



Digital Media Literacy: Social Media Use for News Consumption among Teenagers in Pakistan

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Abstract

The emergence of next generation users has reshaped the use and impact of internet in our society. Now users can access internet from multiple devices (Smartphone, PC/Laptops, Tab/Pad etc.) and multiple locations. This phenomenon among teenagers has increased as they engage with media devices at both home and schools. Pew Internet and American Life Project reported in 2015 that 71% teenagers use multiple social media sites and 92% are daily internet users. Teenagers can create social media account at the age of 13 to socialize, and to access information and news. Thus, social media plays an effective role in online news consumption that has reshaped the usage and production of news media. One of the major challenges for social networks appeared after 2016 US presidential elections was "Fake News", and it associates with elections, terrorism and natural disasters. Apprehensions about the factual and potential social impact of fake news lead to this study about news practices and experiences in Pakistani teenagers. This study focuses on how teenagers identify fake news on social networks and their news practices and experiences on social media. Teenagers are unable to spot fake news as they are less likely to check the source of information that raised a major concern about their ability to deal with fake news. This study confirms that teenagers are less likely to check source of news, as they are also not capable of identifying fake news. Teenagers consider internet and social media as their major source of information. These findings highlight the importance and significance of digital media literacy education at school level to combat new media challenges. Results further demonstrate that social media and news consumption has been neglected in media literacy education in Pakistan. This study provides policy implications to government for the introduction of digital media literacy at schools and college level.

Keywords: Children; Digital media literacy; Media education; Fake news

Introduction

Internet and use of digital devices have largely influenced children and adolescents as they are surrounded and involved in digital environment. They started accessing internet from multiple devices and location to consume content available online. This behavior using internet brings teenagers into next generation users. Next generation users include individuals who access internet from different locations and using multiple devices [1]. Teenagers engage with digital devices at both home and school and engage with content available online. Their access to internet is for multiple purposes such as use of social networks, connect with their peers, play games, entertainment, access news and information.

Lenhart and Page [2] reported on Pew Internet and American Life Project that 71% teenagers use multiple social media sites and 92% are daily internet users. Similarly, in a latest survey by Pew Internet Research Center, 95% teens now own a smartphone in US and 85% use social media mostly using their smartphone, interestingly 45% of them claimed that they remain online constantly from smartphones [3]. Access to information has transformed from traditional media to digital media with increased use of internet among teenagers.

Traditional media, including television (TV), radio, newspaper and other similar sources are now shifting their focus towards new media technologies and practices. While keeping their basic presence, they are transforming their content and created their own new media space and content. Their content is now available on internet with more integrative and social engagement feature which allows teenagers to access information, entertainment and other relevant content. News media organizations merged their content over digital platforms including websites, social media sites, podcasts and blogs [4].

Teenager's access to news has also shifted from traditional media towards new media platforms especially on social media. Overall, social media platforms are important source of news; as shown by cross-national research report by the Reuters Institute, for media and journalism study [5] showed that 51 percent of total respondents use social media as news and information source. On social media partial news is available with headline and a short description which sometime is enough to move on and sometime users need to navigate to the link available for full news access [6].

Thus, teenagers also get exposure to news available on social media [7] along other content and this type of news consumption also influence their daily engagement with news content available online. These news items can be from both authentic media and UGC however, teenagers may not know if news is from authentic source or not. Teenagers, in most cases can't identify misinformation or fake news and more likely to engage with news compared to adults [8].

In recent years, social media news production and circulation also faced challenges such as click baits, fake news and misinformation. Similarly, fake news phenomenon has appeared as a symptom of major problems, including the lack of digital media literacy. Fake News issue appeared as significant and discussed by many scholars after 2016 US presidential elections [9]. Issue of fake news was majorly related to social media as fake news mostly appeared on social media such as tweet bots were activated during 2016 US presidential elections [10]. Based on fact that 62 percent of news consumers in US follow social media for news and information and majority of most engaged fake news during elections also circulated on social media such as Facebook as compared to traditional media [11].

Acceptance of fake news was enormous and even adults in US believed in those online fake news as true which were mainly in favor of Donald Trump [12]. Impact of fake news has also been discussed by scholars and they believed that in 2016 US presidential elections results would have not been same if voters were not exposed to and influenced by the fake news [13]. Similar pattern noticed in Pakistan during 2018 General Elections [14] and during the conflict between Pakistan and India in 2019 [15] and most of the fake news content appeared on social media and got high engagement.

Although, evidence from both government and scholars shows significant impact of fake news in Pakistan; in response to which government level initiatives has been taken to counter and inform public about this issue but we found that no scholar has conducted such study to examine Pakistani teenagers. Digital media literacy may highly impact teenagers at school and college level. This research gap requires a study to examine digital media literacy impact and influence on next generation teenagers. Digital skills are lacking in teenagers, but this deficiency also present in parents and teachers at school level. With changing news practices and increasing engagement demands innovative and new ways to develop teenagers' critical thinking and news literacy skills. Therefore, its essential to investigate how teenagers' access and engage with news; how they use this news content in their daily life

(their experiences); what is their perception about news available online; and how teenagers identify fake news on social media.

News Production and Consumption on Social Networks

News media organizations globally adopted new distribution channels and business models while meeting the requirements of new media technologies. Use of internet, social media and digital devices created latest platforms for news distributions such as social media sites. Increased use of social media and mobile devices has established new dimensions of news production and circulations [16]. Business models are changing for traditional media organizations and they are getting revenue from new channels as well as traditional advertising income they were previously generating [17]. New revenue channels for most of news organizations are mainly digital platforms such as Google derived traffic to their news websites, social media platforms and other new media production sources. Many scholars pointed that editorial decisions making has moved towards online audience and generating revenue through advertising [18-20].

Following the above discussed revenue model, news websites are developed for all type of audience and devices including personal computers, smartphones, tabs etc. and are termed as responsive design website [21,22]. These websites are mainly following google algorithms to attract higher traffic which results in higher advertisement income [23].

Media organizations focus on their credibility and authority while publishing news and appear as the "fourth estate" in democratic countries [24]. By and large traditional media still have the credibility and audience accept their news reporting [25]. Transforming from traditional to digital media, challenges of integrity and credibility has also triggered media organization. Though audience is accepting online news sources and are less interested to pay for traditional news sources such as newspaper, magazines and TV [5].

Online versions of news stories are largely affected by the credibility and trust issues due to availability of false news online. Content creators online with less credibility also created their own content termed as "User Generated Content (UGC)" for websites with similar domain names as authentic news organization which has fueled the issue of fake news and surveys. Audience less likely to accept news or information provided by UGC and prefer content produced by traditional media organization [26].

In addition to websites, social media is another focus for media organizations to circulate news and reach new audience [27]. Social media users consume news provided by traditional media appears as free content and can be used without paying. In recent years, with development of internet and social media, young people are less likely to use paid service for news and information gathering [28].

Social media allows limited content on screen such as Twitter allows only 280 characters [29] and Facebook also

allows limited characters while sharing website link yet remains powerful to reach young people on social media. News published on websites are later shared on social media in shape of headline along with a photo or short video. Sharing news on social media generates discussion on published news [30] and also derives traffic to the news website for full access to the news or share directly from social media [31].

TV news content is mainly shared on YouTube for audience and some news channels are also going live on YouTube with no subscription fees [32,33]. With internet and social media, news circulation has also increased in new media platforms [34].

Young people news consumption has also changed along with news production models. With introduction of new media technologies and transformation observed with digital convergence, where news groups changed their news production and publishing model young people has also changed their news consumption behavior. Young people also show higher interest to get news on social media and they have freedom to get or see news again on their timeline or not. A rift has been noticed between young people and newspaper and there are many reasons for decreasing interest in newspaper such as media preferences, lack of interest and less interest in news content [35].

New media changed the news consumption behavior among youth as social media channels are now becoming new source of news and information for teenagers globally. Facebook and Twitter are widely being used for social connections and making friends online but sharing news content on these platforms has also become popular among teenagers. News groups share their news on social media pages where teenagers also get the chance to read that news of their interest. Young people have the option to read any specific news or ignore the news if it's not of their interest.

News content on social media contain text, images, videos and links to other pages. This content is displayed by social media platforms using their intelligent algorithms so that users may get content according to their interest. Social media platforms has helped users to get impression of news content that is according to their interest. Teenagers follow news according to their interest on social media and stay updated. This phenomenon has evolved genre-based news on social media and has provided choice to users for selecting and following their interest.

Online news consumption has made users more powerful by enabling them to give their option, reaction or feedback to news online. Similarly, they also have the option to share any news with people of their common interest. News content gets viral on social platforms based on its reach and engagement. Such viral content get attention of users with same interest and they tend to share with their peers. Teenagers keep following such trends on social media and engage with content along with their friends of common interest.

While consuming news content on social media, the grave concern appears whether this news content is authentic or

not. While engaging with viral or news content, teenagers are most vulnerable to fake news in online sphere.

Digital and News Media Literacy

Media literacy remains growing concern in society and emerged as challenge in last two decades with inclusion of digital media literacy. Scholars in different times explored media literacy and provided their definition and avenues for discourse on media literacy. According to Aufderheide [36] "media literacy is the capacity to access, understand, evaluate and create communication in all forms". Initially media literacy was studied based on television and in recent times it has expanded to digital media literacy [37].

Learning media literacy skills for individuals in a networked and knowledge society is very important. Globally, media literacy has been introduced in basic schooling as part of curriculum, co-curricular activities and elective subject. Similarly, news literacy has been focused by many institutions globally from last four decades [38]. Scholars has identified that the media literacy education brings positive effects on pupil's understanding and development of media literacy skills [39,40]. Moreover, scholars also stressed on providing media literacy education at basic school level to develop their media literacy skills.

Exponential growth in internet and digital society has witnessed a huge gap in digital media literacy education around the world. Students at school and college are using internet and becoming digital natives from last two decades. Recently, increased in social media platforms and teenagers' higher interest in smartphone and social media has also raised concerns about digital media literacy at the school level (Figure 1).

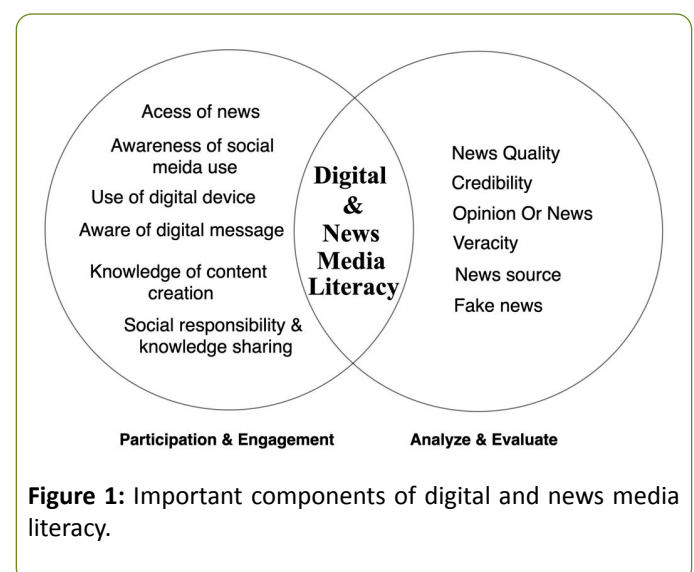


Figure 1: Important components of digital and news media literacy.

Studies shows that along with media literacy education it is essential to introduce curricular for digital media literacy [41,42]. Technological advancement recently has increased, and inventions and innovations are growing rapidly. New platforms are appearing on the internet sphere and technologies such as Artificial Intelligence, Virtual reality and

Robotics and continuously making incredible advancement. Young people around the world are becoming early adopters of technological advancement resulting higher user engagement. With this digital shift in the society, digital media literacy has become very important for young people particularly teenagers.

In previous studies scholars have discussed both internal and external variables that influence the digital and news media literacy of students. Studies were conducted on variables such as age, gender and media literacy experience of school going students [43,44] use of technology for academic purpose, knowledge and academic background of computer related courses [44,45], parental control [46] and socioeconomic status of family [47]. Parental control is an important factor in new media literacy as they are playing significant role of mediator towards ICT use.

Parental mediation has high impact on student's engagement with digital devices and content. Their mediation includes the guidance for proper use of technology, screen time restrictions, content access and controlling the usage [48]. Studies also showed that parental control had been highly effective in reducing the screen time and risks associated with content and technology use [49]. However, parental mediation is also associated with parent's educational background and it directly effects the use of internet and new devices.

Variables of gender and use of technology has been studied widely by scholars, however their results are not always similar or same as before. Some scholars identified use of technology and engagement with digital devices as male domain and believe that female students have less confidence in interacting with new technology products compared to male students [50,51]. Male students are usually the early adopters of technology and use technology more frequently compared to female students [52].

In contrast to male dominance in technology use and frequency of engaging with technology, female students have been reported with higher digital media literacy [53]. They also show more positive response and attitude towards media usage skills, digital devices and use of technology for education purpose [54]. However, parental control remains valid for both male and female students to mediate their engagement with digital devices and content at home.

Importance of digital media literacy in both male and female students can't be neglected as it later leads to understanding of news media literacy. Media literacy and news media literacy are very much connected as both of them need critical evaluation [55]. Media literate people has higher ability to understand, analyze and evaluate both the print and electronic media [36]. These abilities also fall under the definition of news literacy where news literacy is defined as "the ability of an individual to use critical thinking skills to judge the reliability and credibility of news reports, whether they come via print, television, or the internet" [56].

Teenagers consume news available online on social media channels and can engage with content by sharing with their

peers online. It's imperative to understand the news source and its content which may require news media literacy. While engaging with online content teenagers would require digital and news media literacy skills. News published on TV, Radio and newspapers are usually more credible compared with social media news however, teenagers are less likely to get news from such channels and get news exposure on social media more often.

Fake news has appeared as a challenge in online sphere such as social media where news content is shared by both credible and unauthentic sources such as individuals. News content may not be reliable and to cross check and understand the news source and its credibility, media literacy has very important role to play. Teenagers require proper guide and trainings to understand fake news phenomenon. News media literacy has significant role in understanding online news content and its credibility. Similarly, it is also very important to understand the difference in opinion and facts before sharing on social media.

In both the developing and underdeveloped countries, media literacy education has not been encouraged extensively, and in digital media literacy these countries are far behind developed world whilst lacking the media education at school level. In Pakistan, media literacy education has been ignored owing to lack of policies and poor infrastructure [57]. According to a news report by Khan [58], there are 454 public schools in one of major city of Pakistan where more than 300 schools lack the facility of library for students. Basic school facilities are also missing from public schools where core curriculum also need improvement and upgradation. Public schools in Pakistan also lack digital devices at school however, private schools have such facilities where students can use computers, tabs and games. Scale of such schools with digital devices is very small and they also lack both media and digital media literacy at school level. Teachers and parents are also unaware of digital media literacy and when explained to them they showed foremost concern about use of digital devices and social media.

Methodology

For this study we conducted survey of 230 teenager boys and girls from three private schools located in Islamabad, the capital city of Pakistan. Students were selected by schoolteachers as they recommended those students who were willing and confident to answer survey questions. During this survey we categories age into two segments of 13-16 years old and 17-19 years old. Students were guided while answering survey questions and also explained questions to those students who were not able to understand the context or meaning of the question. Survey was conducted under the supervision of teachers so that they feel comfortable in answering these questions.

Survey questions were based on a questioner applied in a previous study conducted by Common Sense Media (Robb, 2017). We also added few questions based on local context according to digital facilities available in schools of Islamabad.

Few modifications were suggested by schoolteachers based on their experience and were included into survey.

Results and Discussions

Teenagers when asked about their news sources (**Figure 2**), they mentioned range of sources for accessing news, including from teachers (38%), friends and family (36%), social media (31%) and news website or news apps (19%). Fewer teenagers get news from teachers (10%) newspaper (7%) and radio (4%). Survey shows that traditional media specially radio and newspaper are least used mediums for news and information among teenagers. However, television is still popular source of news along with social media. Teenagers of 13-16 years of age group are getting news from television (38%) social media (31%) and friend or family members (36%). Whereas teenagers of 17-19 years of age shows less interest in news from television (24%), social media (27%) and friends or family (14%) compared to 13-16 years of age group. Website or apps are another important source of news among teenagers and results shows that website or apps are popular among teenagers 17-19 years of age group compared to 13-16 years of teenagers. One of the obvious reasons for this could be use of smartphone as teenagers of 17-19 are most likely to own their own smartphone and use apps of their own interest. Whereas teenagers of 13-16 less likely to own a smartphone device and they may use their parent's device to access news and information.

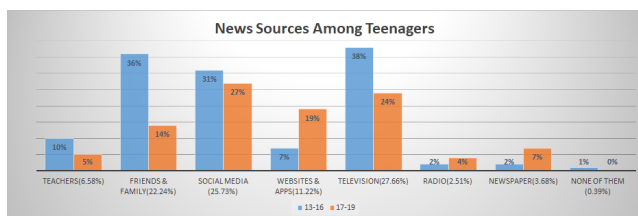


Figure 2: News sources and consumption by Pakistani teenagers.

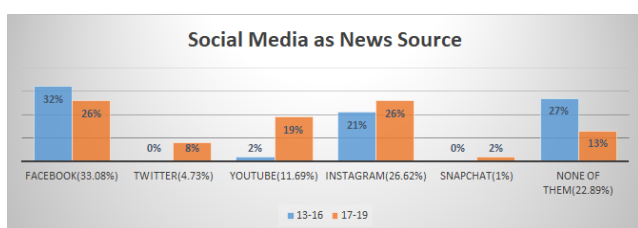


Figure 3: Social media sites to get news by Pakistani teenagers.

Results about social media use for news consumption (**Figure 3**) shows that Facebook and Instagram is by far more popular among teenagers. To get news from social media large number of teenagers use Facebook (33%) and Instagram (26%). This was followed by YouTube (19%) and Twitter (8%). Based on gender there is also a significant difference where

girls are using YouTube more than boys (19% vs 2%). Snapchat (2%) is least used platform for getting news and is only used by girls.

Similarly, girls showed higher trend in using Instagram (27%) compared to boys for getting news. Overall, stats show that 23% of teenagers do not get news from social media and get news from other sources.



Figure 4: I can identify fake news and real news story.

Our survey also shows teenagers in Pakistan are not sure if they can spot a fake news while consuming content on any medium (**Figure 4**). Only 42% (strongly agree or agree) of teenagers believe that they can identify fake news from real story. Whereas, 55% (strongly disagree or disagree) with statement that they can identify fake news. Only 3% mentioned they don't know about this and did not respond to this question neither for agree nor for disagree, and this can be situation where they are not sure what the fake news is or they are unsure if they can identify fake news or not. It also pertinent to mention here that a large number of teenagers of 13-16 years of age category disagree with statement and they can't identify fake news. However, teenagers of 17-19 age category agree with statement and 27% of them believe that they can identify fake news. But only 16% teenagers agree that they can spot fake news and tell the difference from original published stories.

Survey results shows that age is also a major factor in spotting fake news while consuming news content. Teenagers of 13-16 years old have less knowledge about fake news and they cannot identify fake news, or they find it difficult to spot a fake news. Contrary to this, teenagers of 17-19 feel more comfortable in identifying fake news and believe that they can spot fake news.

Conclusion

Our study finds that teenagers in Pakistan access news on regular basis and consume news content from multiple sources but their level of trust on news media is declining. However, their social media news consumption is increasing with higher access to internet and mobile devices. Those teenagers who have their own smartphones and use internet trust social media sources and consume news content from their mobile devices.

With growing use of internet enabled devices and social media, teenagers are highly vulnerable to fake news content.

Only a small number of respondents were able to understand what fake news is and shown confidence that they can spot that fake news. Similarly, a large number of respondents were not aware of fake news and they can't spot if it's a fake news or not.

Teenagers are not given special training at school and they are using social media and smartphones without any guidelines. It is important to educate teenagers about the ways to engage with smartphones, social media content and news media. It is also essential to educate parents who allowed their children to access internet and smartphone. They can implement parental control and manage screen time for their children. For news consumption and information handling both parents and teachers should guide teenagers. Teenagers are getting overwhelming exposure to news content in their daily life and it is essential to educate them about fake news content and techniques to spot fake news.

Teenagers in global south are rapidly becoming next generation internet users and growth of consuming information using internet is increasing. In Pakistan, internet access is expanding in rural areas as well, and internet enabled devices now exist at home. Teenagers who don't have their own devices are using their parent's device to use internet. Penetration of internet has also raised concerns about teenager's use of internet and importance of media literacy education.

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