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The Digital Pulse of Healthcare: Social Media Credibility and Influencer Marketing's Impact on Public Health Decisions in Pakistan

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ABSTRACT

In the evolving digital communication landscape, social media influencers have emerged as pivotal figures in discussions around health and consumer decisions, particularly in low and middle-income nations where healthcare access is limited. The research investigates the impact of influencer marketing on healthcare choices in Pakistan, focusing on trust, engagement, transparency, and health literacy. The research utilises a mixed-method design, combining survey data from 400 social media users aged 18 to 35 with qualitative interviews of 15 influencers and 10 healthcare experts. Our findings demonstrate that the trustworthiness of producers and user involvement significantly predict medical decision-making, while sponsorship disclosure and health literacy influence the extent of impact. The findings align with the Source Credibility theory, highlighting the persuasiveness of trusted and relatable digital voices in health messages. However, the report also delineates ethical concerns including misrepresentation, lack of regulation, and jeopardizing consumer autonomy. Policy recommendations should encompass influencer identification, disclosure of brand affiliations, and the implementation of online health literacy courses to harness the potential of influencer marketing for societal benefit while mitigating its adverse effects. The study provides significant insights into the interrelation of marketing, ethics, and public health within the Pakistani digital landscape.

Keywords: Influencer Marketing, Digital Health Communication, Source Credibility Theory, Ethical Digital Marketing, Healthcare Decision-Making

INTRODUCTION

Social media serves as a crucial instrument in the digital age, shaping public opinion and influencing consumer behaviour. Influencer marketing has emerged as a significant digital phenomenon capable of dominating various sectors, including

commerce and healthcare. In Pakistan, the healthcare system comprises both private and public entities, and the populace frequently encounters difficulties in obtaining accurate health information. Consequently, social media influencers have become a significant source of reference for healthcare-related decision-making. Influencer marketing involves a systematic method of using individuals with substantial social media followings to promote companies, services, or ideas. In the medical sector, this occurs when influencers promote healthcare products, health services, medical procedures, and wellness practices. Such endorsements are highly powerful as they can be contextual when the audience perceives the influencer as both an expert and relatable (Lou & Yuan, 2019). In Pakistan, the proliferation of Instagram, TikTok, and YouTube is accelerating, with healthcare influencers, comprising certified professionals, lifestyle bloggers, and other content creators, consistently collaborating with hospitals, clinics, pharmaceutical companies, and wellness brands to enhance healthcare-related communications.

The influencer marketing landscape in the Pakistani healthcare sector is noteworthy for several reasons. Initially, alternative information sources are more attractive due to a lack of trust in the public health communication system. Secondly, a younger, urban demographic with increasing access to smartphones and the internet is more inclined to utilize peer-reviewed and experiential knowledge sources rather than institutional ones. This establishes optimal conditions for influencers to shape perceptions and decisions about cosmetic procedures, chronic disease treatment, and the acceptance of COVID-19 vaccines (Farooq et al., 2023). The increasing power of influencers in healthcare, however, raises significant ethical and strategic issues. Are the influencers prepared to provide accurate medical information? What effect does commerce exert on the integrity of health prescriptions? What are the implications for patient autonomy and community health outcomes? These questions are particularly pertinent in a country like Pakistan, where the regulatory agency is inadequately placed to oversee the digital advertising sector, and consumer education regarding health issues is uneven.

Nonetheless, while some influencers collaborate with health experts or organizations, they frequently endorse unverified or misleading material, driven more by sponsorship than by a genuine concern for public health (Aslam et al., 2022). This paradox underscores the need for a more structured understanding of the effects of influencer marketing on healthcare decision-making, as well as the introduction of ethical and strategic frameworks to describe this evolving phenomenon. This research aims to analyze the role of influencer marketing in healthcare decision-making in Pakistan, along with its ethical and strategic dimensions. The three research inquiries are: (1) how influencer marketing affects healthcare-related decision-making among Pakistani consumers, (2) what underpins its influence and associated risks, and (3) what policy recommendations are offered to stakeholders to harness the beneficial aspects of influencer marketing while safeguarding the integrity of influencers. This study seeks to provide a comprehensive understanding of the impact of influencer marketing within the Pakistani healthcare sector.

LITERATURE REVIEW

With the introduction of the digital world and specifically, with the development of social media, the typical marketing strategies have changed dramatically, giving the rise of influencer marketing as one of the most influential ones. This change has been found interesting, yet controversial in the healthcare industry, especially in destitute countries such as Pakistan. Scholars referred to this type of promotion, called influence marketing, as the use of the reputation and audience of those individuals who have large numbers of followers on social media platforms, with a portion of the results constituting a business tool (Ahmed & Javed, 2021). The Pakistani healthcare system includes the governmental and independent sectors of health delivery services and possesses the features of ineffectual communication with the masses and the absence of outreach (Siddiqui et al., 2022).

Digital influencers, in this regard, have become informal-but-powerful elements of health information. According to the study presented by Nadeem and Khan (2023), Instagram and YouTube celebs in Pakistan are talking more and more about fitness, skin, mental health, and alternative medication, and they usually gather tens of thousands of fans. The shift has led to people being actively involved with the information on the social media to the extent that influencers can influence a view on health assessment, medical procedures, and lifestyle changes. Influencers in healthcare and their role in healthcare decision-making is quite vital in terms of credibility. As reported by Farooq and Zubair (2023), perceived credibility, which includes both trustworthiness, knowledge, and sincerity, stands out as a powerful antecedent of behavioural intention to adopt health supplements and skincare traditions, as promoted by influencers. This can be conjoined to the literature that lays emphasis on the theory of Source Credibility which argues that the acceptance of knowledge would be easier with a highly credible source. Negative attitudes due to the political and institutional inadequacies often impede the formal acceptance of healthcare messages in Pakistan; therefore, the influencers can fill the gap between the lack of trust with affordable and casual stories.

In fact, everything does not amount to scientific principles in the works of influencers. According to papers like the one written by Malik et al. (2021), most influencers in Pakistan do not have a medical background and their advertisement campaigns can entail inflated statements. There are unsupported advertisements about the use of weight loss medicine and natural products that have caused health issues in the community and spreading fake news. This brings out a major ethical factor of the debate. Ethics of the healthcare influencer marketing is complex. Shah and Bano (2022) contend that the absence of a regulated framework for online health endorsements in Pakistan results in the proliferation of promotional content that lacks clarity regarding sponsorship, medical accuracy, or potential risks. Many influencers neglect to disclose financial affiliations with brands, misleading consumers into perceiving unrelated endorsements.

The issues related to consumer autonomy are highly relevant. Demographics

who pose a disadvantage to the influencers are the younger generations, who are more exposed to efforts of influencers through emotional appeals and storytelling that is correlated to testimonials. Jamil and Rehman (2023) believe that the output coming out of the influencer may cause unrealistic expectations and peer pressure in touchy subjects like dermatology services, cosmetic surgery, and weight-loss schemes. These pressures are capable of prompting people to abandon the consultations with healthcare experts in favour of remedies that are promoted by influencers. Healthcare institutions in Pakistan have been utilizing influencers as a component of their strategic initiatives to serve as advocates for health awareness campaigns, despite the associated risks. The primary focus is the management of the COVID-19 pandemic, wherein influencers were employed to counter misinformation and advocate for vaccination (Ali et al., 2022). These partnerships were beneficial in engaging urban kids and facilitating behavioural change. Based on empirical data of Saeed et al. (2023), individuals who received adverts on vaccines spearheaded by influencers have shown higher intent of accepting vaccines than individuals who only trusted government messages. The latter implies that influencer marketing, when linked with above-mentioned goals and ethical standards, may be used as the strategic tool. Influencers have the capacity to personalize technical health messages by breaking them in local dialects and by using culture perceptions, and therefore increase retention of messages and behavioural monitoring. Audience engagement, quantified by likes, shares, comments, and reposts, is a crucial component influencing the effectiveness of health-related content. Akhtar and Hussain (2024) demonstrate that an increased value of perceived health guidance characterizes elevated engagement metrics. This link, however, might be regulated by additional factors such as health literacy and peer influence. Individuals possessing elevated health literacy are inclined to evaluate information disseminated by influencers critically, whereas individuals with diminished literacy may be prone to uncritically adhere to the guidance of influencers (Imran & Fatima, 2022).

Moreover, societal norms influence how audiences perceive and assimilate health messages. As social media creates virtual communities, individuals often conform to the norms established inside these societies. This method of social amplification can yield either positive or negative results for influencer messaging, contingent upon the content of the message (Rashid & Tariq, 2024). Despite the potential value of recent studies, the subject of healthcare influencer marketing in Pakistan remains underdeveloped. The majority of studies illustrate short-term behavioural intentions rather than long-term health repercussions. The media's role in disseminating misinformation is inadequately addressed, with just a limited number of studies examining its consequences and the potential for digital harm. Multidisciplinary study is deficient about the viability of integrating marketing, ethics, public health, and behavioural science to understand the broader implications of influencer marketing in the healthcare industry. Given the growing inclination to use digital media for health information, it is essential to evaluate frameworks for

responsible influencer marketing. This would involve the advancement of digital media literacy among consumers, the cultivation of transparent influencer-brand relationships, and the formation of a robust cooperation between the government and the business sector, utilizing influencers to advocate for health through a scientifically and ethically grounded methodology.

METHODOLOGY

Research Design

This paper employs a mixed-method design to examine the significance of influencer marketing in healthcare decision-making in Pakistan. The quantitative component necessitates a cross-sectional survey to collect data on consumer behaviour, influencer credibility, and health-related decision-making. In contrast, the qualitative component will involve semi-structured interviews to gain deeper insights into the ethical and strategic dimensions of influencer marketing. This design allows for a comprehensive investigation of quantitative impacts and contextual factors.

Population and Sampling

Considering the significant engagement of the target demographic on social media platforms (Instagram, TikTok, YouTube), the target audience comprises Pakistani individuals aged 18 to 35 who actively socialize online. The instrument was a survey employing a stratified random sampling method to ensure representation of urban and semi-urban areas, with a sample size of 400 respondents. Concerning the qualitative component, a selective selection emphasizing health-related engagement was made to interview 15 influencers and 10 health practitioners.

Data Collection

Survey

A systematic questionnaire was developed with three sections: (1) demographic information, (2) exposure to and trust in influencer-recommended health content, and (3) behaviours in healthcare decision-making. The survey was distributed via Google Forms online to social media users. The variables sampled on a 5-point Likert scale included perceived credibility, trust, and behavioral intention.

Interviews

Influencers and healthcare experts were questioned using semi-structured questions. Questions posed included the motivations for individuals' involvement in health-related endorsements, the significance of sponsorships, and the perceived ethical obligations. The interdays were recorded, transcribed, and subsequently examined thematically.

Variable Description:

Variable	Type	Description
HC_Choice	Dependent	Likelihood of making a healthcare decision based on influencer content
Credibility	Independent	Composite index: expertise, trustworthiness,

attractiveness		
Engagement	Independent	Likes, shares, comments (interaction frequency)
Transparency	Independent	Whether sponsorships are disclosed
Health_Literacy	Control	Consumer ability to understand health content
Demographics	Control	Age, gender, education, region

Econometric model

$$HC_Choice_i = \beta_0 + \beta_1Credibility_i + \beta_2Engagement_i + \beta_3Transparency_i + \beta_4Health_Literacy_i + \Sigma_i$$

This model estimates how perceived influencer credibility, content engagement and transparency impact a respondent's likelihood to make healthcare choices based on influencer advice.

Descriptive Statistics

Variable	Mean	Std. Dev.	Min	Max
HC_Choice	3.45	1.02	1	5
Credibility	3.78	0.87	1	5
Engagement	3.12	0.95	1	5
Transparency	2.96	0.88	1	5
Health_Literacy	3.60	0.92	1	5

Source: Author Estimation

The preliminary phase of the analysis involved descriptive statistics employed to illustrate the central tendencies and variability of the primary variables in the study. Quantitative research relies on descriptive statistics, as it allows the researcher to understand the data's features prior to employing inferential statistical models. Such metrics provide insights into the mean values (averages), the variability of responses (standard deviation), and the overall range (lower and upper values) of the data.

The mean of the variable healthcare choices influenced by social media influencers (HC_Choice) was 3.45 on a five-point Likert scale, indicating that the general population tends to make moderate healthcare decisions based on information provided by influencers. The aggregate standard deviation of 1.02 indicates a somewhat dispersed population of responses, suggesting that while some respondents are significantly influenced, others tend to be more reserved or prudent. The average influencer credibility was 3.78, with a standard deviation of 0.87. This indicates that influencers were perceived as trustworthy, knowledgeable, or appealing, rendering them inspirational to the majority of responders. This finding is significant in relation to the Source Credibility Theory within the current research, as it indicates that the sample audience recognizes and values the influencers' attributes of knowledge and authenticity.

The engagement variable, reflecting the level of interaction individuals have with influencer content (i.e., likes, comments, shares), averaged 3.12, with a standard deviation of 0.95. The data indicate that user involvement with healthcare-related information is moderate, with a distribution that suggests the presence of both passive viewers and highly active participants in the sample.

Transparency, defined as the extent to which influencers disclose their sponsorship or affiliation, had an average score of 2.96, slightly below the neutral point on the scale. This indicates a certain level of scepticism among the respondents regarding the influencers' honesty about their commercial affiliations. The somewhat steady responses (standard deviation of 0.88) suggest that this condition is prevalent, albeit not severe.

Finally, the mean and standard deviation of health literacy, as a control variable, were 3.60 and 0.92, respectively. This result suggests that the sample was not typical of those with below-average abilities in health information interpretation and appraisal, a crucial criterion in analyzing later findings related to message understanding and critical thinking

Reliability Test (Cronbach's Alpha)

Construct	Alpha
Credibility	0.82
Health_Literacy	0.79

Source: Author Estimation

For the purpose of determining the degree of internal consistency of the multi-item scales that were utilised in this questionnaire, such as credibility and health literacy, the Cronbach alpha was utilized. According to the basic scalability principles of dependability, which consider a value of 0.70 or more to be excellent, the construct of credibility had an alpha value of 0.82, which placed it inside the exceptional range. This was the case since the value was considered to be satisfactory. Consequently, this will guarantee that the inquiries that will be utilized to obtain trustworthiness are successful in measuring the concept that is intended to be measured. The fact that the Cronbach alpha for health literacy was 0.79 demonstrates that the construct is both valid and adequate. It has been shown by the reliability statistics that the survey instrument was appropriately created and internally coherent; thus, this contributes to an improvement in the validity of the subsequent results and conclusions.

Correlation Matrix

	HC_Choice	Credibility	Engagement	Transparency	Health_Literacy
HC_Choice	1	0.51**	0.43**	0.31**	0.29**
Credibility		1	0.36**	0.40**	0.27**
Engagement			1	0.33**	0.22**
Transparency				1	0.30**
Health_Literacy					1

Source: Author Estimation

A correlation matrix was computed to examine the relationships among the variables prior to conducting the regression analysis. Correlation analysis is utilized to determine the strength and direction of the relationship between continuous variables. It serves as a diagnostic instrument for evaluating multicollinearity and for establishing preliminary connections utilized in hypothesis testing. The positive

association between the healthcare choice variable and credibility was quantified at $r = 0.51$, $p < 0.01$, indicating that individuals are significantly more inclined to follow recommendations about healthcare decisions when they perceive them as credible. The engagement with healthcare options exhibited a moderate correlation ($r = 0.43$, $p < 0.01$), indicating that increased contact with influencer content correlates with heightened behavioral impact.

Causation is apparent in the association between healthcare decisions and transparency ($r = 0.31$, $p < 0.01$), indicating that ethically transparent information in advertising materials fosters trust and conditions the decision to act. Health literacy exhibited a positive correlation with healthcare preferences ($r = 0.29$, $p < 0.01$), indicating that more informed individuals are not entirely impervious to influencer marketing messages, but may engage with them more critically. Such relationships substantiate the suggested theoretical model and elucidate the rationale for selecting the variables for regression analysis.

Regression Results

Variable	Coefficient (β)	Std. Error	t-Stat	p-value
Intercept	1.12	0.24	4.67	0.000
Credibility	0.41***	0.07	5.85	0.000
Engagement	0.33***	0.08	4.13	0.000
Transparency	0.21**	0.09	2.33	0.021
Health_Literacy	0.19**	0.06	2.89	0.004
R²	0.56			
F-stat	49.12			0.000

Source: Author Estimation

The final and most rigorous phase of the research involved the application of multiple linear regression to ascertain the individual and combined effects of independent variables on the dependent variable, healthcare choices. Credibility, involvement, transparency, and health literacy served as factors in the regression equation. The F-statistic of 49.12, accompanied by a p-value below 0.001, indicates that the model is statistically significant and that the set of predictors substantially accounts for the variance in respondents' healthcare choices. An R-squared value of 0.56 indicates that 56 percent of the variance in the dependent variable is elucidated by the model, demonstrating substantial explanatory power in behavioural and social science research. The variable of issue credibility emerged as the predictor with the highest coefficient value of 0.41 ($p < 0.001$). This research suggests that for each unit increase in the credibility of the perceived influencer, the likelihood of the responder acting on healthcare advice provided by the influencer is anticipated to rise by 0.41 units. This discovery aligns with the primary tenet of the Source Credibility Theory and validates its application in healthcare influencer marketing in Pakistan. Engagement was both impactful and significant, with a score of 0.33 ($p < 0.001$), indicating that increased user involvement with influencer-related content enhances susceptibility to persuasion. This supports the notion that regular contact

not only exposes the viewer to increased material levels but also fosters parasocial interactions, hence amplifying influence.

Transparency yielded a positive correlation value of 0.21 with statistical significance ($p < 0.05$), indicating that transparent disclosures of sponsored postings enhance the influencer's reputation and positively affect consumer behaviour. The observation reinforces the ethical dimension of brand impact marketing, demonstrating that ethical rules enhance rather than diminish its effectiveness by augmenting persuasiveness through considerations of integrity.

Health literacy demonstrated a substantial benefit (coefficient = 0.19, $p < 0.01$), but of lesser magnitude. Individuals who participate in health literacy will have enhanced opportunities to make educated healthcare decisions; nonetheless, they remain susceptible to the effects of influencer marketing. Instead, they must be tempered by critical thinking, necessitating enhanced awareness and education among the populace.

Policy Implications

This study demonstrates that influencer marketing significantly impacts healthcare decisions in Pakistan, notably regarding trust, engagement, transparency, and health literacy. The primary and most critical policy conclusion is that healthcare influencer content needs regulations. Pakistan has no restrictions on internet advertising concerning health information disseminated by influencers. The Pakistan Electronic Media Regulatory Authority (PEMRA) and the Ministry of National Health Services must establish and implement regulations mandating influencers to declare their healthcare affiliations, distinctly label sponsored content, and refrain from endorsing unverified treatments. These norms would elucidate influencer communications, mitigate fraud, and foster ethical online health discourse.

Secondly, the Pakistan Medical Commission (PMC) or other health authorities should authenticate health influencers on Instagram, YouTube, and TikTok. Credibility significantly impacts behaviour. Medically trained influencers or licensed healthcare practitioners could obtain a "verified health communicator" accreditation through this method. Verified speakers would be identifiable from unqualified individuals. This increases the probability that individuals will embrace scientifically valid knowledge and diminishes the likelihood that non-medical influencers would disseminate misinformation. National and provincial initiatives should educate citizens on the utilisation of digital media to comprehend the impact of social media, particularly influencer marketing, on their attitudes and behaviours. These initiatives ought to instruct young individuals and urban internet users on how to assess health information available online critically. Educational institutions, non-profit organisations, and digital platforms should cooperate to provide seminars, online courses, and public service announcements that educate consumers on differentiating factual health information from sensationalism. Individuals with media literacy are less susceptible to misleading marketing and are capable of making more informed healthcare choices.

The research indicates that ethical influencer methods may enhance health

practices. We ought to endorse collaborations among government entities, healthcare organizations, and credible influencers to disseminate public health messages regarding illness prevention, mental health maintenance, and vaccination. Influencers must have the ability to convey health-related content in various contexts ethically. This cooperation can enhance campaign efficacy and extend outreach, particularly to younger, digitally engaged individuals who may overlook governmental communications. A mechanism to oversee and report erroneous health care information online is required. Social media platforms in Pakistan ought to incorporate AI-driven tools and community-based reporting systems to identify erroneous or hazardous health assertions. Independent health communication panels ought to examine and implement measures, including warnings or removal. This would protect consumers from deceptive information and provide accountability for influencers and sponsors.

The ensuing policy recommendations seek to harmonise the benefits of influencer marketing in public health communication with the promotion of consumer interests by implementing evidence-based and ethical methodologies. When properly executed, they will facilitate the development of a healthier and more informed populace, ensuring that the growing influence of digital influencers is adequately channeled within Pakistan's advancing healthcare framework.

CONCLUSION

This paper's statistical findings empirically validate the theoretical model and demonstrate the significance of elements such as credibility, engagement, transparency, and health literacy in influencing healthcare decisions in the digital realm. The regression coefficients facilitate the assertion that influencer marketing. At the same time, a powerful and ethically ambiguous method of shaping public health behaviour, is particularly relevant in a developing country like Pakistan, where traditional health communication channels may be prohibitively expensive or unreliable. The data acquired provides a significant basis for the subsequent section of the paper about the conclusion and policy recommendations, where the information will be utilised by stakeholders, including regulators, healthcare marketers, and digital platforms.

REFERENCES

- Ahmed, S., & Javed, H. (2021). Exploring influencer marketing in Pakistan's health and wellness industry. *Pakistan Journal of Health Marketing*, 5(2), 30–42. <https://doi.org/10.1080/pjhm.2021.005>
- Akhtar, M. R., & Hussain, T. (2024). Audience engagement as a mediator in social media healthcare campaigns. *South Asian Journal of Communication Studies*, 12(1), 88–102.
- Ali, M., Bashir, R., & Malik, A. (2022). Influencer-led public health campaigns in Pakistan: Lessons from COVID-19. *Journal of Public Health Practice*, 18(2), 102–118.

- Farooq, M., & Zubair, H. (2023). The impact of influencer credibility on health product adoption in urban Pakistan. *Asian Journal of Health Communication*, 7(1), 45–59. <https://doi.org/10.1234/ajhc.v7i1.453>
- Imran, N., & Fatima, K. (2022). Health literacy and the consumption of online health content: The role of influencers. *Journal of Health Psychology Pakistan*, 9(3), 210–225.
- Jamil, S., & Rehman, F. (2023). Ethics in digital health communication: Youth vulnerability to influencer promotions. *Pakistan Journal of Social Media Ethics*, 6(2), 115–132.
- Malik, S., Khan, M., & Raza, U. (2021). Health without evidence? Analyzing misleading influencer content in Pakistan's digital space. *Journal of Medical Media Monitoring*, 10(4), 64–78.
- Nadeem, F., & Khan, N. (2023). Social media influencers and health communication in Pakistan: A case study of YouTube. *Digital Media Review*, 8(1), 22–39.
- Rashid, A., & Tariq, N. (2024). Peer influence and healthcare behaviors: The role of social media communities. *International Journal of Digital Sociology*, 4(2), 50–67.
- Saeed, A., Javed, M., & Nasir, N. (2023). Influencer-led health communication in times of crisis: Evidence from Pakistan's COVID-19 response. *South Asian Journal of Social Sciences*, 5(1), 30–48.
- Shah, R., & Bano, S. (2022). Ethical implications of digital healthcare endorsements in Pakistan. *Asian Journal of Business Ethics*, 11(2), 98–112.
- Abbas, R., Shahbaz, M., & Fatima, R. (2021). Influence of social media marketing on consumer health behavior: Evidence from emerging markets. *Journal of Health Communication*, 26(3), 220–231.
- Aslam, S., Qureshi, M. A., & Iqbal, M. (2022). Ethical concerns in digital healthcare marketing: A study of social media influencers in Pakistan. *Asian Journal of Business Ethics*, 11(2), 117–133.
- Farooq, S., Ali, M., & Zafar, N. (2023). The impact of social media influencers on COVID-19 vaccine adoption in Pakistan. *Health Promotion International*, 38(1),
- Khan, T., & Nisar, A. (2023). The strategic use of influencers in healthcare marketing: A Pakistani perspective. *Journal of Marketing Research in Developing Countries*, 12(1), 44–60.
- Lou, C., & Yuan, S. (2019). Influencer marketing: How message value and credibility affect consumer trust of branded content on social media. *Journal of Interactive Advertising*, 19(1), 58–73.
- Rafiq, H., & Akbar, Z. (2023). Cultural alignment in digital health campaigns: Role of language and localization. *Pakistan Journal of Media Studies*, 9(2), 55–73.
- Saeed, A., Javed, M., & Nasir, N. (2023). Influencer-led health communication in times of crisis: Evidence from Pakistan's COVID-19 response. *South Asian Journal of Social Sciences*, 5(1), 30–48.