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## Impact of journalists' Twitter use on their perceptions of job performance in the Pakistani context

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## **1. Introduction**

The social media technologies, specifically blogs, online videos, RSS feeds, Twitter, online users' community, and podcasts were adopted unprecedentedly by the academic and non-academic world for knowledge sharing and keeping connection with professional and personal contacts (Tenopir et al., 2013). Journalists are found active users of social media technologies for their professional assignments (Mansour, 2016). Among the social media technologies, Twitter has become vivid source of information for individuals and organizations that provides easy access to some sorts of data regarding public opinion, citizen reporting and social interactions (Hoeber et al., 2016; Weller, 2015). Since its introduction in 2006, Twitter makes possible to users share information through creating unique and customizable profiles (boyd and Ellison, 2008). The statistics also reveal that it is growing and widely used social media network with approximately 317 million users (Chaffey, 2017).

## **2. Context of the study**

Realizing the importance of digital revolution, the government of Pakistan initiated three key IT related projects during the last two decades; namely, (1) National IT Policy and Action Plan 2000, (2) Telecommunications Policy 2015, and (3) Pakistan Vision 2025, helped to improve Internet connectivity and speed in the country (Pakistan Ministry of Science & Technology, IT and Telecommunications Division, 2000; Pakistan Ministry of Information Technology, 2015; Pakistan Ministry of Planning, Development and Reform, Planning Commission, 2015). The technological advances, low cost mobile technology, and the increased use of internet during the last decade led to communication revolution that caused paradigm shift especially in e-government, e-business, e-education, and e-health. In a recent report, Speedtest Global Index revealed that Pakistan became the highest increase in mobile internet speed among the world's most populous countries during November 2016 - November 2017. According to the report, Pakistan positioned on top of the world's largest countries with a 56.2% jump in mobile download speed followed by India in the category at 42.4% and Brazil at third spot with 27.6% while Japan, 23.5%, and USA, 22.0%, placed at fourth and fifth position respectively (Mcketta, 2017).

Due to the fast development of internet and use of smart technologies, Twitter like other social media technologies has changed the ways of communication and proved to be vital source of amplifying the impact of current incidents in Pakistan. The level of activism and reliance on news over Twitter shows that it is playing a pivotal role in political and social communication. Twitter usage among common public and news agencies appeared to increase during the recent past. For example, in 2016, Twitter became an essential communication tool in Pakistan as the government faced large sit ins in the front of the parliament for the political movement against the current government on Panama Leaks which lead investigations on the ruling family's corruption charges. Tech-savvy activists used social media technologies especially Twitter to organize protests against the then government. As the events unfolded, they also used the service to send messages and pictures to the outside world.

Keeping in view the importance of fast delivery of information and with the growing use of social media technologies in Pakistan, media houses are very keen to enhance rating in the competitive market by reporting real time incidents. This situation compelled the media houses to offer lucrative jobs to vibrant journalists who know how to interplay between online and off-line followers. Likewise, the rapidly changing digital landscape and adoption of

emerging social media technologies in the journalism have pushed researchers towards new investigation. After exploration of the prominent databases for the last one decade, e.g., Web of Science, Scopus, ERIC, ProQuest, and Google Scholar, research on Twitter reveals that scholars have investigated Twitter's expressive and consumptive role in journalism (e.g., Ahmad, 2010; Bruns, 2012; Deprez, et al., 2013; Lee and Kim, 2014; Lee et al., 2017; Tandoc and Ferrucci, 2017) and also suggested the need of more work on it (Kim, 2011). In contrary, researchers did not give much attention to investigate Twitter use for Pakistani context. A few studies have been reported to explore Twitter use by common public (Ali and Kaur, 2015; Ahmad and Skoric, 2014; Murthy and Longwell, 2013).

The consequences of social media technologies usage can be seen on individual, firm and societal level (Bolton, et al., 2013). Ali-Hassan et al. (2011) reported that using social computing increases employees' job performance by enhancing their social capital at workplace. Moreover, if individuals adopt social networks such and use for their work then it is important to investigate the outcome of that use on their work (Leftheriotis and Giannakos, 2014). Despite the increasing importance of using Twitter and its benefits to perform job related assignments, the review of the local literature did not retrieve any study that addresses the impact of Twitter use on job performance. Thus, keeping in view the context, this empirical study investigated the use of Twitter by Pakistani journalists and its impact on their job performance.

The remainder part of this paper reports about aim of the study, research questions, the review of relevant literature, and research methodology. Then, research findings, discussion on findings, conclusion which explains a concise picture of this research, are presented. At the end, this study sheds light on research implications, limitations and directions for future research.

### **3. Aim of the study**

This study investigated factors affect the use of Twitter by Pakistani journalists and examined the impact of its usage on their job performance.

### **4. Research questions**

Specifically, this study addressed the following three research questions (RQs):

RQ1: How frequently do journalists use Twitter for job-related activities?

RQ2: What factors do effect journalists' Twitter ++usage?

RQ3: What is the impact of journalists' Twitter usage on their job performance?

### **5. Literature review**

Previous research found that Twitter is a useful technology for journalists as investigators (Ahmad, 2010), provides timely information on current events (Bruns, 2012), improve effective relationship with audience (Lee and Kim, 2014; Tandoc and Ferrucci, 2017), helpful for personal promotion (Lasorsa et al., 2011), and founds visible impact on media industry (Newman, 2009). Like technological advanced countries, trend to use Twitter is also increasing in the developing world. In Gulf region, Al-Jenaibi (2016) reported the revolution caused by Twitter in shifting the Arab people discourse and opinion in the kingdom because those opinions are being heard instead of censored. He further mentioned that social media is having a major impact on the conservative societies of Saudi Arabia, Qatar and UAE. Despite

the efforts, still research lacks predominantly to explore how journalists of the developing world do leverage Twitter in their professional lives, consider the main actors behind this change in the developing society.

### *5.1 Status of social media research in Pakistan*

The local literature revealed that researchers explored the use of social media technologies, e.g., Facebook, Twitter, YouTube, Wikipedia, WhatsApp, Skype etc., focusing common public, university students, libraries, and librarians. The social media research depicts that the adoption of ubiquitous technologies is beneficial for university students in improving their academic performance (Arif and Kanwal, 2016), general information sharing (Farooqi et al., 2013), and information sharing during political crises (Shaheen, 2008). It was also found that the social media technologies are key sources of information (Kousar et al., 2014) and are considered successful learning path for students (Arshad et al., 2014). The libraries used the technologies as marketing tool (Shah and Ahmad, 2016) while librarians adopted the technologies to perform professional tasks and in personal lives as well (Arif and Mahmood, 2012).

From journalism context, Ali and Kaur (2015) revealed that journalists in Karachi, the largest city of the country, used Web 2.0 technologies, e.g., RSS, blogging, social media network, Wikis, video sharing, image sharing, skype and instant messengers, efficiently for their professional assignments, information gathering, reports and article preparation, and research project. Researchers also reported the usefulness of Twitter in social service during flood rescue and the campaign of 2013 Pakistani general election (Ahmad and Skoric, 2014; Murthy and Longwell, 2013). Considering the importance of Twitter for journalism profession, and propositions on need of further research on Twitter in different region of the world (Lee et al., 2017), still researchers paid less attention to investigate the phenomenon. Overall, the literature shows a gloomy picture to explore the potential of Twitter, an emerging technology in the country, from the Pakistani journalists' perspective.

### *5.2 Theoretical framework and research hypotheses*

One component of reviewing the relevant literature is to establish which theory might be used to explore the research questions (Creswell, 2014). For this study, theory of planned behavior (TPB, Ajzen, 1991), an extension of theory of reasoned action (Fishbein and Ajzen, 1975), was used to investigate factors affect Twitter's use. TPB is a parsimonious theoretical framework that explains attitudinal beliefs, subjective norms and perceived behavioral controls are primary factors for behavior intention and actual behaviour. The information system literature reveals that the theory has been widely tested to explore individual's intention and use of information technologies, e.g., computer (Teo & Lee, 2010) internet/websites (Chia et al., 2006; Lin, 2000; Zamani-Miandashti et al., 2013), and Twitter (Lee et al., 2017). These studies confirmed that attitude, subjective norms and perceived behavioural control are key factors in predicting behavioral intentions to use information technologies. Only 22 citations in 1985, the number of citations per year was grown steadily to a total of 4550 in 2010 (Ajzen, 2011).

The first latent variable of TPB, attitude predicts behaviour intention and is defined as an individual's positive/negative feelings about performing the target behavior. This conceptualization led to the assumption of a stronger relation between attitude and intention (Fishbein and Ajzen 1975). Several studies reported that attitude is a strong predictor in explaining individuals' behavior intention to use computer (Davis et al., 1989), internet

(Zamani-Miandashti et al., 2013; Peng et al., 2012) and internet-based technologies (Lin, 2000; Pynoo et al., 2011). In a recent study, Lee et al. (2017) also found that user attitude (risk and usefulness) significantly predicts behaviour intention to use Twitter by Korean journalists. Hence, it may be posited the following hypotheses:

H1: Risk has positive impact on journalists' behaviour intention to use Twitter.

H2: Usefulness has positive impact on journalists' behaviour intention to use Twitter.

The second predictor of TPB is a social factor known as subjective norm. It is individual's perception of social pressure from closely associated people that they think he/she should or should not perform the behavior in question (Fishbein and Ajzen 1975). The literature also reveals that the decision to use social media technologies is affected by colleagues, friends and family members. In a study conducted in Jordan, the respondents indicated that closely associated people influence behaviour to use Facebook (Al-Debei et al., 2013). Darvell et al. (2011) applied TPB to investigate adoption of Facebook and found that subjective norm predicted behaviour intention. Likewise, users of social media technologies, e.g. Facebook, Twitter, YouTube, Wikipedia, WhatsApp, and Skype, also confirmed subjective norms are important predictors towards adoption of the technologies (Arif and Kanwal, 2016; Lee et al., 2017). Thus, it can be hypothesized:

H3: Subjective norms have positive influence on journalists' behaviour intention to use Twitter.

According to TPB, perceived behavioural control refers to individual's perception of the ease or difficulty of performing the behavior of interest (Ajzen, 1991). In this study, perceived behavioural control means that if a journalist has skills, time, necessary resources (e.g., smart phone, laptop, internet etc.), and ease of use which imply that he/she can use Twitter. In literature, different studies demonstrate the direct relation of perceived behavior control on behaviour intention. For example, the study of Chia et al. (2006) disclosed that perceived behavioral control is a latent variable that refers not only to one's ability or skills to use internet but also includes factors needed for use such as availability of time. According to Kim (2011), the factors such as benefits, and skills are considered key factors for journalists' adoption of weblogs. Thus, the impact of perceived behavioural control on journalists' behaviour intention to use Twitter can be observed by the following hypothesis:

H4: Perceived behavioural control has positive influence on journalists' behaviour intention to use Twitter.

Fishbein and Ajzen (1975) introduced the concept of behavioral intention in the theory of reasoned action. According to them, it is the person's subjective probability that he or she will perform the behavior in question. The studies (Lee et al., 2017; Tandoc and Ferrucci (2017) also found that journalists behaviour intention predict significantly the actual use of Twitter. Thus, the following hypothesis can be framed as:

H5: Behaviour intention has positive impact on actual usage of Twitter.

For this study, individual job performance is defined as "observable things people do (i.e., behaviors) that are relevant for the goals of the organization. The behaviors that constitute performance can be scaled in terms of the level of performance they represent" (Campbell et al., 1990, p.314). Leftheriotis and Giannakos (2016) argued that if individual adopt social networks such as Twitter and use for their work then it is important to observe what is the outcome. Moreover, Ali-Hassan et al. (2011) reported that using social computing increases

employees' job performance by enhancing their social capital at workplace. Furthermore, the results of the study (Moqbel et al., 2013) showed that social networking site use intensity had a significant positive effect on job performance. Thus, it can be argued that Twitter impacts journalist's job performance and it can be hypothesized that:

H6: Twitter usage has positive impact on journalist's job performance.

The hypotheses developed in the preceding section are depicted in the research model as shown in Figure 1. The main constructs of the hypotheses are represented by arrows connecting pairs of latent variables.

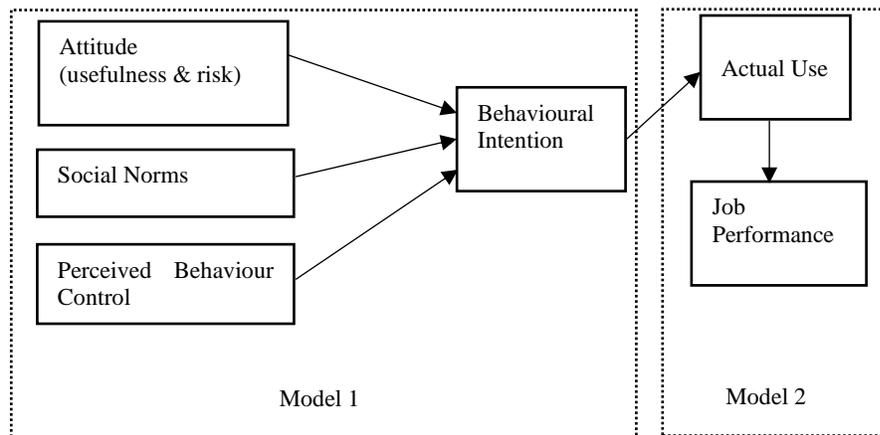


Figure 1. Research model

## 6. Research methodology and design

The literature provides empirical evidences that researchers employed questionnaire-based survey to explore Twitter usage in journalists' context (Lee et al., 2017; Tandoc and Ferrucci, 2017; Lee and Kim, 2014). The survey research is considered reliable method for "collecting original data for describing a population too large to observe directly" (Babbie, 2011, p. 270). Connaway and Powell (2010) also indicated that survey research is relatively inexpensive and has been proved useful for use and user studies, and state-of-the-art surveys. So, this study opted for quantitative survey research design and data were collected through structured questionnaire. To approach the target population, we used convenient sampling technique due to unavailability of the comprehensive directory of Pakistani journalists. In view of Saunders et al. (2009), the convenience sampling is useful when researchers have short time scales and at least some idea of members' opinions.

### 6.1 Development of survey tool

An initial review of the literature was conducted to identify relevant scales. After finalizing the relevant studies, the survey items were adapted keeping in view the study's aim. The survey tool consisted of two sections: the first section includes factors that affect journalists' behaviour intention and impact of Twitter's actual use on their job performance; the section two requires demographic information of the sample survey such as age, gender, education, and frequency and purpose to use Twitter. The subsequent section briefly explains about the measure of latent variables of the research model.

### *6.1.1 Attitude toward behavior intention*

Based on previous research (Lee et al., 2017), the journalists' attitude was measured using risk and usefulness. Risk to use Twitter was measured comprising five items: e.g., (1) content I upload on Twitter could have adverse effects; (2) my tweeting could cause social controversy later; (3) tweeting may bring legal problem for me; (4) I face social repercussion due to tweeting; and (5) I have privacy concerns when tweeting. The usefulness measures journalists' perception how Twitter is useful for their jobs, is based on three items: (1) Twitter is useful; (2) Twitter is helpful for my work, and (3) Twitter is useful for communicating with audience. All the scale items rated on 7-point Likert-type scale ranging from "1-strongly disagree" to "7-strongly agree".

### *6.1.2 Subjective norms*

This variable measures the journalists' perception about three types of subjective norms rated on 7-point scale Likert scale, e.g., (1) my family members and friends who are important to me think that my Twitter use as a good behavior; (2) my colleagues consider my Twitter use as a good behavior, and (3) my employer considers Twitter use as a good behavior. The items were adapted from the study of Wang and Lin (2011).

### *6.1.3 Perceived behavior control*

This latent variable refers to the journalists' perception about resources, skills, and time to easily manage Twitter's usage, based on four items rated on 7-point Likert-type scale: (1) I have necessary resources (smart phone, laptop, internet etc.) to use Twitter; (2) I have essential skills to use Twitter, (3) I have time to manage Twitter use. These items were adapted from the study of Lee et al. (2017).

### *6.1.4 Behavior intention to use Twitter*

This latent variable refers to the journalists' intention to use Twitter, based on two items; (1) I intend to continue using Twitter, and (2) I will use Twitter in future, adapted from the study of Teo and Lee (2010). Responses ranked on a 7-point Likert-type scale.

### *6.1.5 Actual use of Twitter*

The actual use of Twitter was measured by adapting the item, 'I use Twitter to perform my job' from previous study (Lee et al., 2017), also ranked on a 7-point Likert-type scale.

### *6.1.6 Job performance*

This latent variable was measured on a 7-point Likert-type scale, consisted of four items; the two items, (1) Twitter usage has positive impact on effectiveness and productivity in my job, and (2) Twitter usage is valuable assistance to me in the performance of my job, were adapted from the study of Goodhue and Thompson (1995). The third and fourth items; (3) using Twitter, I perform better than an acceptable level, and (4) I intentionally expend a great deal of efforts in carrying out my job using Twitter, were adapted from the previous study (Kuvaas, 2006).

To conduct a study, based on TPB as theoretical framework, normative and intention questions should be dealt carefully. Additionally, repetition in questions may affect the results of the study (Darker and French, 2009). To address the issues, a focus group was conducted to finalize instrument for this study. A draft questionnaire was prepared and presented to focus group participants; consisted of one professor, two doctoral students of mass communication

and three journalists having relevant research experience. Typically, 5 to 12 people are considered enough for a focus group study (Babbie, 2011). The panel reviewed the instrument and suggested minor modifications in the language of the items being asked and formatting of the instrument. Overall, the participants agreed upon the instrument will be reliable after incorporating the suggested changes.

### *6.2 Research participants and data collection*

The population of this study consisted of journalists working in ten mainstream print and electronic media houses of Pakistan. In the first step, the survey in print along with covering letter, explains the aim of the study, was distributed in the press clubs of twin cities, Rawalpindi and Islamabad (Capital of Pakistan). The response rate was too discouraging, received only 47 responses. Later, an electronic link to the questionnaire was sent through e-mail as well as posted on journalists' social media platforms. The Google form hyperlink to the survey was sent to working journalists on their mailing list (over 700 members), acquired from the Press and Information Department under Ministry of Information and Broadcast, Government of Pakistan, Facebook group of the National Press club Islamabad, and individual Twitter handles (100 Twitter handles) of the journalists in one of the researcher's Twitter page contributing to this paper. The response rate remained low, 74 filled the survey, but better than print format distribution method. However, two reminders helped to collect data. The study received 201 questionnaires; excluded seven which were not accurately filled and retrieved findings from 194 usable responses. The data collection activity was continued during a period of 3-months from 01 September to 30 November 2016.

### *6.3 Validity and reliability of the survey tool*

Although the study adapted validated scale items from relevant studies; however, Cronbach's Alpha coefficient ( $\alpha$ ) was calculated to ensure the reliability of the study's instrument. The Alpha value ( $\alpha = 0.788$ ) advocates a strong reliability measurement for the scale items consistent with the minimum psychometric reliability score ( $\alpha=0.70$ ) as recommended by Frankfort-Nachmias and Nachmias (2008). For validity, the results of the exploratory factor analysis showed that the scale items loaded successfully, ranged from 0.316 to 0.710, as suggested by Hair et al. (2009).

## **7. Research findings**

### *7.1 Respondent demographics*

The findings showed that 194 responded the survey; 117 (60.3 %) were male whereas 77 (39.7%) were female. Among the respondents, 94 (48.5 %) belonged to the age group of 26-35 years while 50 respondents aged between 36 and 45 years represented 25.8 % of the sample. A further breakdown shows that only 30 (15.5) fell under less than 25 years while 4 (2.1%) respondents were above of 56 years. Regarding education, the respondents possessed bachelor, master, and MPhil degrees. None of the respondents had PhD degree (Table 1).

### *7.2 Journalists' Twitter use*

The research question one intended to investigate the journalists' Twitter use. General Twitter use was measured by asking how much time journalists spend a day and how do they leverage Twitter by read tweets, tweeting, and both tweeting and read tweets. The findings

illustrate that the journalists use Twitter and more than half of the respondents (112; 59.8%) use more than 51 minutes a day. Similarly, the clear majority, 140 (72.2%) leveraged the platform for tweeting and reading tweets (Table 1).

Table 1: Respondent Demographics

Variable	Value	Frequency	Percentage
Gender	Male	117	60.3
	Female	77	39.7
Age (Year)	< 25	30	15.5
	26-35	94	48.5
	36-45	50	25.8
	46-55	16	8.2
	> 56	4	2.1
Education	Bachelor	37	19.1
	Master	95	49.0
	MPhil	62	32.0
	PhD	Nil	
Frequency to use Twitter	< 20 min	22	11.3
	21-30 min	30	15.5
	31-40 min	26	13.4
	41-50 min	26	13.4
	51-60 min	90	46.4
	> 1 hour	22	11.3
Purpose to use Twitter	Read Tweets	44	22.7
	Tweeting	10	5.2
	Tweeting and read tweets	140	72.2

### 7.3 Hypotheses testing - factors affecting journalists' Twitter use and its impact on job performance

To answer RQ2, 'What factors do effect journalists' Twitter usage?', first, the descriptive analysis of core constructs of the research model-1 is presented to explain the factors that affect journalists' behavior intention to use Twitter. Second, multiple linear regression was performed to test the hypotheses.

Table 2 and Table 4 describe descriptive statistics and correlation analysis of the factors affecting journalists' behaviour intention and actual use of Twitter. The results reveal that Twitter is useful, and they also agreed that colleagues, employer, family members, and friends influenced their behaviour to adopt the technology. Although majority slightly disagreed with risks to use Twitter. In contrast, 36 journalists (18.56%) showed apprehensions that they may have adverse effects, controversy, legal problem, and social repercussion due to tweeting which is a matter of great concern. Moreover, the respondents also possessed necessary resources, essential skills and time to manage Twitter easily.

Pearson's correlation was found statistically significant ( $p < .01$ ), ranged from .482 to .636, for variables except risk. Correlation for risk was found negative (-.233) with the behaviour intention. The analysis also presents a strong correlation between behaviour intention to use and actual use of Twitter (.554).

Table 2: Descriptive statistics and correlation matrix of model one variables

Variable	Mean	SD	1	2	3	4	5
1. Behaviour intention	6.65	.573	1.00				
2. Risk	3.52	1.61	-.233	1.00			
3. Usefulness	6.40	.792	.636	-.314	1.00		
4. Subjective norms	5.97	1.11	.553	-.135	.554	1.00	
5. Perceived behavior control	6.48	.670	.482	-.102	.412	.659	1.00

Scale: Strongly Agree=7, Agree=6, Slightly Agree=5, Undecided=4, Slightly Disagree=3, Disagree=2, Strongly Disagree=1

In terms of hypotheses testing, Table 3 demonstrated that usefulness ( $\beta = .447$ ,  $t = 6.783$ ,  $p = .000 < .05$ ), subjective norms, ( $\beta = .187$ ,  $t = 2.441$ ,  $p = .016 < .05$ ), and perceived behaviour control ( $\beta = .170$ ,  $t = 2.433$ ,  $p = .016 < .05$ ) support behavior intention to use Twitter while risk ( $\beta = -.50$ ,  $t = -.909$ ,  $p = .365 > .05$ ) does not support attitude towards behavior intention. Thus, H2, H3 and H4 are supported while H1 is not supported. Furthermore, the beta value indicated that usefulness ( $\beta = .447$ ) proves to be a stronger predictor which significantly measure behavior intention to use Twitter. Overall, attitude, subjective norms and perceived behavior control are accounted for 48.1 % in measuring the journalists' behavior intention to use Twitter.

The regression analysis ( $R^2 = .30$ ), ( $\beta = .554$ ,  $t = 9.211$ ,  $p = .000 < .05$ ) indicates that behaviour intention significantly predicts the actual use of Twitter among journalists. Thus, H5 is supported.

Table 3: Results of regression analysis of research model one core variables

Variable	Relationship (Independent Vs dependent variable)	$R^2$	t-value	Beta	Sig.
Attitude:	Attitude → Behaviour intention				
Risk			-.909	-.50	.365
Usefulness			6.783	.447	.000
		.481			
Subjective norms	Subjective norms → Behaviour intention		2.441	.187	.016
Perceived behavior control	Perceived behavior control → Behaviour intention		2.433	.170	.016
Behaviour intention	Behaviour intention → Actual use	.306	9.211	.554	.000

RQ3 investigated the impact of Twitter usage on the journalists' job performance. The descriptive and correlation analysis revealed that journalists Twitter use, and job performance are strongly correlated (Table 4).

Table 4: Descriptive statistics and correlation matrix - actual use and job performance

Variable	Mean	SD	1	2
1. Actual use	6.458	.705	1.00	
2. Performance	6.257	.673	.592	1.00

A multiple linear regression was also run to observe the impact Twitter's usage on the journalists' job performance. The results of research model 2 ( $\beta = .592$ ,  $t = 1.0181$ ,  $p = .000 < .05$ ) depicts that the impact of Twitter actual usage is found significant on the journalist's job performance (Table 5). Hence, H6 was accepted.

Table 5: Results of regression analysis of research model two core variables

Variable	Relationship (Independent Vs dependent variables)	R <sup>2</sup>	t-value	Beta	Sig.
Actual use	Actual use → Performance	.351	1.0181	.592	.000

## 8. Discussion on findings

The aim of this study was to examine factors that affect Pakistani journalists Twitter use and its impact on their job performance. During the recent years, advances in ubiquitous technologies have transformed Pakistani society and made easy for users to access digital information. The social media technologies especially, Twitter offers journalists new opportunities to obtain timely information about current events, improve effective relationship with audience and express their opinions to enhance their popularity and visibility among followers. The findings of this study also demonstrate that Pakistani journalists do leverage Twitter for tweeting and reading tweets and its use impact positively on job performance.

The results of this empirical investigation support five out of six hypotheses. The findings reveal that attitude toward usefulness supports the use of Twitter while attitude toward risk did not predict the behaviour intention and negatively correlated with the behaviour intention that suggests that if risk is low then the journalists will more inclined toward its use. These findings correspond to Lee et al. (2017) study in which they also found that Korean journalists' perceived attitude toward risk – i.e., Twitter use is risky – was found to have no relationship with general Twitter use. In contrary to risk findings, in Pakistan, it has been observed in a few cases, that wrong tweets had adverse effects in the form of social repercussions and brought litigation for the journalists.

From the social perspective, the results suggest that closely associated persons exert pressure and play a key role in journalist's intention to use Twitter. In practice, all professionals including journalists do weightage the opinion of friends, family members, colleagues, and employers which exhibit the "collectivistic" nature of Pakistani society. Earlier studies conducted in similar context have also shown that subjective norms are significant predictors of people's usage intention to use the similar technologies (Lu et al., 2009; Darvell et al., 2011; Wang and Lin, 2011). The study of Tandoc and Ferrucci (2017)

found that the journalists monitored their audience feedback and more meticulously, their editors expected to consider the feedback in editorial decision.

In terms of perceived behavior control, the findings show that journalists believe if they possess necessary resources like smart phone, laptop, Internet and skills and time then they can manage easily and can leverage Twitter for tweeting and reading tweet. It can be inferred that the users who have technological advantages will use more the social media technologies. In a recent study, Lee et al. (2017) found that Korean journalists' Twitter usage was also impacted by perceived behavior control.

In this study, the behaviour intention measures significantly, 48.1%, the actual use of journalists' Twitter usage. This finding is also supported from the recent relevant studies conducted on Korean and USA journalists (Lee et al., 2017; Tandoc and Ferrucci, 2017). Finally, the key finding of this research is to be considered the impact of Twitter actual usage on journalists' job performance. The results reveal that if the journalists utilize the platform, their job performance will be improved. Moqbel (2012) found that social networking sites, Facebook, Twitter, LinkedIn, LinkedIn, Google+, impact on employees' performance in US and Yemen. In Pakistan, Ashraf and Javed (2014), also reported social networking impact bank employees' performance. In the current study, the results explain that Twitter usage impact 35.1 % on job performance, measured through self-reporting questions. So, these findings demonstrate that there are some other factors to be addressed in future study. The relevant literature also reveals that employee's job performance is a broad concept which is affected by many factors, for example, employee's cognitive ability, social skills, job-related attitude and prior job experience (Dokko et al., 2009; Hunter and Hunter, 1984). The study conducted by Moqbel et al. (2013) also found that social networking sites use intensity had a significant positive effect on job performance through the mediation of job satisfaction.

## **9. Conclusion**

In Pakistan, ICTs policy initiatives undertaken by the federal government helped to offer fast speed internet access with low-priced which ultimately paved a way to promote smart technologies. Like other social media platforms, Twitter has become one of the most popular communication platforms to stay connected and communicate with others, including friends, family members, communities, and organizations. The review of the relevant literature shows that academics and practitioners paid less attention to assess the impact of emerging social media technologies and the most importantly, how Twitter's usage has impacted journalists' horizon in performing their job in the rapidly changing digital landscape in the country. Based on the gap identified in the literature, this study investigated factors that affect the use of Twitter by Pakistani journalists and how Twitter usage can improve their job performance. A survey-based self-completion structured questionnaire was used to collect data from journalists, selected through convenient sampling, working in ten mainstream print and electronic media houses of Pakistan. In response to the survey, 194 valid surveys were received, 117 (60.3 %) were male whereas 77 (39.7%) were female.

The results show that majority of the journalists leveraged the platform for tweeting and reading tweets. Twitter usage intention is influenced more by usefulness compared to perceived behavior control, subjective norms, and attitude. The study further states that among all the factors, the journalists' behavioral intention was found to be a stronger predictor of the Twitter usage. From the findings, it can be concluded that attitude, subjective norms,

perceived behavior controls, and behaviour intention affects significantly the journalists' Twitter usage that ultimately impact positively on their job performance.

#### **10. Research implications, limitations and directions for future research**

Despite some limitations, the current study offers several contributions to research and practice. First, in terms of theoretical implications, the scholarly effort provides a baseline study and will open doors for future researchers to explore the impact of post-adoption Twitter users' behavior in similar settings. Second, the research findings will support in strategic planning for owners of media houses, social media developers as well as national policy and decision makers of media and mass media institutions to know how Pakistani journalists do leverage Twitter and how its use impact on their job performance. Finally, the theoretical framework includes an important dependent variable, received too little attention in the information system literature, namely – Journalists' job performance from a developing country context.

The findings of this study cannot be generalized due to the sample population that belonged to the mainstream media houses located in cities of the country. Another limitation is associated with the small sample population, selected through convenient sampling technique, which is not true representation of the whole population. Therefore, it is suggested that future research should also include journalists working in other media houses from all over the country. To measure job performance, other factors such as employee's cognitive ability, social skills, job-related attitudes and career history should also be considered while developing theoretical framework. In terms of research design, it is suggested that the future research should be conducted by employing sequential mixed methods design that will support to explore the phenomenon under discussion in more detail. The last but not the least, the use of Twitter, an ever-evolving medium, is a global phenomenon, therefore, we encourage researchers from other developing world, especially sister developing countries to replicate the research that may retrieve results different from those found in this study.

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