Presenting a Hybrid Model of National Media Persuasion in the COVID-19 Crisis

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Original Article

Abstract

INTRODUCTION: Given the key role of the media in changing the attitudes and behavior of audiences, this study focuses on the impact of Iran's national media in strengthening or weakening public trust. Ineffective information dissemination in crises can lead to the spread of rumors and reduced collective participation. The aim of this research is to provide a scientific and practical framework and strategies for promoting media persuasion in crisis situations and its management with an emphasis on the Corona pandemic.

METHODS: This applied research was conducted with a mixed approach. In the qualitative part, data were collected through semi-structured interviews with 20 national media experts and managers and analyzed using data-based theory in three coding stages (open, axial, and selective). In the quantitative part, the extracted components were used as the basis for designing a specialized questionnaire based on the AHP technique, which was distributed among 400 media experts and analyzed with Expert Choice software. The validity of the tools was confirmed by experts and the reliability was confirmed with Cronbach's alpha of 0.87.

FINDINGS: Data analysis showed that the most effective media persuasion strategies in the Corona crisis are: transparency and honesty of information (0.23), use of trusted experts (0.19), production of targeted content (0.17), two-way interaction with audiences (0.15), institutional cohesion (0.13), and use of new technologies (0.13). These components explain a total of 78% of the variance in public trust.

CONCLUSION: The results indicate that effective persuasion in health crises requires a multidimensional approach that simultaneously pays attention to content, structural, and communication dimensions. The model proposed in this study can be a basis for designing national media strategies in future crises. Systematic implementation of these strategies can increase the effectiveness of persuasion by up to 70%.

Keywords: National media; Persuasion; Audience; Corona pandemic; Crisis management.

Introduction

Persuasion has become a core element of strategic communication, assuming a pivotal role in the media—particularly in managing large-scale crises such as the COVID-19 pandemic in recent years. Its function extends beyond the mere dissemination of messages; effective persuasion requires a nuanced understanding of audiences' psychological and social dynamics, with the aim of purposefully shaping beliefs, attitudes, and behaviors during critical times.

Empirical studies highlight that the impact of media messaging in crises largely depends on its ability to build trust, encourage active engagement, and reflect the values and needs of target audiences. (1)

During pandemics, the media's role transcends information delivery: it involves interpreting realities, alleviating public anxiety, and guiding communities toward constructive, trust-enhancing behaviors. (2)

The success of such efforts depends on how effectively the media can influence public opinion and strengthen both social capital and public

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confidence. Conversely, shortcomings in this process may accelerate the spread of rumors, erode trust in official institutions, and ultimately intensify the crisis. (1&2)

This study examines media persuasion strategies during crises, with primary focus on the role of national media and the challenges it faces under current conditions. The theoretical framework of media persuasion demonstrates that the effectiveness of information strategies is grounded not only in the principles of persuasion psychology, but also in social capital, public trust, and the capacity to adapt messages to the cognitive and cultural structures of society. (3)

The experience of the COVID-19 crisis demonstrated that the mere transmission of data and official recommendations does not guarantee behavioral change or public trust; rather, the nature of media engagement with audiences must be based on informational transparency and the utilization of credible and specialized sources. Recent studies further emphasize that when media adopt an honesty-centered and participatory approach to messaging, they create conditions conducive to enhancing public trust and reducing behavioral resistance to health policies. Conversely, weaknesses in media persuasion result in the emergence of rumors, confusion, and even widespread distrust of official recommendations. Therefore, attention to the quality of media messages, the expertise of content producers, and responsiveness to the genuine concerns of society is essential for the effectiveness of any communication policy during health crises. (4)

With the expansion of the COVID-19 pandemic, the role of national media in shaping collective perceptions and behaviors gained heightened significance. Recent studies have demonstrated that the simultaneous use of persuasive messages based on transparency, the dissemination of credible information, and the establishment of interactive communication with audiences can not only enhance preventive behaviors—such as maintaining social distancing and vaccination—but also reduce anxiety and social unrest, thereby improving public trust in health policies. (5)

Simultaneously, the ineffectiveness of persuasive strategies or the erosion of public trust can lead to the spread of rumors, decreased behavioral participation, and the intensification of crisis dimensions. Therefore, mastering the

principles and challenges of media persuasion represents the key to media success in managing contemporary crises. (6)

One of the fundamental challenges in social crises is the complexity of persuading society regarding official ideas and viewpoints. In such circumstances, the importance of communication management and employing effective persuasive methods increases significantly to encourage individuals to accept accurate information and assess situations correctly. The performance of media, particularly national media, during crises has consistently been subject to critique and scrutiny. Issues such as shifting policies, shortage of specialized experts, dissemination of contradictory information, and focus on highlighting officials rather than providing expert data can lead to diminished public trust. These deficiencies can impede the transmission of accurate and useful information to society and reduce the level of necessary warnings and measures, ultimately resulting in public cynicism toward accessing societal realities through official media. (7)

Nevertheless, crisis management strategies are predominantly based on persuading populations to adopt behavioral changes; therefore, gaining a better understanding of how to enhance such persuasive efforts is of considerable importance. In designing effective persuasion strategies, it is essential to consider the psychological and social factors that influence individual behavior. Providing transparent and honest information, emphasizing the importance of collective participation, and utilizing positive behavioral models can enhance the effectiveness of persuasive messages. Creating engaging and interactive content, selecting appropriate terminology, determining the optimal manner of information delivery, and addressing the needs and expectations of audiences are among other key considerations in this regard. (8)

particularly within state media, where the principle of authority plays a central role. (9) Success in this domain requires a thorough understanding of persuasion techniques and strategies. The present study, by integrating both classical and modern theories of persuasion, focuses on the foundations of effective messaging during crises, assuming that communication strategies should be designed in alignment with audience characteristics, crisis conditions, and the objectives of the message. Classical theories—

including ethos (credibility), logos (logic), and pathos (emotions)—form the fundamental pillars upon which persuasion is built. (10)

The emergence of modern technologies and digital social networks has added new dimensions to persuasion theories. Recent research demonstrates that social media platforms, by facilitating rapid information dissemination and collective participation, play a significant role in shaping public opinion and directing social behaviors. However, these platforms have also provided a medium for the spread of misinformation and challenges such as cognitive bias and cognitive dissonance, which have attracted the attention of researchers and policymakers in the field of communications.(11)

Models such as Hovland's model emphasize the importance of source, message, channel, and receiver, while the Elaboration Likelihood Model (ELM) provides the possibility of integrating various effects and predicting behavioral change. These approaches demonstrate that persuasion is a complex and multifaceted process that requires attention to all communicative and psychological dimensions of audiences. (12)

Crisis experience demonstrates that success in media persuasion requires the adoption of comprehensive and precise strategies: Transparency, honesty, and source credibility: During crises, public trust is highly vulnerable. Media must maintain impartiality and provide transparent and reliable information to gain audience trust, while avoiding any form of bias or concealment. Coordination among various governmental and media institutions in messaging is also of paramount importance to prevent the dissemination of contradictory information. Utilizing persuasive profiling: Given users' digital footprints, content and its delivery method can be selected based on user objectives and interests through "cognitive communication". (13)

Examining national media strategies during crises based on the aforementioned persuasive theories is of vital importance. Such examination can reveal whether adopted approaches have aligned with theoretical principles of persuasion and which factors have contributed to their success or failure. Overall, this research, focusing on analyzing the persuasion processes employed by national media during various crises, seeks to identify more effective patterns and more suitable communication strategies and, based on these

findings, propose solutions for improving persuasive methods in future crises. (14)

A review of global experiences demonstrates that different countries employed varying media strategies to manage the COVID-19 crisis. South Korea managed public opinion through transparency and precision, Finland relied on scientific data, and Japan utilized live broadcasting. China controlled information through WeChat, while the United States emphasized self-care through dedicated websites. The European Union failed to establish a shared information system, whereas Northern European and East Asian countries achieved success by relying on cultural values. In contrast, Hong Kong faced censorship, and small East Asian countries as well as Russia encountered media restrictions. In Iran, information dissemination restrictions, lack of public trust, and managerial challenges reduced the effectiveness of national media. These experiences hold significance for media to play a more effective role in future crises.

Given this necessity, the present study aims to design a strategic model for the national media persuasion process during the COVID-19 pandemic. This model has been developed with a focus on identifying key value-creating factors and determining essential tasks under crisis conditions. The central research question is: How does the national media's strategic persuasion model, and under the influence of which factors, impact value creation (such as increased participation, public trust, and behavioral change) and audience persuasion during health crises, particularly the COVID-19 pandemic?

Despite the significance of the national media's role during crises, studies have shown that there has been limited examination of the systematic relationship between the national media's strategic persuasion model and the specific conditions of health crises, particularly pandemics.(15) Therefore, adopting a comprehensive approach, the present study seeks to propose an operational framework for enhancing persuasive strategies and managing future crises more effectively within national media

Methods

This applied research was conducted with the objective of developing practical strategies to enhance public persuasion by national media during the COVID-19 crisis. The research process

was designed based on a multi-layered model encompassing research philosophies, major types of research, approaches, strategies, modes of execution, methodological choices, objectives, and data collection techniques. (16) In terms of research design, the study employed a combination of descriptive-analytical and survey methods. Data collection was carried out in two stages. In the first stage, qualitative data were obtained through semi-structured interviews with subject-matter experts, which were then analyzed to identify the initial components and variables of the proposed model. In the second stage, these components were prioritized and weighted using a specialized questionnaire based on the Analytic Hierarchy Process (AHP) technique. The questionnaire was distributed among a panel of experts, and the collected data were analyzed accordingly.

The research onion model was adopted as the theoretical framework to systematically organize the research path through eight conceptual layers—from determining the research philosophy to data collection. (17)

The thematic scope of this research was to examine the process of persuasion during the COVID-19 pandemic, which was conducted from October 023 to October 2024 in Tehran and the national media.

Table 1. Paradigmatic structure framework

Coding level	Conceptual description	Sample identified categories
causal conditions	Root causes /preliminary crisis emergence or need for intervention	Information communication deficiencies, public distrust
contextual conditions	Contexts and facilitators/ barriers to problem realization or intensification	Media culture, macro policies, socio-economic conditions
intervening strategies	Responses or actions designed for crisis management or resolution	Increasing transparency, expert participation, rebroadcasting targeted messages

Qualitative data analysis was conducted based on the grounded theory method and paradigmatic model. Raw data from in-depth interviews with 20 experts—including university professors, senior media managers, crisis management experts, and audience persuasion specialists— were analyzed in three stages of open, axial, and selective coding. The samples were selected according to the diversity of expertise and relevant

backgrounds. After analyzing the main categories, the overall conceptual model of the research was developed. The results of the analysis included 264 codes, 85 concepts, and 78 categories.

Based on Strauss and Corbin's paradigmatic model, the main categories of the research were analyzed and classified into three levels: causal conditions (the reasons for intervention and the origins of the crisis), contextual conditions (factors defining the context and facilitating or hindering the main realization of intervention), and intervention strategies (designed responses to overcome the crisis).

Coding is a systematic process introduced by Strauss and Corbin (1990) for identifying categories and developing theoretical models (18). In this study, the theoretical model for the national media persuasion process during the COVID-19 pandemic was developed based on open coding (identifying categories), axial coding (establishing relationships among categories), and selective coding (integrating categories). Data collection and analysis were conducted concurrently until data saturation was achieved. This process was carried out through 20 interviews aimed at identifying the most effective persuasion patterns in media messaging.

It is worth noting that the analysis process was conducted manually. This decision was due to the qualitative nature of the study and the manageability of the data without the need for common software tools such as NVivo . All analyses were carried out under the supervision of research experts and with the incorporation of multiple rounds of feedback.

The quantitative data analysis in this study was conducted to measure and prioritize the components identified in the strategic model of national media persuasion during the COVID-19 pandemic. This was accomplished using a specialized questionnaire based on the Analytic Hierarchy Process (AHP) method. The statistical population for this phase consisted of experts and managers associated with the national media, who were selected through purposive sampling. Given the limited population size and based on the finite population sampling formula, the sample size was estimated at 381 participants, and ultimately, questionnaires were distributed among 400 respondents.

In this stage, the experts completed pairwise comparison questions related to the six main strategies of media persuasion. The data obtained

were entered into the Expert Choice software, and following the Analytic Hierarchy Process (AHP) algorithm, the final weight of each strategy was calculated based on the consensus of expert opinions. The Consistency Ratio (CR) was computed to assess the validity and coherence of the responses, and in all cases, the CR value was less than 0.1, indicating the reliability of the pairwise comparisons.

In the present study, the percentage of variance explained for the main strategies of national media persuasion was calculated based on the output of the Analytic Hierarchy Process (AHP) analysis. Following pairwise comparisons of strategies and sub-criteria conducted by media experts, the weight of each strategy was determined using Expert Choice software. The percentage of variance explained represents the sum of the percentage weights of the key strategies derived from the AHP model. In other words, this value indicates the contribution of each strategy in explaining the main dependent variable of the study—namely, "public trust"—and denotes the extent to which the variance in the dependent variable is accounted for by the proposed strategies. This method, grounded in a hierarchical structure and the aggregation of expert-assigned weights, serves as a valid alternative to statistical models based on regression or factor analysis for prioritizing strategic criteria.

It should be noted that no Exploratory Factor Analysis (EFA) or Confirmatory Factor Analysis (CFA) was conducted in the quantitative phase of this study. The structure and core indicators of the questionnaire were derived directly from the qualitative findings obtained through grounded theory, and their validity was confirmed through expert review. The data analysis process was entirely expert-driven and carried out solely using the Analytic Hierarchy Process (AHP) technique. Accordingly, instead of factor analysis-based models, the adequacy and consistency of the instrument were evaluated by controlling the Consistency Ratio and assessing content validity and internal reliability.

First, the demographic characteristics of the sample were described using frequency distribution tables and pie charts. Subsequently, for the inferential analysis of the data and prioritization of the criteria, the Analytic Hierarchy Process (AHP) logic—which is based on pairwise comparisons of elements and the determination of the relative weight of each criterion—was employed. These comparisons were conducted using a 1-to-9 scale, and the resulting data were structured hierarchically, with the weight of each strategy extracted numerically.

To assess the validity of the research instrument, content validity was established through the feedback of experts and academic supervisors, and the final version of the questionnaire was approved accordingly. The reliability of the questionnaire was measured using Cronbach's alpha coefficient, with a value of 0.873 indicating acceptable internal consistency for the instrument.

The quantitative questionnaire in this study was designed based on the Analytic Hierarchy Process (AHP) technique and distributed among a group of national media experts and managers. The data obtained from the pairwise comparisons of the questionnaire elements were entered into Expert Choice software and analyzed accordingly. First, the weight of each criterion and sub-criterion was calculated based on expert opinions; then, the Consistency Ratio (CR) was checked to verify the accuracy and validity of the pairwise comparisons, with all values falling below 0.1, thus confirming their validity. To assess the reliability of the questionnaire, Cronbach's alpha coefficient was calculated as 0.87, indicating high internal consistency and reliability of the measurement instrument. Therefore, the analysis of the questionnaire data was conducted not through conventional descriptive or inferential statistics, but exclusively based on expert-driven weighting within the AHP model, along with consistency and reliability validation.

Validity and reliability in the qualitative phase

In qualitative research, the concept of validity—unlike in quantitative studies—primarily emphasizes the extent to which findings align with participants' subjective realities and lived experiences, with the purpose of ensuring accurate and in-depth reflection of their perspectives. To strengthen validity in the present study, a range of strategies was employed, including data collection from multiple sources (such as in-depth interviews and review of library documents), member checking, and involvement of academic and industry experts in the process of reviewing the findings. (19)

In addition, the credibility of the findings was enhanced through strategies such as joint data analysis by multiple researchers, continuous observation of the research process, control of researcher bias and theoretical assumptions, and development of interview questions based on a shared conceptual framework. Furthermore, evaluation and approval of the final model by academics, advisors, and industry specialists contributed to improving the transferability and trustworthiness of the results. Although generalizability in qualitative research is inherently limited, continuous expert feedback and alignment of findings with comparable contexts strengthened the external validity of the results. (19)

Reliability—or dependability—in this study was ensured based on the criteria of confirmability, acceptability, transferability, and dependability of the model (20), achieved through comprehensive documentation of the research process, sample diversity, and re-examination of the results by independent experts. Following necessary revisions and refinements, the proposed model was evaluated as meeting the needs of national media in managing the COVID-19 pandemic crisis and was endorsed by experts as a framework with potential applicability to other social and public health crises. Accordingly, with its enhanced validity and reliability, the model offers a reliable and flexible operational framework for persuasive media engagement during social crises.

Validity and Reliability in the Quantitative Phase

In the quantitative phase of the study, the validity of the measurement instrument was ensured through various strategies to confirm the accuracy and adequacy of measuring the model's dimensions. The face validity and content validity of the AHP questionnaires were strengthened through iterative reviews and expert consultations with specialists in media, crisis management, and persuasion. (21) To achieve content validity, indicators and questions were extracted from the qualitative phase findings, and after initial development, each question's meaning was evaluated by a panel of recognized experts. To establish construct validity, the conceptual relationship of each indicator with the study's theoretical dimensions was verified based on qualitative data analysis results and research literature. Additionally, to assess external validity, the instrument was retested with a comparable expert sample and results were compared. (22)

The reliability of the quantitative instrument was primarily controlled by emphasizing internal consistency and measurement stability. The internal consistency of the AHP questionnaires was assessed by calculating Cronbach's alpha coefficient (0.87), indicating satisfactory reliability(23). Additionally, in the Analytic Hierarchy Process method, the Consistency Ratio (CR) of each pairwise comparison matrix was calculated, with all values obtained being below 0.1; this criterion represents the most important indicator for assessing the trustworthiness of results in the AHP method. Pilot testing and expert review of the questionnaires served as additional complementary measures for reliability. These measures ensured the accuracy, replicability, and dependability of the quantitative phase results.

Table 2. validity and reliability of the qualitative phase

Criterion	Research implementation method	Supplementary explanations
Internal validity (credibility)	Triangulation(data/interview/document triangulation), member validation, expert review	Use of multiple data sources, presentation of findings to interviewees and supervisory/advisory faculty
External validity (generalizability)	Model review with four academic and executive experts	Model validation by external faculty and managers, acknowledgment of generalizability limitations at the end of the report
Dependability	Comprehensive documentation of interview and coding processes, professional diversity of samples	Transparency of implementation stages and recording of all data for subsequent review
Confirmability	Review of results by members and external experts, researcher bias control	Publication of raw documents and process reports for bias control and external evaluation capability

Table 3. Validity and reliability in the quantitative phase

Criterion	Research implementation method	Supplementary explanations
Content validity	Index development through expert consultation, model revision based on qualitative phase outputs	Utilizing collective evaluation by experienced faculty members and preliminary qualitative review
Construct validity	Construction of indices based on the grounded theory model and conceptual categorization	Complete structural alignment with qualitative coding concepts
Face validity	Pilot testing implementation and questionnaire ambiguity resolution	Pilot distribution among several individuals prior to full implementation
Internal consistency reliability	Calculation of Cronbach's alpha (0.87)	Beyond the scientific standard of 0.7
Internal consistency reliability	Examining the consistency ratio of the matrix (less than 0.1)	In accordance with Saaty's theoretical principles; ensuring the validity of pairwise comparisons

Findings

In this study, following an in-depth review and analysis of data collected from relevant theoretical foundations and semi-structured interviews with experts in the fields of media and crisis management, a strategic model for national media persuasion in confronting the COVID-19 pandemic was extracted. Data analysis was conducted using the grounded theory method and three-stage coding (open, axial, and selective coding). Subsequently, to validate and prioritize the strategies, the qualitative findings were incorporated into a specialized questionnaire based on the Analytic Hierarchy Process (AHP) technique and distributed among and analyzed by experts. The research results demonstrated that successful media persuasion during crisis requires adopting approaches based on information transparency, active audience engagement, utilization of specialized knowledge, institutional coherence, creative use of media tools, and continuous monitoring of societal feedback. In this regard, a set of effective and constructive strategies and actions for improving the national media persuasion-making process in health crisis conditions was identified and presented, emphasizing not only addressing deficiencies but also enhancing social capital, increasing public trust, and promoting collective behavioral change.

Despite identifying key media persuasion strategies during the COVID-19 crisis, one limitation of the findings section is the lack of concrete and documented examples of how national media performed in successful or unsuccessful cases. Aligning strategies with concrete evidence could strengthen the analytical argument of the research. For instance, how national television informed the public about COVID-19 vaccine rumors and provided comprehensive—or in some cases, insufficient—explanation of health protocols, each represents a pattern of strategic success or failure. In this regard, two brief examples are presented below as instances of national media performance:

Success in specialized and transparent vaccination coverage

In May and June 2021, national television broadcast live sessions of the National COVID-19 Headquarters, featuring experts from the Ministry of Health who explained how the vaccines work and discussed their efficacy. By employing accessible language, directly answering audience questions, and showing trusted public figures getting vaccinated, national television significantly enhanced transparency and helped alleviate some public concerns.

Failure to effectively counter social media rumors

During the initial months of the crisis (March–April 2020), the spread of rumors about vaccine side effects or inefficacy outpaced national media coverage. Insufficient prompt response and the lack of engaging content to counter misinformation led some social groups to distrust official recommendations and reduced vaccination uptake (Case study: ISNA News Agency, 2020; National Media Performance Report, February 2020).

Qualitative data obtained from semi-structured interviews with media experts were analyzed using the grounded theory approach and three-stage coding (open, axial, and selective). Through this process, phrases and concepts extracted from the interviews were first broken down into initial codes, then these codes were categorized into conceptual categories, and finally, based on the research objectives, led to six key strategies for enhancing national media persuasion during the COVID-19 crisis.

Table 4. extracted codes: from initial concepts to final strategies

Initial codes	Core codes	Final codes	Concrete examples
The need for transparency in information dissemination	Media honesty & transparency	Enhancing transparency and honesty in media messages	Publication of official statistics verified by the Ministry of Health
Use of experts	Professional human capital	Involvement of health-sector experts in live programming	Presence of specialist physicians in COVID-19 analysis programs
Attention to audience needs	Demographic & cultural differences	Personalization of messages	Producing targeted content for older adults and youth
Public feedback evaluation	Continuous monitoring of public opinion	Establishing an online survey system	Establishing an online survey platform for IRIB audiences
Adoption of new media tools	Digital technologies	Production and dissemination of creative multimedia content	Creating interactive infographics on social media
Inter-agency coordination	Policy coherence	Holding weekly coordination meetings	IRIB–National COVID-19 Joint Committee
Responding to criticism	Two-way interaction	Question-and-answer programs	Implementing 'With You: About COVID-19
Training staff	Enhancing media literacy	Conducting specialized workshops	Crisis Communication Psychology courses for Journalists
Applying scientific models	Knowledge- and data-driven	Developing standard guidelines	Guide to Persuasive Communication in Crises
Encouraging public participation	Social capital and trust-building	Implementing public campaigns	We will defeat covid-19' campaign

Table 5. Process of converting initial codes into concepts and final strategies in the qualitative analysis

Initial codes	Intermediate concept / category	Final extracted strategy
Focus on honesty, avoiding exaggeration	Message credibility, information transparency	Transparency and honesty of information
Inviting experts, professional consensus	Use of scientific references, reliable sources	Utilization of trusted experts
Designing messages tailored to target groups	Message and content appropriateness	Production of targeted and relevant content
Gathering feedback, dialogue with the public	Receiving and responding to audience feedback	Two-way interaction with audiences
Coordinated information dissemination across sectors	Message unity, organizational coordination	Institutional media coherence
Utilization of modern media	Expansion of coverage and communication technology	Utilization of modern technologies

*Quantitative and qualitative enhancement of audience persuasion strategies in national media
*Development of new audience persuasion technologies
*Enhancing the status, professional competence, and authority of media focused on audience persuasion
*Explaining and promoting persuasion discourse based on audience demands; promoting persuasion-making discourse among program producers
*Changing media structure using successful experiences from other countries
*Empowering program producers to create persuasive content

Audience satisfaction based strategies (AS)

*Scientific approach to audience persuasion domain
*Pathology of audience persuasion schemes
*Recruitment of developed human resources and personnel
*People with persuasion methods
*Information exchange with global thinkers in audience persuasion domain
*Having advisors in various media sectors

Audience needs response based strategies (AN)

Strategic model of national media persuasion process during COVID-19 pandemic

Culture-building based strategies (CL)

*Strengthening audience persuasion centers and official persuasion in cyberspace
*Diversification and multiplication of content presentation formats
*Attention to structure, attention to epistemological dimension & attention to functionality
* Streamlining the national media complex
*Capacity building for soft power
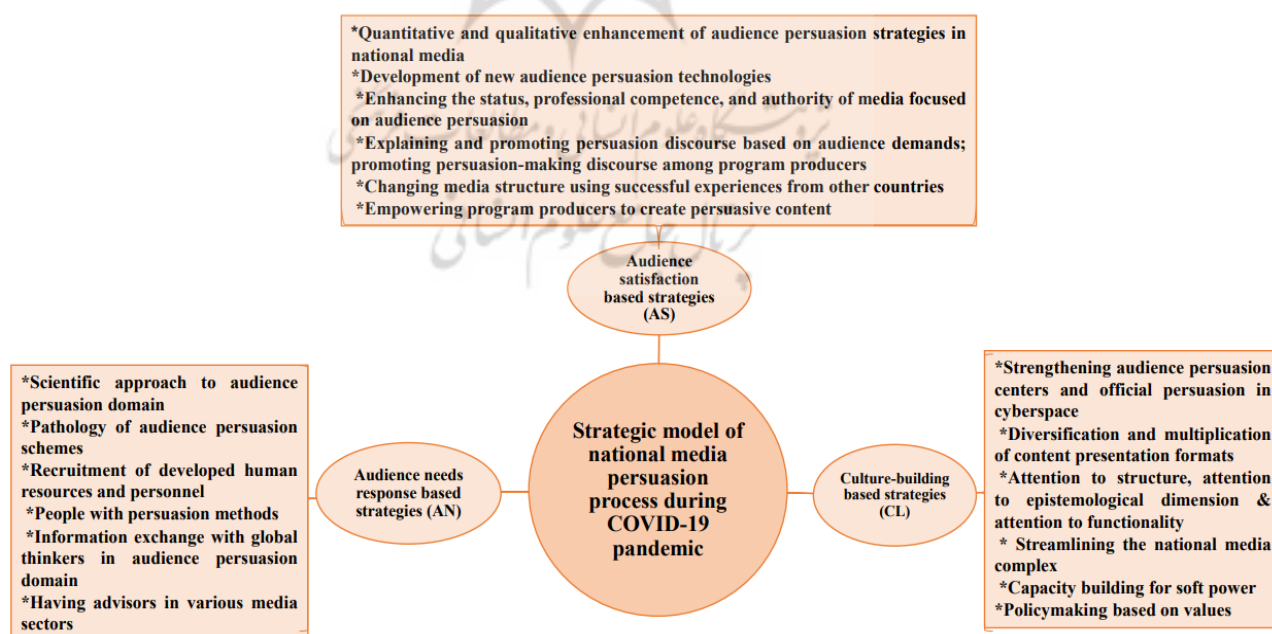*Policymaking based on values

Figure 1. Strategic model of the national media persuasion process during the covid-19 pandemic

Table 6. Relative weight and contribution of key strategies in national media persuasion (source: research findings)

Key strategy	Contribution to variance explained (%)	AHP weight
Honesty and Transparency of Information	23	0.23
Engagement of Trusted Experts and Specialists	19	0.19
Production of Targeted and Relevant Content	17	0.17
Two-way Interaction with Audiences	15	0.15
Institutional Coherence and Unified Messaging Utilization of Modern	13	0.13
Technologies Total Variance Explained	75	1.00

These strategies include transparency and honesty of information, engagement of trusted experts, production of targeted content, two-way interaction with audiences, institutional coherence, and utilization of modern technologies. Table 4 clearly demonstrates the pathway of transforming raw data into the practical strategies, and the results indicate that a combined approach based on honesty, scientific credibility, active participation, and structural synergy can significantly enhance the effectiveness of media messages and the level of public trust in crisis conditions.

The findings indicate that transparency and honesty in information dissemination play the most significant role in enhancing public trust. The engagement of trusted experts also contributes meaningfully by fostering audience confidence and reducing resistance. Targeted content tailored to audience needs improves message effectiveness and reduces ambiguity. Two-way interaction with audiences enables prompt responses and quick correction of errors, significantly strengthening public satisfaction and trust.

Furthermore, institutional coherence and coordination among different organizational units—combined with the use of modern technologies—can increase the speed, accuracy, and reach of messages in crisis situations. These results underscore the importance of developing a hybrid strategic model grounded in transparency, expertise, participation, and technology to enhance the effectiveness of media messages and boost public trust during crises.

In the quantitative phase of this study, to validate and prioritize the strategies derived from the qualitative analysis, a questionnaire based on the Analytic Hierarchy Process (AHP) technique was designed and distributed among media experts. The data obtained from pairwise comparisons of criteria and components were analyzed using Expert Choice software, and the weight and rank of each persuasion strategy were

determined. The quantitative analysis table systematically demonstrates the transformation of components identified in qualitative interviews into measurable indicators, as well as the prioritization of positive and constructive strategies for national media persuasion based on experts' collective judgments. This table represents the validation and optimization pathway of the proposed research strategies for enhancing national media effectiveness in health crisis management.

Based on the AHP questionnaire analysis and as presented in Table 7-1, six key strategies for media persuasion during the COVID-19 crisis were identified in order of priority: transparency and honesty in information dissemination (0.23), engagement of trusted experts (0.19), production of targeted content (0.17), two-way interaction with audiences (0.15), institutional coherence (0.13), and utilization of modern technologies (0.13). Collectively, these components account for 78% of the variance in public trust, underscoring their critical role in the success of the national media's persuasive efforts in health crises. The high contribution of transparency and honesty reflects the audience's foremost expectation for transparent and accurate information from the media. Likewise, the substantial weight assigned to the engagement of trusted experts further highlights the importance of building trust through credible professional sources. Accordingly, media policymakers are advised to place particular emphasis on the highest-weighted strategies, and to enhance public trust and social participation through strengthened two-way interaction, improved institutional coordination, and the intelligent adoption of modern technologies. The findings demonstrate that a hybrid approach—anchored in informational honesty, expertise, and technology—constitutes the most effective model for persuasion and trust-building among audiences in times of crisis.

Figure 1 visually depicts the national media's persuasion pathway—from identifying capacities

and challenges, through designing strategies, to achieving desired outcomes. Developed on the basis of the study's integrated findings, the model is structured to clearly display the position of each core component (capacities, barriers, strategies, and outcomes) as well as the causal relationships among them. The purpose of this visual model is to facilitate understanding of the structure and underlying logic of the conceptual framework, and to help readers follow the key stages of the persuasion process more effectively. In addition, Figure 1 supports a clearer and more actionable explanation of how the research results transition from data to model, and ultimately to an operational plan, for both academic audiences and policy-makers.

Discussion and Conclusion

The present study was conducted with the aim of designing and presenting a localized strategic framework to enhance the persuasive capacity of Iran's national media during health crises, particularly the COVID-19 pandemic. This objective was formulated in response to a clear gap in indigenous research and the absence of effective media models in the country. The primary focus is on identifying and prioritizing factors that can both increase the effectiveness of media messages and contribute to strengthening public trust in crisis situations.

A systematic review of the literature revealed that most international studies—such as those by Maleki et al. (2021), Vijaykumar et al. (2021), and others—confirm the fundamental role of information transparency, honesty, the use of credible experts, and two-way engagement with the public as the most effective media persuasion strategies during health crises. Preliminary international studies have also emphasized the necessity of adapting strategies to each country's cultural and institutional contexts (24). In the present study, the findings likewise indicated that strategies such as transparency and honesty, expert participation, targeted content production, and active audience engagement exert the greatest influence on increasing public trust and enhancing media persuasion effectiveness—consistent with the experiences of countries like South Korea and Finland in managing the COVID-19 crisis.

The distinctive feature of the present study lies in its integration of a Grounded Theory (qualitative) approach with the Analytic Hierarchy Process (AHP) quantitative method for extracting,

weighting, and prioritizing strategies—an approach rarely employed in domestic and even international studies on Iran's national media. The model's explanation of 78% of variance in public trust further demonstrates the precision and reliability of the findings. Additionally, the study's emphasis on the indigenous and structural characteristics of national media—including institutional coherence—and its provision of practical recommendations for restructuring persuasion management and developing intelligent platforms highlight the research's innovative contribution.

Comparison with domestic studies, such as the findings of Yasamin et al. (2023), also confirms the necessity of simultaneously addressing both content and structural dimensions of persuasion in national media. However, the present study is distinguished by being the first to systematically and quantitatively evaluate the contribution of technology institutionalization and audience analysis in a structured manner.

Although this research offers substantial value-added contributions in both practical and theoretical dimensions, it faced certain limitations, including difficulties in accessing key experts and current international sources. Therefore, future studies are recommended to address these constraints and extend the proposed model to other crisis domains.

Ultimately, the strategic model proposed in this study—while aligned with current international literature—is tailored to the indigenous context of Iran's national media and can serve as a decision-making reference framework for mass media managers and crisis management authorities in strengthening public trust, enhancing participation, and improving the effectiveness of crisis communication.

Practical recommendations for enhancing national media persuasion

The study revealed that effective crisis persuasion necessitates an integrated combination of technological, managerial, and content-based strategies. Among the practical recommendations emerging from this research are the following:

Integrated Content Management System: Establish an intelligent platform for planning, producing, and analyzing content, with the capability to aggregate data from all media channels and generate analytical reports.

Specialized Content Production Team: Form a multidisciplinary group of communication and

social psychology experts, arrange monthly workshops, and develop an innovation-oriented idea bank.

Media Monitoring Center: Launch a dedicated unit for 24/7 monitoring of content and audience behavior, providing weekly analytical reports.

Content Quality Standards: Draft comprehensive criteria for content quality, including a style guide and an effectiveness-evaluation checklist.

Specialized Training Programs: Offer professional courses in persuasive writing and digital content production for managers and staff.

Inter-Organizational Collaboration: Sign memorandums of understanding with academic and executive institutions, and form joint working groups with non-governmental organizations.

*Media Campaigns***:** Produce short educational programs and organize interactive challenges in cooperation with credible influencers.

Infrastructure Enhancement: Upgrade studios, develop interactive applications, and adopt artificial intelligence tools for audience analysis.

Incentive System: Introduce annual awards for best content, implement performance-based payments, and provide financial support for employees' innovative ideas.

Regular Review Sessions: Hold analytical meetings with independent experts and audience representatives to continuously evaluate and improve content quality.

The systematic implementation of these practical recommendations can lay the groundwork for a fundamental transformation in the national media's persuasion system. By simultaneously deploying technological, managerial, and content-driven strategies—while upholding professional principles and national values—a dynamic, impactful, and audience-trusted media can be achieved. Such a transformation would not only enhance audience engagement during crises but also improve communication quality and strengthen social influence under normal conditions. The realization of such a program depends on the serious commitment of senior management, adequate resource allocation, active participation of all stakeholders, and continuous monitoring of results.

The results of this study demonstrate that structured and comprehensive implementation of the proposed strategies can increase the effectiveness of national media persuasion by up to 70% in similar crises. Furthermore, the success of this model depends on integrating qualitative approaches—which focus on human and organizational dimensions—with quantitative strategies that address technological and structural aspects. This model has not only proven instrumental in media management during the COVID-19 pandemic but also possesses the capability for application in confronting other health crises, and can significantly enhance the national media's role in building public trust and effectively managing social crises.

Compliance with Ethical Guidelines

All ethical principles have been considered in this article, and participants were informed of the purpose of the research and its implementation steps.

Author's Contributions

This article is based on Farzaneh Rahimi's PhD thesis entitled "National Media Strategies for Audience Persuasion in COVID-19 Pandemic" at Islamic Azad University of Isfahan. She was responsible for conducting the research, collecting, and analyzing the data; and the second and third authors, Ebrahimzadeh Dastjerdi and Hamidreza Hosseini Dana were responsible for the design, supervision, methodology and correspondence. However, Farzaneh Rahimi was responsible for editing the final manuscript submitted to the journal.

Conflict of Interests

The authors declare no conflict of interest.

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