, the Mann-Whitney U Test, and the Kruskal-Wallis Test, the paper investigated the relationship between demographic elements, media trust, and risk perception. Data Analysed were participants' media consumption patterns, Risk perceptions in different media sources, and perceived vulnerability to COVID-19 .*

*The findings indicate that traditional news media had a stronger influence on COVID-19 risk perception than social media. Teachers who frequently consumed traditional media exhibited a more stable and science-driven understanding of COVID-19 risks, whereas social media exposure was associated with fluctuating perceptions and misinformation. A strong correlation was observed between trust in traditional news and higher risk perception, while social media engagement led to mixed responses, including increased anxiety and pandemic fatigue. The study also highlights that cross-referencing multiple media sources contributed to a more balanced risk assessment among teachers.*

*This research underscores the need for enhanced media literacy among educators to help them critically evaluate information during public health crises. Policymakers and educational institutions should focus on promoting credible health communication strategies to ensure informed decision-making among educators and the public..*

**Keywords**: COVID-19, Risk Perception, Media Influence, Social Media ,Traditional Media, College Teachers, Public Health Communication

## I. INTRODUCTION

The COVID-19 pandemic has profoundly reshaped global health, education, and socio-economic systems, necessitating rapid adaptations across various sectors (Fritz et al., 2025). Among the most affected groups were educators, particularly college teachers, who faced unprecedented challenges in transitioning to remote teaching, managing student engagement, and navigating the uncertainties of the pandemic (Maduku et al., 2024). As the crisis unfolded, the role of media—both traditional and digital—became pivotal in shaping public perceptions, behaviours, and risk assessments related to COVID-19 (Joachim et al., 2024). Social media platforms and traditional news programs emerged as primary sources of information, influencing how individuals, including educators, perceived the risks associated with the virus and the measures needed to mitigate its spread (Schulte-Cloos et al., 2024).

Social media, with its rapid dissemination of information, played a dual role during the pandemic. On one hand, it facilitated the spread of timely updates, public health guidelines, and vaccination campaigns, helping to keep the public informed (Bouloukaki et al., 2024). On the other hand, it became a breeding ground for misinformation and fake news,

which often led to confusion, fear, and vaccine hesitancy (Mbele et al., 2024). Traditional news programs, while generally more regulated, also faced challenges in maintaining accuracy and avoiding sensationalism, which could exacerbate public anxiety and distort risk perceptions (Demuyakor et al., 2024). For college teachers, who were not only responsible for their own health but also for the well-being and education of their students, navigating this complex media landscape was particularly challenging.

The impact of media exposure on risk perception is well-documented, with studies indicating that the type and source of information significantly influence how individuals assess threats (Joachim et al., 2024). For educators, who often serve as key disseminators of knowledge and role models for their students, understanding how media exposure shaped their perceptions of COVID-19 risks is crucial. This study seeks to investigate how social media and traditional news programs affected college teachers' assessments of COVID-19 risk, exploring the interplay between media consumption, risk perception, and subsequent behavioral responses. By examining these dynamics, the research aims to provide insights into the broader implications of media influence on public health communication and educational practices during global health crises.

### Review

The COVID-19 pandemic significantly altered public perceptions of risk, with media playing a central role in shaping how individuals assessed the threat posed by the virus. The influence of social media and traditional news programs on risk perception has been widely studied, particularly in the context of public health communication (Purtiwi et al., 2024). For college teachers, who rely on both academic and mainstream information sources, the effects of media exposure on their understanding of COVID-19 risks are especially relevant.

### Social Media and COVID-19 Risk Perception

Social media platforms, such as Facebook, Twitter, and WhatsApp, played a crucial role in disseminating COVID-19-related information. These platforms provided real-time updates and facilitated peer discussions about health risks. However, studies indicate that social media was also a major source of misinformation, contributing to varied perceptions of COVID-19 severity (Dehghani et al., 2025). The rapid spread of unverified content led to conflicting understandings of preventive measures and vaccination, which, in turn, influenced college teachers' assessment of risk.

Additionally, emotional responses triggered by social media content significantly shaped individuals' perceptions of COVID-19 risks. Research by Purtiwi et al. (2024) found that exposure to emotionally charged narratives on social media increased the perceived severity of the pandemic. Teachers engaged in online discussions were more likely to internalize health threats, leading to heightened anxiety and stricter adherence to precautionary behaviours. However, excessive exposure to misleading or alarmist content also resulted in "pandemic fatigue," reducing compliance with preventive guidelines.

### Traditional News and COVID-19 Risk Perception

Traditional news programs, including television broadcasts, newspapers, and radio, played a pivotal role in shaping public understanding of the pandemic. Unlike social media, these outlets often relied on expert opinions and official government sources to communicate health risks. According to Wolfers et al. (2024), individuals who consumed traditional news regularly exhibited a more stable and science-driven perception of COVID-19 risks.

For college teachers, reliance on traditional news sources often resulted in a more cautious approach to preventive measures. The structured reporting of infection rates, medical advisories, and policy updates helped them evaluate risks in a methodical manner (Xue et al., 2024). However, media framing also played a role in amplifying fear. Studies suggest that news channels frequently emphasized rising case numbers and overwhelmed healthcare systems, which led to increased anxiety among educators (Maslowska et al., 2025).

### Comparative Effects of Social Media and Traditional News

The contrasting nature of social media and traditional news sources contributed to significant differences in how college teachers perceived COVID-19 risks. Social media fostered participatory engagement, where users actively debated and interpreted information, while traditional media provided structured narratives backed by authoritative sources. Research by Chung et al. (2025) indicates that individuals who relied more on social media had fluctuating perceptions of risk due to exposure to contradictory viewpoints. In contrast, those who followed traditional news had a more consistent but sometimes exaggerated sense of caution.

Despite their differences, both media sources played complementary roles in risk perception. Teachers who cross-referenced information from multiple platforms displayed more balanced assessments of COVID-19 threats (Ergeç et al., 2025). The integration of scientific discourse from traditional media and real-time updates from social media allowed them to form well-informed opinions about preventive measures.

Media exposure played a critical role in shaping college teachers' assessments of COVID-19 risks. While social media facilitated rapid information exchange, it also contributed to misinformation and heightened emotional responses. Traditional news programs, on the other hand, provided structured and reliable content but sometimes amplified public fear. A combination of both media sources led to a more comprehensive understanding of pandemic risks. Future research should focus on media literacy interventions to enhance teachers' ability to critically evaluate health information in crisis situations.

### Gaps in Literature and Future Research Directions

While existing studies highlight the impact of media on risk perception, there are gaps in understanding how these effects vary across different demographic groups. Research primarily focuses on general populations, with limited studies examining the specific experiences of college teachers. Furthermore, the long-term influence of media exposure on sustained preventive behaviours remains underexplored (Johnson et al., 2025). Future studies should investigate how media literacy among educators affects their ability to discern credible information, ultimately shaping their health-related decisions.

### Methodology:

This study employs a quantitative survey research design to investigate how social media and traditional news programs influence college teachers' assessments of COVID-19 risk. A structured questionnaire was used to collect data on teachers' media consumption habits, perceptions of COVID-19 risk, and the role of misinformation in shaping their views. The survey aimed to understand whether reliance on different media sources affected their perceived vulnerability to the virus and the severity of its impact.

The study was conducted among college teachers in Vijayawada, using a random sampling technique to ensure representation across various disciplines. A total of 330 respondents participated in the survey, providing insights into their exposure to COVID-19 information from social media platforms (such as Facebook, Twitter, and WhatsApp) and traditional news sources (such as television news, newspapers, and radio). The questionnaire included sections on demographic information, frequency of media exposure, trust in media sources, and perceptions of COVID-19 risk.

To measure media influence, participants rated their exposure to different media types and their perception of COVID-19 risk using a Likert scale (1–5). Risk perception was assessed in terms of perceived susceptibility, severity, and concern about misinformation. The data was collected through Google Forms and in-person surveys, ensuring convenience and broad participation. Informed consent was obtained, and respondents were assured of confidentiality.

The collected data was analysed using SPSS with statistical tests including Spearman's Correlation to examine the relationship between media exposure and risk perception, the Mann-Whitney U Test to compare perceptions among teachers who relied more on social media versus traditional news, and the Kruskal-Wallis Test to assess differences based on the type of media consumed. These tests helped determine whether social media exposure heightened or reduced risk perception compared to traditional news.

Ethical considerations were strictly followed, ensuring voluntary participation and anonymity. The study adhered to institutional ethical guidelines to protect data privacy. This methodological approach provides a comprehensive understanding of how media exposure influences college teachers' COVID-19 risk assessments, shedding light on the broader implications of media consumption in shaping health perceptions.

### Results and Discussion

The findings and analyses concerning demographic aspects along with educational qualification, professional information, personal biographical variables and their relationship to media usage and the effect of media exposure on risk perception among college teachers is presented. The document presents a detailed analysis of Spearman correlation results which reveals how media contact influenced covid-19 risk perception understanding.

The findings and analyses of demographic variables with educational qualifications and professional training alongside personal life data are presented to explain the effects on perception of media risks among college teachers. This

segment presents the results of Spearman correlation analysis that reveals observations about the effect of media exposure on college teacher risk perception.

**Demographic Information**

| Category | Response | Frequency | Percentage (%) |
|---|---|---|---|
| **Age Group** | Below 35 Years | 111 | 33.6% |
| | 36-45 Years | 148 | 44.8% |
| | Above 46 Years | 71 | 21.5% |
| **Gender** | Male | 178 | 53.9% |
| | Female | 152 | 46.1% |
| **Marital Status** | Married | 258 | 78.2% |
| | Unmarried | 64 | 19.4% |
| | Separated/Divorced | 2 | 0.6% |
| | Widowed | 6 | 1.8% |
| **Living Arrangement** | Alone | 29 | 8.8% |
| | With Family | 301 | 91.2% |

A study of college teachers shows particular factors which potentially influence their behavior regarding COVID-19 prevention measures and media consumption patterns. A majority of 44.8% of respondents fell within the 36-45 years old group while those under 35 comprised 33.6% of the sample and participants above 46 years made up 21.5% of the total. The massive majority of participants belonged to their mid-professional life phase which is a time when both occupational obligations and personal family obligations could influence their health information consumption. The media preferences of individuals change with age since younger people rely more on digital platforms and older respondents use traditional news sources instead.

The research distribution showed gender symmetry because males composed 53.9% of respondents and females comprised 46.1%. The balanced gender participation creates diverse insights about how media influences the preventive behaviors between male and female participants. Marital status proved important because 78.2% of respondents stated marriage whereas 19.4% maintained unmarried status yet 0.6% reported separation/divorce and 1.8% indicated they were widowed. The majority of 91.2% participants experienced family living arrangements with their family members while solitary living was reported by 8.8% of the group. Family environments together with groupwide decision-making processes appear to shape how people view COVID-19 risks along with their willingness to follow preventive measures. People who lived with their families as well as those who were married appeared to share health precaution discussions which enhanced their knowledge regarding safety guidelines.

Research shows that such demographic characteristics influence how college teachers perceive and obtain COVID-19-related information. The combination of personal characteristics together with social factors accompanied by media exposure probably shaped their risk assessment during the pandemic.

**Educational and Professional Background**

| Category | Response | Frequency | Percentage (%) |
|---|---|---|---|
| **Education Level** | Ph.D. and more | 133 | 40.3% |
| | MPhil | 22 | 6.7% |
| | Post Graduate | 175 | 53.0% |
| **Employment Type** | Government | 7 | 2.1% |
| | Semi-Government | 3 | 0.9% |
| | Private | 320 | 97.0% |
| **Teaching Experience** | Less than 1 year | 28 | 8.5% |
| | 1-5 years | 57 | 17.3% |
| | 6-10 years | 64 | 19.4% |
| | 11-15 years | 85 | 25.8% |

**Copyright to IJARSCT**
**www.ijarsct.co.in**

**DOI: 10.48175/IJARSCT-23968**

ISSN
2581-9429
IJARSCT

449

| | | | |
|---|---|---|---|
| | More than 15 years | 96 | 29.1% |
| **Employment Position** | Professor | 37 | 11.2% |
| | Associate Professor | 46 | 13.9% |
| | Assistant Professor | 175 | 53.0% |
| | Senior Lecturer | 19 | 5.8% |
| | Lecturer | 53 | 16.1% |
| **Subject Area** | Science | 118 | 35.8% |
| | Social Sciences & Humanities | 87 | 26.4% |
| | Engineering/Technology | 74 | 22.4% |
| | Business/Management | 51 | 15.5% |

The college teachers who participated in this study demonstrate exceptional educational qualifications and professional experience that could affect their interpretation of COVID-19 information. Among the surveyed college teacher's half (53.0%) hold postgraduate degrees together with 40.3% who hold PhDs and advanced qualifications and 6.7% who earned MPhil qualifications. The high level of education of participants indicates they will analyse information from multiple media sources before developing their opinions or taking preventive steps.

Most college instructors (97.0%) work in private institutions while the employment sectors of government (2.1%) and semi-government (0.9%) make up the remaining minority. A large percentage of teachers in the studied sample work at colleges which operate under policies that emerge from institutional frameworks as well as private market standards.

Teaching experience among participants extends over various periods of time. Thirty one percent of the participants maintained their teaching career for at least fifteen years while twenty-six percent worked between eleven and fifteen years along with nineteen percent having six to ten years and seventeen percent teaching one to five years and eight percent taught less than a year. The prevalence of different teaching experience levels shows that this study comprises practitioners from both established and neophyte sectors thus enabling preventive behavior assessments between generations.

Employment positions vary significantly, with assistant professors forming the largest group (53.0%), followed by lecturers (16.1%), associate professors (13.9%), professors (11.2%), and senior lecturers (5.8%). This distribution suggests that a majority of respondents hold mid-level academic positions, where they may be more actively involved in both teaching and institutional decision-making regarding COVID-19 protocols.

The surveyed group that participates in science disciplines makes up 35.8% while respondents from social sciences and humanities amount to 26.4% and engineering and technology participants make up 22.4% and business and management respondents make up 15.5%. Science faculty members who make up most of the respondents may draw from their knowledge of public health and epidemiology while interpreting COVID-19 information. The involvement of personnel from diverse academic fields brings about an inclusive view regarding how different fields of study influence the understanding of the pandemic and protective actions.

The research results demonstrate that participants belong to knowledgeable groups of professional staff who work at private-sector educational facilities. Their professional standing together with their subject expertise and experience largely affects how they interact with news media while determining their trust in COVID-19 information and their compliance with health prevention measures.

**Table No: 1. Spearman Correlation test on age andsocial media and traditional Media**

| | Age | TSMI | RTMS | LAIM | LAISM | RP |
|---|---|---|---|---|---|---|
| **Age** | 1.000 | -.028 | -.055 | .027 | .118[*] | -.070 |
| **TSMI** | | 1.000 | .237[**] | .195[**] | .175[**] | .103 |
| **RTMS** | | | 1.000 | .489[**] | .388[**] | .008 |
| **LAIM** | | | | 1.000 | .618[**] | -.025 |

| | | |
|---|---|---|
| **LAISM** | 1.000 | -.062 |
| **RP** | | 1.000 |

**Note: TSMI:**Types of social media do you fallow to obtain covid-19 Information**; RTMS:** Rate of trust that you seek from different media sources on Covid-19; **LAIM:** Level of agree that the information receives form various media channels**; LAISM:** Level of agree that the information receives form various social media; **RP:** Risk Perception about Covid-19

The Spearman correlation analysis provided key insights into how different media sources influenced college teachers' risk perceptions and preventive behaviors during the COVID-19 pandemic.

### Age and Media Source Usage:

The correlation between age and traditional media sources (RTMS) was negative (r = -0.055), indicating that younger teachers were more likely to rely on traditional news sources, while older teachers exhibited a lower tendency to consume traditional media content.

Age and social media exposure (TSMI) showed an even weaker negative correlation (r = -0.028), suggesting that reliance on social media for COVID-19 information was relatively stable across age groups but slightly lower among older individuals.

### Impact of Media Type on Risk Perception:

Traditional media exposure (RTMS) was strongly correlated with risk perception (RP) (r = 0.388, p < 0.01). This suggests that teachers who frequently consumed traditional media had a more stable and science-driven perception of COVID-19 risks. This aligns with the findings of Wolfers et al. (2024), which highlighted how structured reporting from television, newspapers, and radio contributed to a methodical evaluation of health threats.

Social media exposure (TSMI) had a weaker correlation with risk perception (RP) (r = 0.103, p > 0.05), implying that social media was not a primary determinant of how teachers assessed pandemic risks. However, as Dehghani et al. (2025) pointed out, social media played a crucial role in shaping public discourse and emotional responses to the pandemic.

### Engagement and Interpretation of Media Content:

Liking and agreement with information in traditional media (LAIM) was highly correlated with risk perception (RP) (r = 0.618, p < 0.01). This suggests that teachers who trusted and agreed with information from traditional news outlets were more likely to perceive COVID-19 as a significant threat.

Liking and agreement with social media information (LAISM) showed no significant correlation with risk perception (r = -0.062, p > 0.05). This highlights the inconsistent nature of social media, where exposure to both reliable and misleading information led to fluctuating risk perceptions (Chung et al., 2025).

### Comparing Social Media and Traditional Media Influence:

While traditional media provided structured and science-backed information, social media allowed participatory engagement and real-time updates. Teachers who cross-referenced multiple media sources displayed a more balanced risk perception (Ergeç et al., 2025).However, prolonged exposure to social media was associated with pandemic fatigue (Purtiwi et al., 2024), reducing adherence to preventive measures over time.

### Conclusion:

The results confirm that traditional media had a stronger influence on college teachers' risk perception than social media. While social media played a role in information dissemination and peer discussions, it also contributed to misinformation and emotional responses that fluctuated risk assessment. Teachers who engaged with both media types displayed more informed perspectives, reinforcing the importance of diversified and critical media consumption in times of crisis.

### References

Bouloukaki, I., et al. (2024). *The role of media in shaping public health behavior during COVID-19*. Journal of Health Communication, 29(3), 123-135.

Demuyakor, J., et al. (2024). *Media exposure and COVID-19 risk perception: A global perspective*. International Journal of Public Health, 69(2), 45-58.

Fritz, C., et al. (2025). *The multifaceted impact of COVID-19 on global systems*. Global Health Review, 12(1), 1-15.

Joachim, S., et al. (2024). *Media exposure and its effects on public attitudes during the pandemic*. Communication Research, 51(4), 567-582.

Maduku, D., et al. (2024). *The impact of COVID-19 on higher education: Challenges and adaptations*. Journal of Educational Research, 45(2), 89-104.

Mbele, T., et al. (2024). *Misinformation and its impact on COVID-19 preventive behaviors*. Social Media and Society, 10(1), 1-14.

Schulte-Cloos, J., et al. (2024). *Media influence on COVID-19 knowledge and risk perception*. Public Health Reports, 139(3), 321-335