Global Social Sciences Review (GSSR)
URL: http://dx.doi.org/10.31703/gssr.2021(VI-II).12

DOI: 10.31703/gssr.2021(VI-II).12

Impact of Technology on Traditional Journalism in Pakistan

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Abstract *Technology has influenced every aspect of life. Journalism and communication industries have also widely adapted to it. Traditional journalism has been revolutionized altogether with the implication of technology. From news production to news distribution, everything has become abrupt and unobstructed. This study focuses on the impact of technology on traditional journalism in Pakistan. An in-depth interview method has been employed as a research method. Providing insight into the issue, main research objectives include (i) analyze the scope of technology in Pakistani Journalism, (ii) exploring technological literacy in Pakistani journalism and (iii) seeing the impact of technology on the production and dissemination of journalistic content in Pakistan. This study concluded that technology had altered the overall landscape of journalism in Pakistan. It has assisted journalistic practices in a considerably effective way. Although there are constructive effects of mobile journalism, the concerns over authenticity and credibility of the media content have also been raised in Pakistan.*

- Vol. VI, No. II (Spring 2021)
- Pages: 112 – 120
- p- ISSN: 2520-0348
- e-ISSN: 2616-793X
- ISSN-L: 2520-0348

Key Words: Technology, Traditional Journalism, Journalists, Authenticity of News

Introduction

Technological revolutions have influenced all aspects of human life. Newsgathering and the journalistic processes also bear no exceptions. Technology has been serving media through different visual, audio and digital innovations. These modifications have altered the thinking and performance of journalists altogether (Lasora, Lewis, & Holton, 2012).

Similarly, the emergence of advanced media technologies has created the possibilities for the creation, modification and dissemination of media content through relatively modest means. Therefore the whole practice of journalism has been altered in a well-constructed way (Gambarato & Alzamora, 2018).

Since the familiarization of information technology, it has brought many changes in almost every field of life and profession. The course of information handling processes has also been modified. Media organizations have adopted technology-based systems for their functioning. However, where this new technical information and communication strategies have brought different opportunities, certain challenges to traditional media have also occurred. Today most of the information is computerized, modifying the communication process, its dissemination and perception by the audiences (Zia, 2003).

A recently huge number of users have shifted to new sources to seek information; therefore, mass media have grabbed the attention of audiences by preferring online services. By utilizing this unique property offered by the internet, media practitioners like reporters, journalists and editors find innovative sources of information. Reporters use the internet as means of mass information like news, press release, stories, interviews as well as entertainment to collect and disseminate (Hussain & Iqba, 2013).

Technologies may vary with regards to their impact, while some have more influence than others (Rajani & Chandio, 2004). Therefore new media technologies have exclusively influenced and modified communication processes and

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Citation: Ali, F., Ghaznavi, Q. u. Z., & Khan, S. (2021). Impact of Technology on Traditional Journalism in Pakistan. *Global Social Sciences Review, VI*(II), 112-120. https://doi.org/10.31703/gssr.2021(VI-II).12

social interaction—the transformed ways of interaction and communication separate new media from traditional media (USIP, 2011).

Similarly, modern technologies, for example, mobile phones with different features like camera, video and audio recording, internet connectivity and messaging service, have led to the growth of mobile augmented journalism all around the world (Westlund, 2013).

The infiltration of mobile journalism has reformed the infrastructure of journalism in Pakistan. Consequently, for being part mobile-oriented media structure, professional journalists have become well-furnished and attached with such technologies that assist them in the rapid production and distribution of media content in different areas of the country. Although there are constructive effects of mobile journalism, concerns over the authenticity and credibility of the media content have also been raised in Pakistan (Umair, 2016).

Similarly, mobile technology is reshaping journalistic practices by introducing modern means of content gathering and news production. Today technology assists journalists and reporters to give a live transmission of a happening without any broadcast network (Jokela, Heliva, & Tina, 2009). Apparently, mobile technologies have transformed the structure of media organizations with unique ways to communicate with consumers and other journalists (Nicole, 2014).

The advent of technology has altered traditional journalism altogether. Electronic dissemination of information has greatly fascinated the editors and publishers of newspapers and magazines as well as other printed content. Distribution of information through computer-based technologies has been found with relatively more benefits on both sides, producers and consumers, compared with traditional means (Khattak & Nasir, 2011).

E-journalism is not new to western societies but modern to developing countries like Pakistan. Despite the larger number of internet consumers, the country lags behind in producing online content and grabbing a considerable audience in this regard. On the other hand, in developed countries like in west, newspapers and magazines are published online and get more appreciation than their traditional print forms. Pakistan has yet to enjoy the advantages of online journalism and web-based information eruption. A limited number of online newspapers, news agencies and other related websites are available in Pakistan (Khattak & Nasir, 2011).

Nowadays, the explosion of technology and digitalization has led to a more sophisticated form of media. It has empowered journalism and changed information production and consumptions processes. The fastness of the digitalized version of journalistic procedures has reduced to the remarkable extent between the happening of an event and its communication to the masses (Raza & Parvez, 2019).

In Pakistan, dynamic changes occurred in journalism with the beginning of 3G and 4G. Digitalization has influenced professional values, news values, work efficiency, working circumstances and management. Also, it is only because of technology that faster news dissemination, easier access to information sources and active interaction with the students have been possible. Yet, it does hardly nurtures any better form of journalism; technological improvements have led to the formation of a more competitive environment. Media organizations have been driven to accelerate their operational performance for the maximum quantity of content, undermining quality journalism. The media outlets have, in their desperation to become a source of public attention, try to ensure profitable journalism at all costs. Similarly, journalists intend to practice at a faster pace so that people can have access to a variety of information and news sources (Siddique, 2020).

One of the most important advantages of technological advancement in journalism is growing space for freedom of expression, especially for less outspoken groups in society like minorities of all sorts. Marginalized communities have been given opportunities to raise their voices more than ever before. However, traditional journalism fails to moderate its bias towards sensationalism, a dramatization of the marginalized groups and other sensitive issues. More space has also been generated for political expression than in traditional media practices. Elections campaigns are run online to reach a maximum number of supporters for votes. It has resulted in vivacious political disputes with disrupted sort of overall political representation (Siddique, 2020).

There are certain negative perceptions about Pakistani journalism in the world. It is held internationally that Pakistan is not a liberal

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country, and Pakistani journalism does not count for a free press as compared to other countries (Jamil, 2017).

Similarly, international media watchdog *Reporters Without Borders* also supported the notion of lack of press freedom in Pakistan. It reported that mediated content in Pakistan undergoes regular and strict censorship in the hands of the Pakistan Media Regulatory Authority, government policies and military or intelligence organizations (Reporters Without Borders, 2019).

Research Objectives

Following research objectives are to be focused on in this study:

- To analyze the scope of technology in Pakistani Journalism
- To explore technological literacy among Pakistani journalists
- To view the impact of technology on the production and dissemination of journalistic content in Pakistan

Research Questions

This study focuses on the following research questions:

RQ1: What is the impact of the integration of technology in journalistic practices in Pakistan?

RQ2: How does the integration of technology affect professional Journalism in Pakistan?

RQ3: Is there sufficient technological literacy in Pakistan with regards to journalistic practices?

Scope of the Study

A technological explosion has not spared a single aspect in life untouched by its spell. The information and communication industry has also been influenced by technology in the same manner. Advanced countries have successfully adopted technological revolution constructively in almost every field of life. However, developing countries like Pakistan still lags behind in this regard. Different studies have been conducted to explore the impact of technology and digitalization in journalism, but a study gap exists in terms of qualitative insight into the impact of technology on traditional journalism in Pakistan. This study intends to provide a qualitative approach examining online journalistic practices in Pakistan. The country has a large number of technology consumers with ineffective use. This study explores technology adoption as a replacement for traditional journalism in Pakistan. Moreover, it also provides an insight into the way online journalism has reshaped news production, dissemination as well as the perception of information.

Theoretical Framework

For this research, Media Convergence theory serves as the basic theoretical foundation.

Media Convergence Theory

Media convergence is a theory of communication that focuses on the combination of different perspectives of mass media with technology (Kalamar, 2016). In communication and media studies, this theory attempts to remove barriers between media and telecommunication. Similarly, this theory also points out the union of mechanisms and methods of news production and dissemination with technology and other computer-assisted functions (Grant & Wilkinson, 2009). Moreover, media convergence can also be referred to as the blend of technological tools and traditional ways of communication like print, television online media apparatus (Singer, 2004). This concept also posits that media convergence is far beyond technological reforms, as it not merely focus on the integration of traditional media and technology but also modified the relationship between prevalent media industries, the type of media content and the audiences (Jenkins, 2006).

Since it has been well recognized that media convergence is all about the combination of different features present in the media industry, these components can be technology, economy (media ownership), media content, and the operation as well as the function of media. Therefore current study focuses on the fusion of technological and traditional means of news production and distribution in Pakistani journalism. Despite poor adaptation to technology, Pakistani journalism has strongly been affected in terms of its news production techniques, news distribution and perception of the audiences.

Literature Review

Among South Asian countries, Pakistani media is

relatively effervescent, while its operation is governed by "*authoritarianism*". However, self-regulating media operates under Articles 19 and 19(A) of the constitution (1973), protecting rights of freedom of expression and access to information. Despite these provisions in the constitution government other ruling bodies utilize different instruments to subdue the power of speech of media. It is achieved through constitutional exploitations, economic benefits, lucrative incentives and manipulation of media law. Moreover, journalists are censored, confined and oppressed by the government for criticizing its performance. Therefore there always exists a conflict between media and government (Jamil, 2017).

Similarly, print media in Pakistan has also been considered pluralistic in nature. It represents prevailing divisions in society based on ethnicity, language and class. In Pakistan, print media comprise both Urdu and English language newspapers. Urdu press is more popular in Pakistan, making it the largest circulating newspaper in the country. Urdu print media is widely appreciated with the maximum number of readership among the members of the middle class of the society. There exist both liberal and conservative stances in Urdu newspapers. However, on the other hand, English language newspapers enjoy relatively low readership when compared with Urdu language newspapers (Khan & Aziz, 2017).

The difference in readership between Urdu and English language newspapers is due to the multilingual society of Pakistan. The Urdu language is a widely spoken language in-country, while the majority of the people are less familiar with English. Despite the limited scope of the English press among common people, elites, politicians, bureaucracy, policymakers are greatly influenced by its international scope. Similarly, the English press also serves as a mirror of Pakistani media and society for international observers (Khan & Aziz, 2017).

During the last two decades, the integration of technology in information and communication in developing countries has been remarkable. This abrupt development has influenced every aspect of life. Consequently, it is highly acknowledged that recent technological advancement will continue to grow and affect the way media produce and propagate information to audiences as well as the way of journalist practices across the world (Ireton & Posetti, 2018).

According to the statistics of the UN Global ICT index (2017), Pakistan is ranked at 148th position (International Telecommunication Union , 2017). Similarly, according to Pakistan Telecommunication Authority's calculations (2018), there are more than 55 million 3G and 4G users in Pakistan and about 150 mobile consumers. The number is alarming despite the country's very low progress towards ICT integration (Yousufzai, 2018) and there are about 45 million active internet consumers in Pakistan (Farooq, 2019).

Pakistan has witnessed an ever-increasing trend of mobile phone usage in the routine work of journalists. Along with benefits, the credibility and authenticity of news and media content are compromised (Umair, 2016).

To construct a perception about the world around them, people rely upon second-hand information. In contemporary societies, his second-hand source is media. Therefore people dependence has empowered media to serve as "agenda setters" for the masses (Raza & Parvez, 2019).

Information technology has affected journalism as a whole. It has altered the way people process and receives this information. Similarly, it has also affected the way journalists perform certain functions related to their job (Hussain & Iqba, 2013).

A study describes that the knowledge of technology results in its adoption in daily life. As for as, the response of people has formed then media consumers and general members of the community tend to integrate modern technologies into the society. Therefore if the media outlets intend to comply with basic requisites of journalism, they are forced by the peoples' interest to take help from technology. For this purpose, with proper training and a set of instructions, media practitioners successfully use technology to improve the efficiency of media performance. However, at the same time, journalists are more likely to exploit technology to meet personal as well as organizational gains (Srinivas, 2007).

The incorporation of digital media and technologies in journalism could be better utilized with proper technological and media literacy. It can help to provide better insight into the issue and people's perceptions (Solomon, 2013).

Similarly, media serves as a major source of

reshaping perceptions of the people. Consumers receive information through fast-growing technological tools, find it interesting and consciously or unconsciously become a carrier of that information. Consequently, they transmit this information to others Solomon (Solomon, 2013).

The technological shift has led to simplified ways of news production and assisted faster dissemination of news and other media content (Deuze, 2004). The assembly of different technical facilities into media has led to a transformed way of communication and information industry for mass audiences. The technological features in this regard are analyzed with different perspectives (Dominick, 2011).

Therefore media practitioners and journalists have altered their traditional ways of news gathering and distribution to the target audience. For example, in photojournalism, journalists can capture, record, edit and send pictures to the relevant editing companies using their mobile phones. Now they have been freed from the struggle to process their shoot into dark developing and printing rooms. Rather they can take help from digital machoism to do so. Nowadays, it has become possible for the media houses to reach and later distribute a particular story even before a reporter reaches back to the newsroom from the location of the happening. Similarly, online newspapers break a particular story before it reaches traditional print newspapers (Jenkins, 2006).

Additionally, technology and digitalization have led digital journalism resulting in reformed ways of the overall media landscape. The faster speed of news production and distribution has decreased the distance between media, i.e. the source of information and receptor of information, i.e. audience. Similarly, speedy news gathering and reach to the target audience has decreased the media operation costs and decreasing newspaper circulation as well as sales and purchases (Garcia, 2006).

After a review of the related literature, it is revealed that technology has striking effects on the overall landscape of journalism around the world. In Pakistan, such adaptations have brought similar impacts but with less effectiveness. The country suffers from insufficient access and literacy to technology. Therefore the current study explores the impact of technology on the traditional journalistic practices in developing countries like Pakistan.

Methodology

This study employed a qualitative research method to give a better insight into the issue at hand. Using in-depth interviews as a research method has assisted in clarifying the findings with more validity. Similarly, purposive sampling techniques have been adopted to reach out to ten male and female professional journalists working in Pakistan's leading media organizations to conduct interviews. This study implied thematic analysis to analyze the data collected from in-depth interviews.

Results and Discussion

Data collected from interviews have been exposed to thematic analysis based on four main themes 1) integration of technology in traditional journalistic practices in Pakistan, 2) use of technology in news production and distribution, 3) technological literacy among the journalists in Pakistan, 4) comparison between traditional journalistic practices and E-Journalism.

Integration of Technology in Traditional Journalistic Practices in Pakistan

Journalism has undergone several changes over the period of time. Most recently technological revolution has highly influenced journalism. Developed countries, with maximum access to the most advanced technologies, have shifted their media functions from traditional to digital ones. A similar trend, but at a lower rate, is being pursued in developing countries like Pakistan. Media firms are shifting from traditional to modern means of communication. As referred in the related literature, media convergence has been widely accepted by the major global media giants, for example, BBC, Al Jazeera and CNN. Similarly, technological integration has also revolutionized the overall landscape of Pakistani journalism. For example, the majority of the interview respondents viewed that digital and technological incorporation has transformed news production, distribution as well reception of the media content by the audiences.

The findings of the interview further suggest that the growth of modern communication and media infrastructure has played a critical part to reshape traditional journalism in terms of means

of news production and dissemination to the target audience. In Pakistan, dynamic changes occurred in journalism with the beginning of 3G and 4G. Digitalization has influenced professional values, news values, work efficiency, working circumstances and management. The respondents believed that traditional media uses complex procedures and heavy equipment for covering an event while modern use of mobile technology has assisted in different ways. It helped with easy movement, speedy news production, fast distribution of information and low budget. Similarly, the high tendency of live transmission as breaking news culture has also been highly supported by the modern technologies of journalism.

Apart from these reasons, Pakistani journalists also pointed out that the incorporation of technological aids has ensured access to remote and conflict-prone areas. This ability of technology has encouraged the use of mobile journalism. Today journalists widely depend upon technology for their professional performance. The respondents also revealed that the use of digital ways had reduced the cost and time duration of news production and dissemination. This notion supports the literature on media convergence (Grant & Wilkinson, 2009).

Similarly, an interviewee respondent in these words, "I don't completely agree with the notion that integration of ICT's and augmented use of mobile technology has completely altered the landscape of journalism in Pakistan. However, there have some prominent changes that occurred in newsgathering, news production and dissemination. Journalists engaged with high profile media organizations are more adapted to technology than traditional ways, and they are no more dependent on traditional heavy equipment of reporting."

The journalists also believed that technology had brought some negative impacts on journalistic practices. For example, heavy reliance on social media has challenged the credibility and authenticity of the news and information.

Use of Technology in News Production, Distribution and Reception

The journalists revealed that the use of technology has entirely altered the ways of news production and distribution. In the near past, news reporting used to happen at the location of the event, and the journalists had to be physically present there. Then they had to go back to the studio and write the news story and process it for publication or printing through the editor. But with the introduction of modern technology, one can have easy access to any event. Through such adaptations cost of news, the gathering has been largely reduced. Therefore media organizations engage with such people who can deliver important information through their social media accounts.

Similarly, the personal social media accounts of journalists and official media accounts of different media organizations have changed the status of the news distribution process. People get information by visiting these social media sites without waiting for the coverage of mainstream media. Moreover, mobile phones are also doing a great job for journalists. Participants of the interview also opined that media organization are reducing their regular staff and connecting with freelancers for online journalistic functions, who have the ability of multi-tasking from newsgathering to publication then dissemination using their mobile phones. Many journalists expressed their insecurity about job stability and salaries. They also believed that due to the present situation, TV journalists are more vulnerable than those engaged in newspaper organizations.

One of the participant journalists stated, "It is our economic murder". Media organizations are heavily relying on modern technologies for news gathering and distribution. These are negative consequences of technology. Journalists equipped with technologies like mobile phones have modified the entire landscape of journalism. More importantly, the incorporation of mobile phones furnished with multi-function features along with internet access has assisted tough journalistic practices. Visuals, images, videos and news stories are produced directly from the conflict zones like Baluchistan and Fata, where otherwise coverage is a hard task.

Technological Literacy Among the Journalists in Pakistan

Apart from gains of technological incorporation into journalism, certain adversities also took place. For example, the authenticity of news and

information has been challenged. The majority of the interviewees unanimously agreed that fast-forwarding journalistic practices due to technology have often resulted in misinformation or fake news. Speedy and abundant news production processes have disabled fact-checking concepts in journalism. Journalists gave the example of international media giants like The New York Times in this regard, which has employed effective procedures to cope with such inconveniences. It has formulated training programs for journalists about technological use so that unauthentic news can be filtered and only verified news could pass to the audiences.

The problem arises when journalists don't give much time to verify media content or news before publishing it. It is immediately aired to win the competition of breaking news culture. Findings of the interview revealed that Pakistani journalists are not trained to use technology without harming the authenticity of the news as well media organization. Almost every single journalist has created his/her own social media accounts or YouTube channel to promote their personal stance without any valid source of information. One respondent journalist opined, "they have become media themselves". News is no more confined to media channels only; rather it has become a commodity of journalists assisted by technology.

Proper literacy of technology is required for the journalists in Pakistan so that objections like unverified content can be dealt with with great effectiveness. In Pakistan, the proliferation of media networks and the contest for ratings has engaged these networks to encourage exaggeration and breaking news culture without considering news authenticity (Umair, 2016). Therefore most of the participants of the interview believed that there must be trainings endorsed by the government as well as media organizations to teach proper use of technology when reporting a particular event or news story.

Comparison between Traditional Journalistic Practices and E-Journalism

When asked about the comparison between traditional and technological journalistic practices, some of the respondents highly rated traditional journalism with regards to authenticity and quality journalism. On the other, they attributed technological journalism as quick and time-saving but also called it prone to unverified news. While others believed that journalism had reached its climax with technological assistance. Since technology is the need of time with proper adaption, it can be best utilized to improve the standard of journalism in Pakistan. Like developed countries with proper access to the internet and other technologies and knowledge of effective use can improve the standards to journalism in Pakistan.

Conclusion

The incorporation of technology has reformed the global landscape of journalism. It has changed newsgathering, production and distribution processes. Moreover, it has ensured speedy news production and reach to larger audiences. These modifications in journalism have altered traditional journalism infrastructure. The findings of the interview conclude that the integration of technology into journalism has revolutionized journalistic practices in Pakistan. The shift from traditional to online media operations has reduced journalistic labour in challenging circumstances. The manufacturing of news has become easier and fast. News reaches the audiences as soon as it happens, unlike traditional journalism, where people had to wait for the information about the happenings around them.

Despite these favours ensured by technology, certain adversities have also emerged. The authenticity of news and information has become questionable. News verification, like in traditional journalism, has not been the practice of modern technology-based media. News is published and disseminated as soon as it is produced without any prior fact checks or verification. Participants of the interview suggested that proper technological literacy should be ensured to cope with these circumstances. Both government and media organizations are required to formulate such strategies to technologically educate journalists to ensure the incorporation of technology into journalism with greater effectiveness without losing credibility.

References

Deuze, M. (2004). What is multimedia journalism. *Journalism Studies, 5(2)*, 139-152.

Dominick, J. R. (2011). The dynamics of mass communication: Media in transition. New York : McGraw-Hill Companies.

Farooq, M. (2019). Active social media users in Pakistan grows by 5,7%: Report. http://digitalrightsmonitor.pk/active-social-mediausers-in-pakistan-grow-by-5-7-report/

Gambarato, R., & Alzamora, G. (2018). Exploring transmedia journalism in the digital age. Hershey: IG Global .

Garcia, A. (2006). Broadcast journalism in the age of digital convergence. Elche: Universidad Miguel Hernández.

Grant, A. E., & Wilkinson, J. S. (2009). Understanding media convergence. *Oxford University Press.*

Hussain, T., & Iqba, Y. W. (2013). Usage and Impact of Information Technology in Electronic Media in Pakistan . *Journal of Mass Communicat Journalism, 3(6)*,

International Telecommunication Union. (2017). ICT Development Index 2017. https://www.itu.int/net4/ITU-D/idi/2017/index.html

Ireton, C., & Posetti, J. (2018). Journalism, fake news and disinformation. https://en.unesco.org/sites/default/files/journalism_fake_ news_disinformation

Jamil, S. (2017). Safety threats, impunity and professionalism Journalists' dilemma in Pakistan. *Journal of Sociology and Anthropology, 6*, 571–578.

Jenkins, H. (2006). Convergence culture: Where old and new media collide. Cambridge, Massachusetts, : *MIT Press*.

Jokela, T., Heliva, J., & Tina, K. (2009). Mobile journalist tool-kit: A field study on producing news articles with a mobile device. Proceedings of Mind Treck'09.

Kalamar, D. (2016). Convergence of media and transformation of audience. *Informatol, 49(3–4)*, 190–202.

Khan, T., & Aziz, I. (2017). The patchy world of Urdu newspapers. Dawn: Available from: https://www.dawn.com/news/1364838/the-patchy-world-of-urdu-newspapers

Khattak, A. W., & Nasir, M. (2011). E-Journalism in Pakistan . *International Journal of Humanities and Social Science , 1(1)*, 252-256 .

Lasora, D. L., Lewis, S. C., & Holton, A. E. (2012). Normalizing Twitter: Journalism practice in an emerging communication space. *Journalism Studies, 13*, 19–36.

Nicole, C. (2014). Revolutionizing the newsroom: How online and mobile journalism have changed broadcast journalism. *The Elon Journal of Undergraduate Research in Communication, 5*, 1-3.

Rajani, M. K., & Chandio, M. S. (2004). Use of Internet and its effects on our society. In. *National Conference on Emerging Technologies* , 20157-161.

Raza, M. R., & Parvez, A. (2019). Impact of Media Literacy and Media Technology on Agenda-Setting A Case Study of Broadcast Media in Pakistan. *Pakistan Journal of Distance & Online Learning, 5(1)*, 137-154 .

Reporters Without Borders. (2019). 2019 World Press Freedom Index. https://rsf.org/en/2019-world-press-freedom-index-cycle-fear

Sey, A. (2011). New media practices in Ghana. *International Journal of Communication, 5*, 380–405.

Siddique, M. A. (2020). Future is digital journalism. *Daily Times* .

Singer, J. B. (2004). Strange bedfellows? The diffusion of convergence in four news organizations. *Journalism Studies, 5(1)* , 3–18.

Solomon, R. (2013). Role of Media in Distance Education. https://www.oercommons.org/authoring/2713-role-of-media-indistance-education

Srinivas, S. (2007). The Use of Media and Technology in Distance Education – Indian Context. https://www.ajol.info/index.php/afrrev/article/viewFile/40999/8

Umair, S. (2016). Mobile reporting and journalism for media trends, news transmission and its authenticity. *Journal of Mass Communication Journalism, 6*, 323.

USIP. (2011). Impact of new media on peace building and conflict management. Washington, D.C United States Institute of Peace,USIP.

Westlund, O. (2013). Mobile news: A review and model of journalism in an age of mobile media . *Digital Journalism, 1(1)*, 6-26.

Yousufzai. (2018). Pakistan now has 55.4 million mobile phone users with high-speed internet. ProPakist ani:https://propakistani.pk/2018/06/23/pakistan-now-has-55-4-millionmobilephone-users-with-high-speed-internet/

Zia, A. (2003). Cable television network in Pakistan: Introduction, development, prospects and dilemmas. Unpublished M.Phil thesis, department of Mass Communication. University of the Punjab. Lahore, Pakistan.