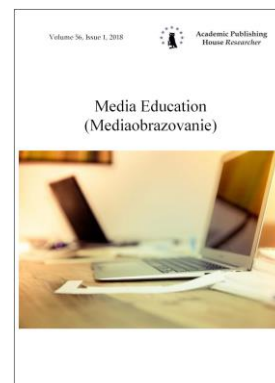


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## Fake News Shared on WhatsApp During Covid-19: An Analysis of Groups and Statuses in Pakistan

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### Abstract

With the advancement of technology, the flow of information has increased many folds. With this, the spread of fake news has also increased. This has many objectives on part of its originating source. The panic criterion is one of it, which aims to create unrest and a distorted image of a situation prevailing around the readers. To consider the problem, this study analyzed the WhatsApp user's response to fake news concerning (Covid-19) in Pakistan. This study considered a quantitative survey research method. A Purposive sampling technique has been used to select respondents from the four provinces of Pakistan i.e. Punjab, Baluchistan, Sindh and Khyber Pakhtunkhwa. A total of 200 respondents were considered for the study, and only those respondents were included in the study who responded that they check the authenticity of news that is shared through the WhatsApp groups and statuses. The data has been analyzed through SPSS by extracting frequencies and percentages. The questionnaire was tested for reliability by applying a Chonbach's Alpha, the value came out to be .621 which is 62 %. Hence, the questionnaire is reliable in terms of measuring the main concept of the study.

**Keywords:** Covid-19, WhatsApp, fake news, groups, status, Pakistan, media.

### 1. Introduction

Since the exposure of a deadly virus outbreak in Wuhan China i.e. Coronavirus (Covid-19) in December 2019, it has spread extensively worldwide. As such, Coronavirus has turned several countries around the world to enforce initial quarantine measures as the mandatory disease control tool (Waris et al., 2020). Similarly, the (Covid-19) is considered the third outbreak of the deadly virus which impacted more than 209 countries including Pakistan.

According to WHO (WHO..., 2020), during this scenario, World Health Organization (WHO) has initiated a dedicated messaging service in different languages, including Hindi, Arabic, Italian, English, Spanish and Portuguese with partners including Facebook and WhatsApp to keep individuals secure from this fatal virus. This convenient messaging service can reach out to two billion individuals and it enabled the World Health Organization (WHO) to get data straightly into the hands of the individuals that require it.

Moreover, the usage of WhatsApp has surged since the emergence of (Covid-19) as individuals growingly turn to the social media app to stay in touch with the updates (Coronavirs..., 2020). Generally, the platform of messaging has amused a 40 % increment in usage, increasing to 51 % of the states in the late phase of the outbreak.

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In the current scenario, huge interlinks via the online social networks can develop “real-time maps” which should be believed as significant tools for tracking the pandemic and for establishing interventional campaigns when required (Al-Garadi et al., 2016). But new “info media ecosystems” of today’s globe, famously named as social media can also have certain worst impacts on the control and results of an infectious disease pandemic.

According to the (Rathinaswamy et al., 2020), In today’s contemporary society, manipulation and dissemination of data are the activities that pervade several factors of our economic, social, and cultural life. As per the Pew Research Center of America in 2019, almost 2.95 billion individuals are consumers of social media which will be increased in the coming days that are quite influential and miraculous (Depoux et al., 2020). Although, false news and rumors in the shared content is the negative side of the e-media, such sort of fake news and rumors can be dangerous and could result in panic among the users.

In this regard, unreliable and false information is spreading around the world to such an extent, that some commentators are now referring to the new avalanche of misinformation that’s accompanied the (Covid-19) pandemic as a ‘disinfodemic’. The ‘disinfodemic’ has resulted in the sale of unproven herbal products and fake treatments and cures at large (UNESCO..., 2020). Such false claims may risk one’s life under such false believes while no vaccine has yet been discovered.

This research focuses on WhatsApp groups and Statuses Gauging WhatsApp users’ response to fake news concerning the corona pandemic in Pakistan. It will help us to identify the response of WhatsApp users in case of fake news and statuses about the corona pandemic. It is anticipated that the research shall bridge the gap and provide considerable results. Further, during the survey more insight into the Assessing WhatsApp users’ response will be taken and it shall give a concrete answer to many other related aspects.

Thus, this research is significant because The fight against (Covid-19) rages on across the globe, and a second crucial battle must be simultaneously fought to end another menacing phenomenon: misinformation in the shape of fake news on a different platform.

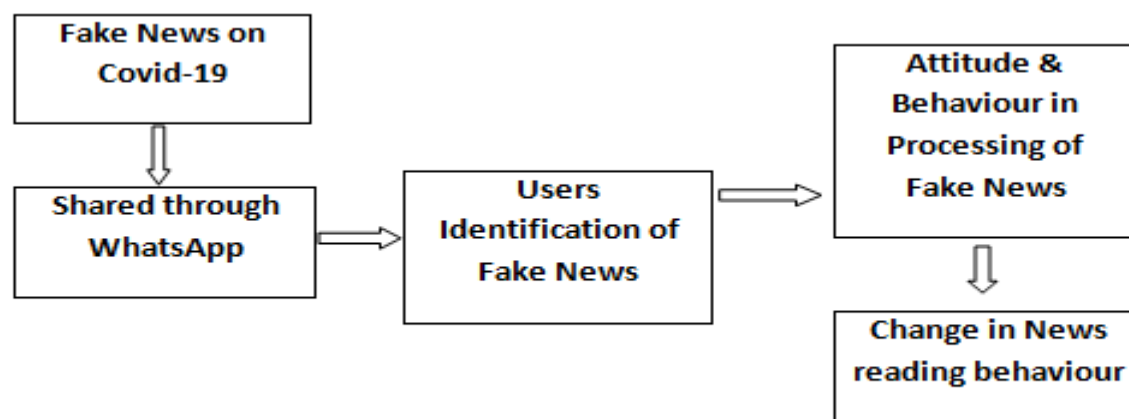
Therefore, this study has been planned to measure WhatsApp users’ response to fake news shared through WhatsApp statuses and groups. Moreover, it highlights the impact of fake news on their news reading behavior shared through the groups and statuses. Following are the key objectives of the study:

- Analyze the responses of WhatsApp users on fake news shared through Whatsapp groups and statuses;
- Identify the platforms of social media where most of the fake news about Covid-19 has spread;
- Identify provincial and gender-wise differences in responses of respondents concerning checking of the authenticity of news through WhatsApp groups and statuses;
- Find out the impact of fake news on change in news reading behavior.

## 2. Materials and methods

According to the Theory of Reasoned Action (TRA), the behaviour of an individual is evaluated by their intention to perform the behaviour and that this purpose is, in turn, a key function of their behaviour towards the attitude and subjective ethics (Setterhall, Mikaela, 2015). Intention or instrumentality is considered to be the vital predictor of behaviour. Basically, three things evaluate instrumentality: their behaviour towards the particular attitude, their perceived behavioural control, and their subjective ethics.

Moreover, Khan’s (Khan, Idris, 2019) used the theory of reasoned action in their study “Recognize misinformation and verify before sharing: a reasoned action and information literacy perspective”. They considered the various factors of belief, attitude, self-efficacy and behavior in their study. They further elaborated the above factors in their questionnaire as, belief in the reliability of the information, self-efficacy in recognizing misinformation, attitude towards verifying online Information and Behavior of sharing without verification. The current study demanded to focus on these factors. Therefore this theory has been opted. Thus, by taking wisdom from this theoretical approach, the researchers have drawn a conceptual framework for the current study demonstrated below.



**Fig. 1.** Conceptual Model

The study is descriptive however, inferences have been surfaced through using inferential statistics. Primary data has been used to conduct this study. The study is Quantitative, where for data collection, the survey method has been used. Respondents from the four provinces of Pakistan i.e. Punjab, Balochistan, Khyber Pakhtunkhwa and Sindh who uses WhatsApp have been considered in this study. Their responses have been recorded through a questionnaire. Both demographical information and specific questions related to the variables of the study have been made part of the questionnaire. A five–point Likert scale has been used in the questionnaire. In this research, a sample size of 200 respondents were considered, in which, 50 respondents from each province were selected by using purposive sampling. Both genders are given equal opportunity to participate in the study; their ages have been grouped from 18-52. In a total of 50 respondents from each province, 25 respondents were male and 25 were female. In this way, this study will infer a rational analysis on gender basis regarding the study. However, the respondents that do not check the news for authenticity were asked to leave the questionnaire. After that, 167 users took part in the study.

### 3. Discussion

Nowadays, the primary focus of attention is being imparted on the pandemic (Covid-19) health emergency. The beginning of this deadly bug was first rooted out in the city of Wuhan, China on 31st December 2019. According to World Health Organization (2020), more than 170 countries, except Antarctica, have been affected by this deadly disease with almost 1436198 confirmed cases on the worldwide level reported on April 9th, 2020 (WHO..., 2020). On 11th March 2020, this fatal bug was termed as “Pandemic” due to its rapid spread and diagnosis (Livingston et al., 2020). Although, WHO has also labeled this situation as “Infodemic” due to the availability of the massive amount of information being shared and produced on this epidemic virus; hence regrettably made the entire scenario complicated to search out the truth from deceptive data as well (Culp, 2020). However, the diffusion of deceptive data on media is an old technique, but surely it is an increasing case on the worldly level. Furthermore, the presence of misleading information increases the possibilities of people to believe the data they come across.

According to Scheufele (Scheufele, Krause, 2019), false information’s circulation has become a threat to society. In 2013, the World Economic Forum gave such sort of remarks to a report entitled “Digital wildfires in a hyper–connected world” (Frey, Smith, 2014). Similarly, Resende (Resende et al., 2019) argued that this logic contains special attention as falsehood data refers to health since the attitude of practitioners, misinformed people and public leaders can have extreme impacts on the health of citizens.

Moreover, in Brazil, Resende (Resende et al., 2019) noted that family groups were responsible for 51 % of the spread of deceptive news on the social media app i.e. WhatsApp during the period of presidential elections 2018. Due to the end-to-end encryption, it is very tough to trace the spread of fake news on such type of apps (Bovet, 2016). Still, the latest attempts have accumulated and observed information from the chat groups of WhatsApp, concentrating on the textual interpretation in such groups (Garimella, Tyson, 2018). Our current effort offers a deep

insight into the message exchanged in the WhatsApp group, revealing other findings, the dissemination of fake campaigns via pictures on the platform.

In India, Khurana (Khurana et al., 2019) studies that, falsehood or rumor spreading is an increasing issue. The tradition of following social media messengers' type of WhatsApp to characterize deceptive information is leading the nation in an unsecured direction. There are two primary reasons for the flow of fake news. Firstly, a massive reduction in mobile prices for last few years. And secondly, the cheapest means of internet data services (Jr et al., 2017). Hence, this growing trouble of fake news will increase the problems more, and also being well aware of the fact that it won't be going to know conveniently (Pulido Rodríguez et al., 2020). In November 2017, so many of the deceptive news were heard during the period of demonetization of currency notes in India. Through WhatsApp, lots of falsehood, images, and videos on the dispute of Muslims and Hindus are shared.

Banaji (Banaji, Bhat, 2019) found that peer-to-peer messaging services, file-sharing sites and in various cases the cross-platform app WhatsApp, have played a pivotal role in the lynching and other utmost violence resulting from the prevalence of false news in the state of India. They urged that messaging services and WhatsApp must be liable for stopping future crimes of this kind (Montesi, 2020). Moreover, the report argued about the proofs from the analysis of the messages forwarded by consumers and the consumers' justifications of and encouragement for passing on data that results out to be incorrect; in this way, while we locate that however the media and communication technologies' role has been overestimated and the other major roles i.e. government briefings, mainstream and electronic broadcast, speeches, and regional social contexts have been underestimated. Facebook and WhatsApp can yet contribute utterly in preventing the engagement of their products in continual lynching and the development of extremist mobs.

Social networking sites have a dark side to it which is getting larger over time and it is ruining the independence and wellbeing of societies and the public (Baccarella et al., 2018). Scholars discussed that these platforms motivate socially vindictive attitude e.g., narcissism, self-promotion, self-objectification, emotional coldness, and deception (Fox, Rooney, 2015). These adverse impacts of social media primarily affect social, cognitive, mental and emotional health results (Immordino-Yang et al., 2012). Moreover, adverse aspects of social networking sites are dangerous for society and firms. Few of the notable negative effects involve online firestorms and hostile propagative feelings of being lazy at work and work-life disputes and the prevalence of online gossips and falsehood, which is injurious to the survival of firms. Provided the significance of flourishing falsehood in affecting firms and users, this research aims to investigate these associations (Allcott, Gentzkow, 2017).

According to evolutionary psychology, gossips have been evaluated as techniques people utilize to affect others. With the passage of time, scholars have secured that gossip is beneficial in motivating data transmission and social cohesion (Talwar et al., 2019). The sharing value of gossips has achieved a more fascination connotation in the period of WEB 2.0. Social media owns participatory nature, whereby individuals make new acquaintances and reinforce the links with already existing companions via e-interactions (Khasawneh, Komreich, 1809). Social links, group securing, peer identification, status encouragement and feeling of being a member of group might be observed as factors that encourage the public to participate in the group.

Trust is indicated to the eagerness to believe someone deployed upon affirmative expectation from his or her previous attitude. In an e-environment, trust is developed as a result of the victorious exchange of beneficial data (Bitter et al., 2014). The Higher status of e-trust motivates the public to offer more social support and take risks in data sharing. As a result, e-trust has been evolved as a significant factor in the world where content is formulated by consumers independently (Grosser et al., 2010). Although trust hasn't been analyzed as yet in the aspect of deceptive information sharing attitude, the mere closely relevant research recommends that adverse gossip is commonly shared with someone that the gossiper trusts.

The higher level of e-trust is likely to cause consumers to get more support to the data sharing with them by sharing it more on their social media sites. As a result, the link between e-trust and deceptive news sharing attitude can be expected (Talwar et al., 2019). Kidwell discussed that social media consumers have greater trust in the data and news shared on WhatsApp is likely to share deceptive news with others and are less likely to check the originality of news before sharing (Grosser et al., 2010). Moreover, the greater e-trust can be expected to stop consumers

from authenticating news acquired from reliable sources since consumers feel comfortable sharing any news acquired from reliable sources, even if they sound deceptive.

The prevalence of deceptive information can cause irrelevant stress and confusion among users. The Falsehood that is intentionally developed to misguide and to cause harm to the users is termed as Digital Disinformation (Apleni, Smuts, 2020). Disinformation can cause problems within minutes for many people. It has been termed to disturb election methods, develop stress, conflicts and hatred among people (Report Digital Disinformation..., 2019).

Duplicate news offers a challenge to society because disclosure can impact the perceptions of users. Deceptive news can impact trust, shape up the people's views of others, and an impact crucial information and political arguments (Torres et al., 2018). Individuals exposed significantly to deceptive news might perceive it as more authentic in contrast to legitimate news. The study also indicates that even if readers are told data is untrue, a distinguished cognitive procedure governs either they select to believe it or not.

Plotnick (Plotnick et al., 2019) mentioned that it is highly anticipated that deceptive news and echo chambers maximize the threat of misinformed personal, social and political decisions making processes. While factors like underlying algorithms and design of social networking sites have been demonstrated to impact the development of echo chambers (Shu et al., 2020). Other studies have recommended that human cognition and biases outcomes in public accepting and making decisions deployed in deceptive information and concepts strengthened by echo chambers.

Therefore, existing literature recommends that FoMO has its roots in several psychological deficiencies incompetence and relevant requirements, as argued in the theory of self-determination. (Oulasvirta et al., 2012). To prevent these insufficiencies and seek relevancy, the public tends to turn to e-social media, as these give a continual flow of informational and social appreciations.

In this aspect, the utilization of social media might reach a compulsive level, hence connecting FoMO to greater use of social networking sites (Blackwell, 2017). FoMO can also be utilized as a psychological response like stress that people might face when they feel isolated from their peers and social groups (Baumeister et al., 1990). Hence, locating fame and feeling of belongingness are believed to be the significant drivers of FoMO (Talwar et al., 2019). FoMO has also been elaborated by scholars as continual anxiety or suspicion among the users of social media that others may have a much more rewarding event in comparison to others (Przybylski et al., 2013). Under recent research by psychologists, Nottingham Trent University has associated FoMO with the gossip sharing group and discovered that FoMO made individuals more careless online making them more susceptible towards the cases of gossips, harassment and crucial comments (Nottingham Trent University..., 2016).

According to the suggestion of Tice, social exclusion might be able to reduce self-regulation and aggravate unacceptable attitudes (Baumeister et al., 1990). To conclude, we explain that extreme utilization of social networking sites, exacerbated vulnerability and carelessness because of FoMO can be anticipated to cause consumers to share deceptive news. Moreover, reduced self-regulation is less likely to encourage them to make any attempt to authenticate information before the proposed sharing (Talwar et al., 2019). Thereby, it is expected that users with high FoMO might not think of authenticating information before sharing and share deceptive data.

Tambini (Tambini, 2017) concluded that several studies were utilized to recognize and study the primary factors and causes engaged in the sharing and spreading of rumours or deceptive news on social media. Upon observing numerous reasons for the prevalence of fake news, they were classified into key factors and sub-factors (Cinelli et al., 2020). These involve cognitive factors, economical factors, social factors, political factors and hostility factors. Taking into consideration of the expansion of social media usage, it conformity and peer effects; social competitions and satire and comical falsehood has a huge impact when deciding to share the proposed deceptive news.

#### 4. Results

In data analysis, the researchers have analyzed the data through SPSS and to obtain some major findings.

**Table 1.** Reliability Statistics

Cronbach's Alpha	N of Items
.62	13

*Interpretation*

**Table 1** explain the questionnaire was tested for reliability by applying a Chonbach's Alpha, the value came out to be .621 which is 62 %. Hence, the questionnaire is reliable in terms of measuring the main concept of the study.

**Table 2.** Description of Participants Characteristics

Variable Name Groups		Frequency	Percent
Gender	Male	100	50.0
	Female	100	50.0
	Total	200	100.0
Provincial affiliation	Punjab	50	25.0
	Balochistan	50	25.0
	Khyber	50	25.0
	Pakhtunkhuwa		
	Sindh	50	25.0
	Total	200	100.0
	18-24	30	15.0
	25-31	65	32.5
	32-38	78	39.0
	39-45	12	6.0
	46-52	15	7.5
	Total	200	100.0
Education	Under Graduate	8	4.0
	Graduate	95	47.5
	Post Graduate	97	48.5
	Total	200	100.0
Occupation	Salaried	143	71.5
	Business	20	10.0
	Other	37	18.5
	Total	200	100

*Interpretation*

**Table 2** shows that, in this study, an equal proportion of gender was considered. An effort was made to ensure that female participation in the study to know their responses as well as compared to males. Therefore, 50 % of each gender type participated in this study. A total of 200 respondents were considered for this study, in which 50 respondents from each province were asked to fill the questionnaire. 50 participants each from Punjab, Baluchistan, Khyber Pakhtunkhwa and Singh participated in this study. Considering the age-wise details of the respondents, 15 % of the respondents fall in the age range of 18-24, 32 % in the age range of 25-31, 39 % in 32-38, 6 % in 39-45, 7.5 % fall in the age range of 46-52. The education level of the respondents were, 4 % of the respondents were undergraduates, 47.5 % were graduates, and 48.5 % were postgraduate.

**Table 3.** Years using WhatsApp

	Frequency	Percent
Less than 1 year	8	4.0
1-2 years	9	4.5
3-4 years	32	16.0
4-5 years	48	24.0
5 years and above	103	51.5
Total	200	100.0

*Interpretation*

**Table 3** explains the respondents were asked that for how much time they have been using WhatsApp, 4 % of the respondents are using WhatsApp for less than 1 year, 4.5 % use it for 1-2 years, 16 % are using it for 3-4 years, 24 % are using it for 4-5 years while 51.5 % are using it for 5 and above years.

**Table 4.** Occupation

	Frequency	Percent
Salaried	143	71.5
Business	20	10.0
Other	37	18.5
Total	200	100

*Interpretation*

**Table 4** shows the occupation of the respondents, 70 % of the respondents were salaried, 10 % were doing their business while 18 % fall in the other category.

**Table 5.** Purpose of Using WhatsApp

	Frequency	Percent
Personal	174	87
Business	13	6.5
Other	13	6.5
Total	200	100

*Interpretation*

**Table 5** shows the respondents' purpose of using WhatsApp, 86.5 % of the respondents use it for personal communication, 6.5 % for business while 6.5 % fall in the other category.

**Table 6.** How many news items on (Covid-19) you read through WhatsApp groups and statuses on daily basis?

	Frequency	Percent
1-3 items	114	57
4-6 items	56	28
6-9 items	19	9.5
10 or more items	11	5.5
Total	200	100

*Interpretation*

**Table 6** shows that, 57 % of the respondents read 1-3 news items through WhatsApp group and status on daily basis, 28 % read 4-6 items, 9.5 % read 6-9 items while 5.5 % read 10 or more news items.

**Table 7.** Do you check news for authenticity that is shared through WhatsApp groups and status?

	Frequency	Percent
Yes	167	83.5
No	33	16.5
Total	200	100

#### *Interpretation*

**Table 7** shows that respondents were asked to respond whether they check the news for authenticity that is shared through WhatsApp groups and status, in which a significant number of respondents 83.5 % says that they check the news for authenticity while 16.5 % says that they don't check the news for authenticity, hence they were asked to leave the questionnaire.

**Table 8.** Province Wise data of respondents on checking authenticity of news shared through WhatsApp group and Status.

Provincial affiliation		Frequency	Percent
Punjab	Yes	42	84.0
	No	8	16.0
	Total	50	100.0
Balochistan	Yes	40	80.0
	No	10	20.0
	Total	50	100.0
Khyber Pakhtunkhuwa	Yes	42	84.0
	No	8	16.0
	Total	50	100.0
Sindh	Yes	43	86.0
	No	7	14.0
	Total	50	100.0

#### *Interpretation*

**Table 8** shows the provincial wise responses of respondents on whether they check the authenticity of news shared through WhatsApp Groups and statuses. In Punjab, 84 % say yes they check the news for authenticity and 16 % say no they don't check. In Balochistan, 80 % say yes they check the news for authenticity while 20 % say they don't check the news for authenticity. In Khyber Pakhtunkhwa, 84 % say yes they check the news for authenticity while 16 % don't check and in Sindh 86 % of respondents check the news for authenticity while 14 % don't check.

**Table 9.** Gender wise details of respondents on checking the news for authenticity that is shared through WhatsApp groups and status?

Gender		Frequency	Percent
Male	Yes	83	83.0
	No	17	17.0
	Total	100	100.0
Female	Yes	84	84.0
	No	16	16.0
	Total	100	100.0

#### *Interpretation*

**Table 9** shows that 83 % of male check news for authenticity while 17 % don't check. Likewise, 84 % of female check news for authenticity shared through Whatsapp group and statuses and 16 % don't check. After this question, only those respondents participated in the study those responded that they check the news for authenticity.

**Table 10.** Most of the news on (Covid-19) shared through WhatsApp groups and statuses is taken from

	Frequency	Percent
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Facebook	127	76
Twitter	3	2
Youtube	18	11
News Websites	17	10
Blogs	1	.5
Other	1	.5
Total	167	100

#### Interpretation

Table 10 shows that most of the news on (Covid-19) is shared through WhatsApp groups and statuses are taken from, facebook 76 %, Twitter 2 %, YouTube 11 %, news websites 10 %, blogs .5 %

and other 5 %.

**Table 11.** I report the group admin of WhatsApp and my contacts about the news that seems to be Fake.

	Frequency	Percent
Yes	86	51.5
No	81	48.5
Total	167	100

#### Interpretation

In Table 11, 51.1 % of the respondents say that they report the group admin of WhatsApp group and contacts about the news that seems to be fake while 48.5 % don't report the group's admin and their contacts.

**Table 12.** Descriptive statistics of items recorded on Likert Scale

Statements	SA %	A %	N %	DA %	SDA %
Covid-19 is a top news agenda after its outbreak in Pakistan.	70 (42%)	76 (45%)	10 (6%)	3 (2%)	8 (5%)
I am always in doubt about news items on Covid-19 shared in WhatsApp groups and statuses.	42 (25%)	101(60.5%)	21(12.5%)	3 (2%)	0
I prefer to browse newspaper and news channels website the moment I am in doubt about the news on Covid-19 shared through WhatsApp groups and statuses.	41 (24.5)	86 (51.5)	19 (11)	13 (8)	8 (5%)
Fake News items shared through WhatsApp groups and statuses create panic among the users.	69 (41%)	80 (48%)	10 (6%)	3 (2%)	5 (3%)
I respond to news items shared through the groups and status that the news is fake to aware them about its falseness.	24(14.5%)	75 (45%)	54(32.5%)	12 (7%)	2 (1%)
I have changed my news reading behaviour due to fake news shared on WhatsApp groups and statuses.	30 (18%)	103(61.5%)	23 (14%)	6 (3.5%)	5 (3%)
I prefer to leave the groups that share fake news.	29 (17%)	76 (45.5%)	38 (23%)	15 (9%)	9 (5.5%)
I prefer to mute the Status of those contacts that share fake news.	33 (20%)	78 (47%)	27 (16%)	20 (12%)	9 (5%)
I often advice my contacts and group members to check for	55 (33%)	93 (56%)	9 (5%)	8 (5%)	2 (1%)

news authenticity before sharing.					
Due to the presence of Fake News on WhatsApp groups and statuses, my news consumption behavior has changed.	35 (21%)	106(63.5%)	13 (8%)	6 (3.5%)	7 (4%)

### Interpretation

**Table 12** Note. SA= strongly agree, A=agree, N-Neutral, SD=strongly disagree, D=Disagree.

A descriptive analysis of the questionnaire items was carried out that was recorded on Likert scale. 42 % of the respondents strongly agreed that (Covid-19) is a top news agenda after its outbreak in Pakistan, 45 % agreed, 6 % remained neutral, 2 % disagreed while 5 % strongly disagreed. 25 % responded that they are always in doubt about news items on (Covid-19) shared in WhatsApp groups and statuses, 60.5 % agreed, 12.5 % remained neutral, 2 % disagreed and none strongly disagreed. 24.5 % of the respondents responded that they prefer to browse newspaper and news channels website the moment I am in doubt about the news on (Covid-19) shared through WhatsApp groups and statuses, 51.5 % agreed, 11 % remained neutral, 8 % disagreed while 5 % strongly disagreed. 41 % said Fake News items shared through WhatsApp groups and statuses create panic among the users, 48 % agreed, 6 % remained neutral, 2 % disagreed and 3 % were strongly disagreed. 14.5 % responded that they respond to news items shared through the groups and statuses that the news is fake to aware them of its falseness, 45 % agreed, 32.5 % remained neutral, 7 % disagreed and 1 % strongly disagreed. 18 % of respondents said they have changed their news reading behavior due to fake news shared on WhatsApp groups and statuses, 61.5 % agreed, 14 % neutral, 3.5 % disagreed and 3 % strongly disagreed. 17 % responded said they prefer to leave the groups that share fake news, 45.5 % agreed, 23 % neutral, 9 % disagreed and 5.5 % strongly disagreed. 20 % responded that they prefer to mute the Status of those contacts that share fake news, 47 % agreed, 16 % were neutral, 12 % disagreed and 5 % were strongly disagreed. 33 % of the respondents strongly agreed that they often advise their contacts and group members to check for news authenticity before sharing, 56 % agreed, 5 % remained neutral, 5 % disagreed and 1 % strongly disagreed. 21 % responded that Due to the presence of Fake News on WhatsApp groups and statuses, my news consumption behavior has changed, 63.5 % agreed, 8 % neutral, 3.5 % disagreed and 4 % strongly disagreed.

**Table 13.** Correlation between Fake news that create panic and change in news reading behavior among WhatsApp users (n = 167)

		Fake News items shared through WhatsApp groups and statuses create panic among the users.	I have changed my news reading behavior due to fake news shared on WhatsApp groups and statuses
Fake News items shared through WhatsApp groups and statuses create panic among the users.	Pearson Correlation	1	.320**
	Sig. (2-tailed)		.000
	N	167	167
I have changed my news reading behaviour due to fake news shared on WhatsApp groups and statuses	Pearson Correlation	.320**	1
	Sig. (2-tailed)	.000	
	N	167	167

\*\* . Correlation is significant at the 0.01 level (2-tailed).

### Interpretation

**Table 13** illustrated the Pearson's r for the correlation between the fake news items that create panic among users and change in news reading behavior is 0.320; it shows a moderate and

positive correlation between these two variables. The results also show that there is a statistically significant correlation between the two variables. That means, increases, or decreases in one variable do significantly relate to increase or decrease in the second variable.

## 5. Conclusion

In the Pakistani context, it is a positive indicator that this study has surfaced that majority of the respondents are habitual to check the authenticity of news shared through WhatsApp. Moreover, an important issue for today's information consumers is that information on social media platforms relatively lacks professional gate keeping to monitor the content and evaluate. This study found that majority of the respondents monitor and evaluate the news for fake news.

Due to the extensive use of social media platforms nowadays, it is viewed that people do not check the news for authenticity. The same problem was taken up in this study and it was analyzed in detail whether the people in Pakistan who are using WhatsApp groups and statuses check the news for authenticity or not. Many other social media platforms are used however this study considered WhatsApp and groups. Surprisingly, the results of this study showed that most of the respondents check the news for authenticity while few do not check. It is a healthy sign that people have realized the need to check the news for fakeness before sharing. Almost everyone has a WhatsApp account and that is used daily for many purposes. It's a trend that people share news through WhatsApp groups and statuses, especially the news concerning Covid-19. This study found that 83.5 % of people check news concerning Covid-19 for authenticity. The other result of the study shows that most of the respondents find Covid-19 news as a top agenda of news nowadays. 63.5 % of respondents agreed that they have changed their news reading behavior because of the presence of fake news shared through WhatsApp groups and statuses. Finally, it can be well claimed that there was a strong agreement on all the items of the questionnaire, which means that the respondents are sensitive about the fake news shared through the platforms.

In the era of post-truth, social media could still be the best venues to disseminate information if the people on social network are transmitting news from credible sources (Hermida, 2010). Social media has led to ground-breaking phenomenon such as real-time citizen journalism (Vosoughi et al., 2018). Fake news spreads much faster than real news, and real people are to be blamed for this and not the devices or medium.

Further studies can consider other platforms of social media or other mediums of communications considering the fake news. Adding to this, the sample size can be increased and probability sampling can be used. Moreover, a case study can be conducted to give certain news items to groups of people that what ways they use to find fakeness of news.

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