Predictors of Fake News Sharing on Social Media during COVID-19 in South Asia: Evidence from Pakistan

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ABSTRACT

Spread of fake news has been rapidly increased in recent months and the determinants that lead the sharing of misleading information is not well studied. Henceforth, this study analyzes the result of a Pakistani sample (n=385) regarding proliferation of fake news regarding COVID-19. This phenomenon was studied by using uses and gratification framework it was extended by the altruistic motivation. An explanatory research design was followed, data was collected through questionnaire based on prior studies and respondents were approached through different social media websites and answers were collected through Google forms by following convenient sampling technique. Acquired responses were analyzed through regression model to investigate the magnitude of effects among the six categories of study on the result of fake news sharing. Findings showed that altruistic motivation was the main predictor of fake news sharing of COVID-19. Furthermore, other predictors i.e. motivation for information sharing, socialization gratification, motivation for seeking information and passing time were contributing in sharing fake news about COVID-19, while no relationship was found between entertainment motivation. This research suggested some theoretical and practical implications.

Key Words: **Fake News, Altruism, Motivation, Socialization, Social Media & Entertainment.**

Introduction

Fake news is now becoming an increasing issue of present time, although fake is not novel, therefore, it became serious issue because popularity of social media permitted interaction and spread of ideas to people (Fernández-García, 2017). As a result, users of social media can advance their ideas by spreading news through like and share; hereafter, users are unvaryingly visible to an irrepressible sort of material particularly news that is imminent as of self-determining authors. So we

can say that social media is now became a platform to circulate fake news quickly (Apuke & Omar, 2020). A prior study of Lazer et al. (2018) discovered that social media is the most powerful expedient for disseminating larger amount of unauthentic content, sharing a misinformation about a phenomenon aggravates the probability of manipulating people' perception. It becomes difficult to differentiate original and fake news content. In this way, Duffy et al. (2019) referred fake news as fictitious information that imitator legal news offered subtly to appeal the public for considering it legal. The need of content verification extended significant significance counter to the background of fake news and distortion disaminated on social media because people are highly relying on internet sources and sites i.e. YouTube, Facebook, WhatsApp and Twitter to acquire in contrast to customary media sources (Khan & Idris, 2019; Gottfried & Shearer, 2016). From now fake news is rampant issue of present digital era it suggested that even some governmental administrators and individual interests in the proliferation of misleading information to larger audience for ensemble their purpose.

Can say that fake news almost affected each and every side of our lives but the utmost critical influence is false content abut COVID-19 pandemic (Hou et al., 2020). In China, in the course of the month December 2019 novel corona virus (COVID-19) a respiratory disease was reported and in few months this viruses was spread to overwhelming in all over the world, becoming the reason for the death of many people. Primarily, it was transmitted by the animals to humans. Later it was transferred to the human by the human through interaction. According to Coronavirus live report of Worldometer (2021) till 29th January 2021 approximately 102,301,414 cases of COVID-19 are reported globally and about 2.205,612 deaths have been reported. Hou et al. (2020) said that heavy bulks of fake news on social media regarding COVID-19 are rumoring and this fake content developed a sense of panic among the whole population. Due to these claims research found an urgent need to discover vaccine for COVID-19 is continue in all over the world, fake news propagation intensified on social media as a result many scholars and experts have faith in promoting threats of COVID-19 pandemic (Apuke & Omar, 2020).

Understanding of motivation for sharing news on social media his scarcely discussed in prior literature in fact a little knowledge is available about intention for sharing fake news on social media in south Asian context. All the studies are conducted in western context like United Kingdom and United States of America (Talwar et al., 2020). Previous studies have been conducted on general population and this study includes youth who spend more time on social media than the other group of people. This study provides another aspect of fake news prevailing in all over the world. Henceforth, this study comprehends a multi-dimensional model by following Uses and Gratification perspective with the addition of altruistic motivation. Previous studies Apuke and Omar (2020, Khan and Idris (2019) are conducted in different cultural context and there is need to investigate the findings in Pakistani context. The significance of this research is that it extends the prior studies conducted on fake news planning during COVID-19 pandemic. This study

is helpful for both government and Pakistani citizens, as it provides the baseline regarding the predictors of fake news sharing regarding COVID-19 pandemic.

Aims of the research

Subsequent are the aims of the research;
1- To investigate the relationship between altruistic motivation and sharing fake news regarding COVID-19.
2- To analyze the association between entertainment gratification and fake news sharing regarding COVID-19.
3- To find out the role of socialization gratification in fake news sharing regarding COVID-19.
4- To check the effect of information seeking gratification on fake news sharing regarding COVID-19.
5- To analyze the role of information sharing in fake news sharing regarding COVID-19.
6- To demonstrate the role of time pass gratification in fake news sharing regarding COVID-19.

Theoretical framework and literature review

Uses and gratification theory

Sven Windahi (1981) provided a detailed description of active media users: this theory understood the gratification of audience activity in terms of voluntary and selective orientation of people towards the process of communication. In short, this perspective suggested that usage of social media is intentional act of requirements and objectives well-defined by listeners adherents themselves, that leads in communiqué course might facilitating, limiting and effects the gratifications with respect to exposure. Dissimilar to other theories postulating usage of social media, uses and gratification theory provides the user supremacy to distinguish what social media they use, with the postulate that users have clear intention and use. This denies the theory of mass society, which assumes that people are stranded sufferers of social media established by big organizations while individual differences perspective states that intelligence and self-esteem largely drives a single selection. Uses and gratification theory is unique in subsequent postulates:
1- Use of social media is goal oriented because audience is active.
2- The need for gratification for a specific medium selection depends on number of audience.
3- Other sources are competed by media for the satisfaction of need.

4- Users are well-aware of social media usage, curiosity and motivation for being able to give information about the accurate picture of social media use.

5- Value judgment of social media gratified is only weighed by the audience.

When these said assumptions are analyzed in the framework of epidemics, apparent sternness of the circumstances lead people to share more and more information in general. While some users take spread of facts on social media as an entertainment and self-aggrandizement to encourage misleading information about COVID-19 (Islam et al. 2020) because Zhou et al. (2020) found that COVID-19 pandemic is compounded due to online proliferation of fake news based on the interventions to cope with COVID-19. Altruistic motivation can be referred as individual's motivation to share information without expecting anything in return. in present study altruistic motivation was operationalized in terms of sharing any news without any benefit because altruistic motivation have been bring into being to be related with sharing knowledge on social media it has been found that among social media users there are mostly those people who voluntarily gather information to give answer to the questions raised by others (Plume & Slade, 2018; Ma & Chan, 2014).

Entertainment gratification comprises usage of social media to amusing and satisfying oneself, expressive release and relief of anxiety because Baek et al. (2011) discovered that users of social media shared links on social media accounts to relax and entertain them. Similar to this, Thompson, Wang and Daya (2019) retrieved and discussed a linear correlation between entertainment gratification and social media trolls and mentioned that social media trolls are resulted due to joy and expression of opinion given by the users openly. Gratification of socialization can be mainly discussed by the frequency of social interaction of the people with the people. In the study context gratification of socialization was discussed in terms of need to establish social capital and compare it with the others during the news sharing on social media. This helps them to maintain their social capital as it leads towards similar interest and opinion about anything (Lee & Ma, 2012; Apuke & Omar, 2019). Likewise, Information seeking generally refers to an individual's activity to seek meaningfulness and extension of knowledge regarding any aspect or problem. To analyze literal information with respect to information seeking capabilities. This study comprehend a complete scenario of learning through social media websites to adopt the learned strategies and being able to solve the faced problem (Khan & Idris, 2019; Kulthau, 1991). Furthermore, Time pass is defined as usage of social media to get rid of boredom. It has been discovered as one of the most significant reason for using social media. In this way, Choi et al. (2016) said that sharing fake news is highly relevant to satisfaction of time pass gratification. It is not wrong to call it the second most effective predictor of sharing fake news after altruistic motivation. Lastly, information sharing is seen as people's need to enhance their knowledge about their environment by sharing information on social

media. Prior studies Whiting and William (2013) found a significant association between user and gratification model and sharing information on online network.
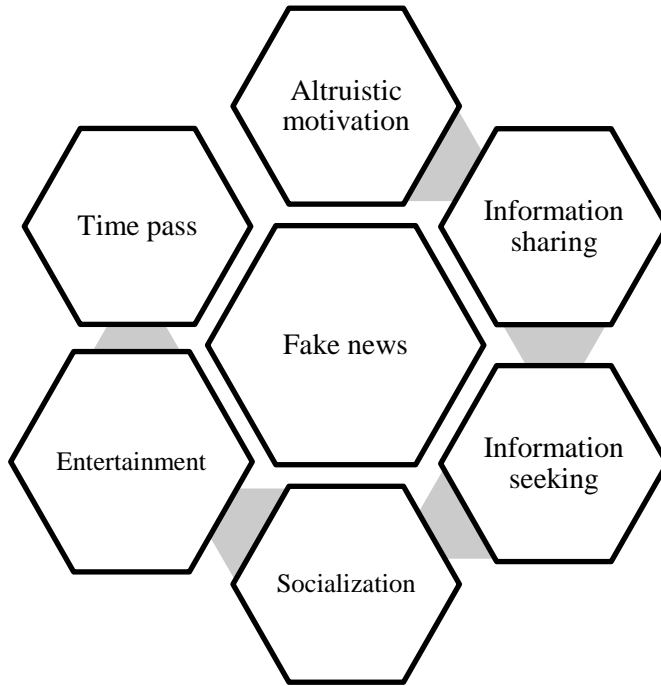

Figure 1 Conceptual Model of the Study

Material and methods

This section provides information regarding methods for accomplishing the study as the researchers utilized a survey research design.

Procedure

Proposed conceptual model was tested through online survey created by using Google form. As the main objective of the study was to find out predictors of fake news sharing during COVID-19. The inclusion criterion included all the participants age span of 18 year or above and having an active account on any social media platform i.e. Facebook, WhatsApp, Twitter or Instagram. Sample size was n= 385 highly recommended by Hair et al. (2019). Respondents were approached through network sampling which is also known as chain referral in Pakistan. For the collection of data, link of survey was posted on different social media platforms. Respondents were invited to give their responses and share the

survey link in their contacts. This process was repeated till the researcher gets their desired no. of responses for the generalization. Thus, data were gathered from April 2020 to August 2020 when the situation of COVID-19 became irritating for Pakistan.

Measurement

There were six categories of predictor variables i.e. information seeking + time pass + information sharing + entertainment + socialization + altruistic motivation and one category of criterion variable i.e. Fake news sharing. Items of information seeking were adapted from Lee and Ma (2012), time pass, entertainment, socialization, information sharing were retrieved from Thompson et al. (2019), altruistic motivation was detected from Plume and Slade (2018) and Wasko and Faraj (2005). On the other hand, the items of fake news sharing were adapted from Khan and Idris (2019) and Talwar et al. (2019). All the items were categorized in five point Likert scale ranged from 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= Strongly Agree.

Statistical analysis

For coding, recoding and generalization of data, statistical package for social sciences (SPSS-22) was used and basic profile of the respondents was presented through frequency and percentage while magnitudes of effect was analyzed through step wise linear regression analysis to demonstrate the most effective predictor of fake news sharing during COVID.

Data analysis

Basic profile of the respondents

Sr.#	Variable	Categories	F (%)
1	Gender	Male	256(66.4)
		Female	129(33.5)
2	Age	18-25	131(34)
		26-32	120(31.1)
		33-39	37(9.6)
		40 and above	99(25.7)
3	Occupation	Employed	121(31.4)
		Unemployed	74(19.2)
		Student	145(37.6)
		Retired	45(11.6)
4	Level of education	Matriculation-Intermediate	181(47)
		Bachelors-Masters	193(50.1)

		Above	11(2.8)
5	Active accounts on social media	Facebook	98(25.4)
		WhatsApp	191(49.6)
		Twitter	15(3.8)
		Instagram	81(21)
6	Time spent	1-4 hour	76(19.7)
		5-8 hour	221(57.4)
		>8 hour	88(22.8)

n=385, f=frequency, %= percentage

Table 1 states the distribution of the respondents with respect to their profile. Majority of the respondent 66.4% were male and 33.5% were females who participated in this study, 34% were the age of 18-25 year, 31.1% were the age of 26-32 year, 25.7% were the age of 40 year and above and 9.6% were 33-39 year old, 37.6% were students 31.4% were employed, 19.2% were unemployed and 11.6% were retired 50.1% had completed Bachelors-Masters, 47% mentioned that they had done matriculation-intermediate education, 2.8% mentioned above masters qualification, 49.6% were using WhatsApp frequently, 25.4% were frequently using Facebook, 3.8 were using Twitter and 21% were using Instagram frequently, 57.4% were spending 5-8 hour, 22.8% spend >8 hour and 19.7% spend 1-4 hour on social media during COVID-19.

Table. 2

Regression Model

Magnitude of Effect of Predictors i.e. Altruistic Motivation, Entertainment, Information Seeking, Socialization, Information Seeking, Time Pass and Fake News Sharing

Dependent Variable	AM		ENT		IS		SOC		ISE		TP	
	B	SE	B	SE	B	SE	B	SE	B	SE	B	SE
FNS	0.885	0.59	.116	0.66	.0755	.049	0.060	.088	0.033	.064	.651	0.71
B	0.753**		0.90		0.699		0.046		0.28		0.612	
T	18.45		1.764		15.65		.0683		0.532		9.333	
R^2	0.565		.008		0.48		0.44		0.511		0.374	

n=385, AM= altruistic Motivation, ENT= entertainment, IS= Information sharing, SOC=socialization, ISE= information seeking, TP= time pass, SE= standard error, FNS= fake news sharing

Table 2 shows that magnitude of effect on criterion variable i.e. fake news sharing and predictor variables i.e. altruistic motivation, entertainment, information distribution, information seeking, socialization as well as time pass during COVID-19 pandemic. Results from the acquired responses indicated that altruistic motivation is the main predictor of fake news sharing between people while no significant effect of entertainment was observed on fake news sharing. Furthermore, information sharing, information sharing, socialization, information seeking and time pass were also effecting fake news sharing among people during COVID-19.

Discussion and conclusion

The liabilities of fake news or misleading information impersonating as demonstrable fact, which is often dispersed online are intensely seeming during public well-being disasters with untruthful sameness drawn between positivistic indication and unacquainted opinion (Hartley & Khuong, 2020). The core aim of the research was multidimensional in nature. To investigate the connection between altruistic motivation and sharing fake news regarding COVID-19. Such as to analyze the association between entertainment gratification and fake news sharing regarding COVID-19, to find out the role of socialization gratification in fake news sharing regarding COVID-19, to check the effect of information seeking gratification on fake news sharing regarding COVID-19, to analyze the role of information sharing in fake news sharing regarding COVID-19 and to demonstrate the role of time pass gratification in fake news sharing regarding COVID-19 among the citizens of Pakistan. Findings from regression model indicated that altruistic motivation of sharing posts on social media is the main interpreter of sharing fake news on social media. These findings were consistent with the findings of a study conducted on Nigerian population with the same measurement (Apuke & Omar, 2020). This study demonstrated that people are sharing news feeds regarding COVID-19 without expecting any reward from people in return. This situation can be analyzed with the perception of helping people in letting them know about pandemic situation. Similarly, no effect of entertainment gratification was found in the present study because COVID-19 is not a matter of joke it has taken millions of lives in all over the world. Hence, it cannot be claimed that people share news on social media just for the sake of entertainment. These findings were not similar to the findings of Baek et al. (2011) who stated that people share news on social media for entertainment and relaxation but these were similar to Apuke and Omar (2020). Furthermore, this study showed a significant effect of information seeking on sharing fake news, previous study of Flanagin and Metzger (2000), Khan and Idris (2019) reported that overwhelming of the social media users rarely verify the information they seek from fake news sharing through online sources. This can be the result of attitude issues needed for internet skills in using online sources for information. Likewise, when responses of socialization gratification were analyzed findings showed a significant influence of

socialization gratification on fake news sharing on social media during COVID-19. A cross sectional research of Lee and Ma (2012) stated that there was no role of socializing gratification for sharing fake news regarding COVID-19 because people does not want to stay connected with the other people by sharing fake news which can harm the lives of others. But present study showed significant influence of socializing gratification which can be due to people's care for the other people and helping others by providing them information regarding symptoms and precautions of COVID-19 the only fault in it was non verification. Lastly, time pass was also found to be an important predictor of sharing fake news in this way, Choi et al. (2016) said that sharing fake news is highly relevant to satisfaction of time pass gratification. It is not wrong to call it the second most effective predictor of sharing fake news after altruistic motivation. Based on the findings of the study, this study made an inference centered on uses and gratification theory, researchers demonstrated the interpreters of fake news sharing. We sketched a sample of Pakistani population which indicated that altruistic motivation is the furthermost imperative conjecturer of fake news sharing among people during COVID-19 while entertainment gratification was not found to be associated with fake news sharing between the targeted residents but information seeking, socialization, information sharing and time pass also lead to fake news sharing regarding COVID. That one should be understood that our findings are based on six selected variables findings can be vary if fake news sharing is measured with other variables. This study provided building block findings which may able people to think first before trusting particular news on social media. Verification before sharing any news on social media, checking the name of author who shared it, reading the complete text rather than reading headlines and verifying dates can prevent individuals to segment fake news on their social media accounts.

Limitations of the study

Although present study contributed to knowledge with some limitation. This study is concluded with the background of COVID-19 pandemic from the targeted population of Pakistani citizens. There is a probability that the results of our study may not generalized for fake news sharing in general and these results cannot be generalized on other nations because of difference in cultural context. Furthermore, this study was suggested by Duff et al. (2019) and future studies can be done with other variables to extend the literature in this regard. As entertainment is not found to be associated with fake news sharing other variables such as self-efficacy, trust in online sources and self-disclosure of knowledge should be investigated. Likewise, future studies can also investigate the role of socio-economic status and demographic characteristics associated with fake news sharing to get in depth knowledge about the background factors associated with fake news sharing among people during COVID-19.

Recommendations

After keeping consideration on the study findings it is suggested that intervention strategies should be introduced to tell people about the right and authentic source of information because findings shown that altruistic motivation is playing key role in fake news spread during COVID-19 pandemic. It is not suggested to people for reducing their altruistic motivation but suggesting them to indorse the genuineness of the evidence afore sharing on social media. Fake news sharing can be resulted into panic and unnecessary precautions i.e. medicine which could consequence to death. Sahu et al. (2020) said that some people are dying due to fake information and preventive practices of the COVID-19.

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