

## **Relationship of Smartphone Use and Job Performance: Insights from Electronic Media Industry in Pakistan**

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This research article explores the relationship between smartphone usage and job performance among professionals working in the leading electronic media channels in Pakistan. Furthermore, it also examines how gender, education, and age act as moderators in the relationship between smartphone usage and job performance. For this purpose, a survey was carried out involving professionals belonging to the electronic media industry in Pakistan. The findings revealed a positive and significant relationship between their smartphone usage and job performance. The results also showed that the gender of employees did not moderate this relationship, while the education and the age were found to be significant moderators. The study will help the media owners in devising the policies and strategies to facilitate their workers in easy utilization of smartphones for work related tasks.

**Keywords:** job performance; journalistic practices; media professionals; Pakistan; smartphone usage

Technology has revolutionized the world with its novel innovations and interventions aimed at enhancing human productivity. Likewise, digitization has emerged as a pivotal force in journalism, empowering journalists to streamline their brainstorming process and execute their daily tasks more effectively (Bakirmekik, 2022). It is observed that cell phones are extensively regarded as a cheapest and easily accessible source of satisfaction for its users, as they spend a major portion of their day on these devices for interaction with others, data sharing and making different contacts/relationships. Hence, cell phones give liberty to the individuals especially youth for internet surfing and other online activities (Ali, 2014). The trend of using smartphones, equipped with latest features like sound recording camera, internet and messaging, in every field including mass media has transformed the process of news production, dissemination and its utilization hence resulting in introducing new advanced system (Gambarato & Alzamora, 2018; Westlund, 2013). The technological evolution from traditional way to digitalization especially mobile phones is a continuous process since 1990s and now media industry is massively adopting the smartphones (Kalorth et al., 2020).

Smartphones are taken as a game changer in media industry because they have not only influenced the news collection, reporting, news editing, news dissemination but also job performance of the media reporters as they now can use their handheld sets to also capture live pictures from the scene even in the absence of heavy broadcast systems (Gambarato & Alzamora, 2018; Westlund, 2013). Opting for smartphone use in journalism is also known as Mobile Journalism or Mojo Journalism. It is described as a “Type of digital storytelling where the primary device is used for writing, editing and designing.” It is a novel term in which personnel belonging to different media outlets are equipped with smartphones to disburse the multimedia story (Lydersen, 2020). Like other countries, smartphones are also becoming famous in Pakistan as a total of 188.9 million cellular mobile connections are active in the country (We Are Social & Meltwater, 2024). Netizens in Pakistan surged by 4.4 million (+5.4 percent) between 2022 and 2023. A total of 87.35 million internet users was recorded in Pakistan at the beginning of 2023. In January 2023, 71.70 million social media users were present in Pakistan, encompassing 30.1 percent of the overall population. There were 71.70 million digital media consumers in Pakistan in January 2023. With the increasing trend of mobile phones in journalism, journalists are now well-equipped for the rapid generation and circulation of news, specifically in remote and rural areas (Umair, 2016). The job performance and job satisfaction of electronic media personnel are improving due to approachability, accessibility, work credibility and easiness of smartphone use (Podger, 2018). However, Information and Communication Technologies (ICTs), despite being an essential part of the organizational technological environment, also cause mobile technostress when the users undergo an imbalance due to continuance intentions of using cell phones (Khlaif et al., 2023).

This study examines the relationship between smartphone usage and job performance of the employees working in electronic media houses in Pakistan. Smartphones are moveable handheld computers that install and uninstall software as per requirements. Also, they include video recorders, messaging, e-mail, digital cameras, internet access, and apps (Suleman et al., 2021). They provide an easy medium to users for immediate connectivity, leading the present information technology environment. On the other hand, job performance is basically a way to achieve an objective or aim in a role, work, or company, however, the actual repercussions of the performed duty in a job are often ignored (Campbell et al., 1990). Job performance is also traditionally described as behaviors and actions within the control of the individual who serves the company's objectives (Rotundo & Sackett, 2002).

Historical records reveal that smartphone usage has satisfied the thirst for immediate connectivity as it has led the present information technology environment. Various elements of smartphone addiction in the perspectives of social and academic learning, mobile phone messaging and following the latest trends by its users have been observed. The findings of previous studies concluded that smartphones have direct or indirect impact on its consumers. Several researches have been carried out to explore the role of handheld technologies on the students of mass communication in America and UAE (Ayish & Dahdal, 2017) and work efficiency of the mobile or field journalists through smartphones (Vaataja, 2012). In the Pakistani context, researches have also been conducted to investigate ethnic news media in the digital age, mobile journalism and changing patterns of news production and fake news culture (Jamil & Appiah-Adjei, 2019) and usage of X (formerly known as Twitter) by journalists that positively impacts their job performance (Shah et al., 2022). However, the relationship between smartphone usage and job performance of electronic media personnel, especially in Pakistan, is least explored. Therefore, the influence of extravagant usage of smartphones needs to be analyzed on the level of professional proficiency of electronic media personnel in Pakistan. The primary aim of this study is to investigate the role of smartphone usage on the job performance of electronic media personnel in Pakistan.

### **Literature Review**

Salah (2017), in his qualitative research, discovered that the individuals engaged in journalism profession find handheld sets or smartphones an effective tool as they can comfortably report from remote areas or where they cannot reach easily. Hence, positively affecting their job performance. This emerging technology has offered a great opportunity for both journalists and media houses to increase their connections across the world. Vaataja (2012) stated that the work efficiency of smartphone-laden mobile journalists increases when they are in the field as the mobiles help them in capturing, finalizing and sending the story or footage or any new related material directly from the field. The acknowledged benefits of handheld mobile devices for field journalists include monetary gains, workflow improvement, job satisfaction, access to information, convenience, communication enhancement, temporal flexibility, and location independence.

Ayish and Dahdal (2017) surveyed students of media and communication studies and concluded that the respondents were in support of preparing their assignment on video storytelling on portable devices like iPads and smartphones in comparison to other procedures. This termed the mobile phones reliable media collecting tools for better journalistic practices. Jamil (2023) investigated that the digital incompetency of Pakistani journalists negatively affects their job performance and digital trends installed in newsrooms in the mainstream media. The findings revealed by Nauman et al., (2023) identified that the individuals with strong self-emotional regulation skills are more proficient at controlling their smartphone usage and display decreased work withdrawal behaviors, eventually leading to enhanced job performance.

Some researchers like Shah et al., (2022) also explored that Pakistani journalists use digital technologies, including smartphones to use social networking sites like X, formerly known as Twitter, and this positively affects their job performance. An empirical research study of US print media editors and reporters revealed that journalists who use smartphones are more likely to generate content like video, audio and photo, which ultimately improves their job performance; but, many respondents also complained that using smartphones keeps them tied to their work every day of the week (Molyneux, 2014). History shows that journalists accept new technologies for collecting the news if such tools are easy to use, can help in enhancing the storytelling procedure, and even assist in accelerating newsgathering (Quinn, 2011).

Workers who utilize advanced digital technologies can improve not only their job performance but also other office-related mechanisms like work knowledge, collaboration and self-confidence (Pitafi et al., 2018). Employees also use smartphones to achieve organizational goals and objectives by getting information faster through these gadgets as compared to the typical notice boards (Bambang & Putri, 2023). Using certain social media

platforms like Facebook and instant messaging software KakaoTalk in offices positively influences job performance at the individual level, therefore, helping the employees become more fluent with technology (Lee & Lee, 2020).

Li (2019) disclosed that depending on smartphones for official tasks appears to boost the job performance of the employees. Not only this, but it can also turn into obsession and fade their work efficacy. As media houses run operations around the clock with morning, evening and night shifts, the employees who work in late hours also have to interact with the technologies. According to a study by Cheung et al., (2020), using smartphones for work at night negatively impacts workers' organizational well-being. Nevertheless, the study also discovered a positive relationship between smartphone use for work at night and employees' job satisfaction.

By synthesizing and categorizing the existing literature, this research seeks to analyse the prevailing trends and knowledge gap. Additionally, it aims to contribute to the state-of-the-art research by presenting novel findings that address unexplored areas and bridge existing knowledge gaps.

This study employed Uses and Gratifications Theory as a theoretical base stating, "What does an active audience do with the media, why, and with what effect?". According to this theory, individuals tend to select media and content that align with their interests in order to satisfy them. Particularly, the theory intends to investigate what social or psychological needs stimulate people to use a variety of media (Katz & Blumler, 1973). It also deals with the impact of technologies comprising both traditional and new media: radio, television, smartphones, internet, Twitter and Facebook (Roy, 2009). This theory also tells that people are not passive, while they have some goals for which they seek indulgence, leading to active media consumption. The Uses and Gratification Theory has been identified as suitable and feasible for journalism and mass communication fields (Moon et al., 2022). As this theory is based on the concept of an active audience, it is possible to apply it to new computer-mediated communication and smartphones (Foregger, 2008; Logan, 2014; Ruggiero, 2000). Bautista and Lin (2017) applied the Uses and Gratification Theory to identify the impact of mobile instant messaging applications usage by nurses on their work-related performance. The study found that the mobile applications gratify the need of the respondents for information exchange and socialization. Another study exposed a statistically significant relationship between school principals' usage of smartphones regarding performance and their job satisfaction while applying the Uses and Gratification Theory as a theoretical base (Thomas, 2021).

In addition to investigating smartphone usage's relationship with the job performance of electronic media personnel in Pakistan, the study also explores how gender, education, and age serve as moderators in this relationship. The following hypotheses have been formulated to meet the objectives of this study.

H1: There is a positive and significant relationship between smartphone usage and job performance among electronic media personnel in Pakistan.

H2: Gender (male and female) moderates the relationship between smartphone usage and job performance among electronic media personnel in Pakistan.

H3: Education (BA/BS, Master's, and MPhil degrees) moderates the relationship between smartphone usage and job performance among electronic media personnel in Pakistan.

H4: Age (younger, middle-aged, and old age groups) moderates the relationship between smartphone usage and job performance among electronic media personnel in Pakistan.

### **Method**

To assess the relationship between smartphone usage and job performance, a cross-sectional research design was employed. A quantitative research technique was adopted for which a survey (N=400) was conducted among the electronic media professionals of the prominent media outlets in Pakistan to meet the objective and nature of the study.

### **Sample**

The population for this study was confined to individuals with specific occupation and characteristics. The employees working in Pakistani electronic media houses who engage with smartphones on daily basis at their workplace were target participants. A purposive sampling technique was used to collect the data from the respondents spanning ages 19 to 50 years and residing in Lahore. Homogeneous sampling, a type of purposive sampling, was employed to select the very relevant sample with similar characteristics or traits. The population of this research was media professionals who regularly use smartphones, includes reporters, anchor persons, digital media experts, producers, newsroom employees, and researchers. However, employees from sections unrelated to

news, interns, and managerial staff have been excluded from the study. As determined by the exclusion and inclusion criteria, out of the total number of employees (ranging from 500 to 800) in each media house, approximately 90 of them use smartphones for designated work-related tasks. A total of 500 questionnaires was handed over to the media personnel and 455 were returned. However, all questionnaires containing missing values were omitted and only 400 questionnaires (80 per media house) were included as a final sample in the study. These individuals were employed by Express News, Dunya News, Lahore News, City 42, and Din News, working in all three shifts (Morning, Evening and Night). Additionally, the participants demographically showed an equal representation of both males and females. In this way, the population was filtered out to get a fine sample of the respondents.

**Measures**

Smartphone Addiction Scale developed by Kwon et al., (2013) was adapted to determine smartphone usage. It was a 19-item tool with Cronbach’s Alpha value of 0.844, as shown in Table 1. Job Performance Scale developed by Goodman and Svyantek (1999) was adapted to determine job performance. It was a 16-item tool with Cronbach’s Alpha value of 0.908 as shown in Table 1. Each statement of both tools was measured on a five-point Likert scale: 1=strongly disagree, 2=disagree, 3=neutral, 4=agree and 5=strongly agree.

**Table 1**

*Descriptive Statistics and Reliability Coefficients for Study Variables*

Scales	$\alpha$	$k$	$M$	$SD$	Range	
Smartphone Usage Scale	.844	19	65.82	10.897	19-95	37-85
Job Performance Scale	.908	16	61.44	10.644	16-80	17-80

Note:  $\alpha$ = reliability coefficient,  $k$ = no. of items in scale and subscale

Table 1 shows that Smartphone Usage Scale and Job Performance Scale indicate a high level of internal consistency and accuracy of the measures with Cronbach Alpha Values of 0.844 and 0.908 respectively.

**Procedure**

For data collection purpose, a formal permission was obtained from the Human Resources and Administration departments of the respective news channels. A questionnaire comprising written consent form, demographic information sheet, smartphone usage and job performance scales was given to the respondents. It was communicated to them that their participation is voluntary in nature. The information taken from them during data collection will be kept confidential and will not be used other than for research purposes.

**Results**

**Sample Demographic/Description**

The statistics related to the demographic characteristics of the sample can be found in Table 2. There was an equal representation of male ( $N = 200, 50%$ ) and female ( $N = 200, 50%$ ) participants. Similarly, an equal number of participants were selected from each TV channel i.e. Dunya News ( $N = 80, 20%$ ), Lahore News ( $N = 80, 20%$ ), City 42 ( $N = 80, 20%$ ), Express News ( $N = 80, 20%$ ) and Din News ( $N = 80, 20%$ ). The majority of them possessed a master's degree ( $N = 216, 54%$ ). While all resided in Lahore city, the majority hailed from rural backgrounds ( $N = 344, 86%$ ) and the rest of them were from urban settings ( $N = 56, 14%$ ). Moreover, the demographic sheet further asked about the smartphone brand and found the 112, 28% respondents were users of the iPhone, 252, 38% respondents had Samsung while 136, 34% participants were using other brands. Descriptive and inferential tests were run in Statistical Package for Social Sciences (SPSS) for data analysis.

**Table 2**

*Demographic Details of Participants*

Descriptive	Frequency	Percentage
<b>Gender</b>		
Male	200	50%
Female	200	50%
<b>Education</b>		
BA/BS	96	24.0%
Master	216	54.0%
MS/MPhil	88	22.0%

<b>Organization</b>		
Dunya News	80	20%
Lahore News	80	20%
City 42	80	20%
Express News	80	20%
Din News	80	20%
<b>Family System</b>		
Joint	196	49.0%
Nuclear	204	51.0%
<b>Locality</b>		
Rural	344	86.0%
Urban	56	14.0%
<b>Brand of Smartphone</b>		
IPhone	112	28.0%
Samsung	152	38.0%
Others	136	34.0%

### Hypotheses Testing

The main hypothesis stated, "There is a positive and significant relationship between smartphone usage and job performance among electronic media personnel in Pakistan." Pearson Product Moment Correlation Analysis was applied to ascertain any relationship between the independent variable Smartphone Usage and the dependent variable Job Performance. It also provides a measure of the strength and direction of the relation as to which extend, one variable changes when the other variable changes.

The result indicates a positive, strong, and significant relationship between smartphone usage and job performance ( $N=400$ ,  $r = .518$ ,  $p < 0.001$ ) among electronic media personnel in Pakistan (see Table 3). Hence, H1 is supported.

**Table 3**

*Pearson Product Moment Correlation Between Variables (Main Hypothesis)*

Variables		Smartphone Usage	Job Performance
Smartphone Usage	Pearson Correlation	1	---
	N	400	---
Job Performance	Pearson Correlation	.518**	1
	Sig. (2-tailed)	<.001	---
	N	400	400

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

Note: \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

The second hypothesis H2 of this study assumed a more positive and significant effect of gender on the relationship between smartphone usage and job performance. Simple moderation analysis (model 1) was performed in Process Macro v4.2 to measure the moderating role of gender (male or female). This analysis was employed to evaluate whether the association between smartphone usage and job performance varies depending on gender. Understanding such moderation effect is important for recognizing differences in how smartphone usage influences job performance based on gender.

Table 4 shows that the gender of employees did not moderate the relationship between smartphone usage and job performance ( $B = -.0067$ ,  $t = -.076$ ,  $p = .939$ ). Thus, H2 is not supported. This means that the gender differences happen to have no connection to the employees' smartphone use for work purposes.

**Table 4**

*Moderation Effect of Gender on Relationship Between Smartphone Usage and Job Performance*

Variable	B	SEB	t	Sig.	LLCI	ULCI
Constant	30.820	9.836	3.13	<.0019	11.48	50.15
Smartphone Usage	.523	.148	3.51	<.0005	.230	.814
Gender (Male=1, Female=2)	-2.095	5.771	-3.62	.717	-13.4	9.26
Smart Phone Usage*Gender	-.0067	.0869	-.076	.939	-.177	.164

Note:  $R$  square change = .283,  $F(3,396) = 52.112$ ,  $p < .001$

The third hypothesis H3 of the study assessed the moderating role of education level (see Table 5) in the relationship between smartphone usage and job performance. For this purpose, simple moderation analysis was performed in Process Macro v4.2 to measure the moderating effect of education level. By taking education as a moderator, the study intended to find whether the strength or direction of the relationship between smartphone usage and job performance differs across different levels of education, unveiling significant insights for researchers and practitioners in the field.

Table 5 shows the analysis of the unconditional interaction indicating a significant change in the R-squared value ( $\Delta R^2=.057$ ) due to the interaction between smartphone usage and job performance, confirming the presence of a moderation effect of education.

**Table 5**  
*Moderation Effect of Education Level on Relationship Between Smartphone Usage And Job Performance*

Variable	B	SEB	t	Sig.	LLCI	ULCI
Constant	51.25	8.64	5.93	<.0001	34.26	68.26
Smart Phone Usage	.208	.124	4.676	<.0002	-.367	-.4532
W1 (Master, BA/BS)	22.980	9.38	2.445	.014	-41.4	-4.54
W2 (MPhil, BA/BS)	29.14	9.91	2.94	.004	-48.6	-9.67
Int_1	.293	.137	2.15	.032	.025	.561
Int_2	.350	.145	2.43	.016	.066	.634

Note: *R square change*=.057, *F* (2,394) = 24.91, *p*<.001

The results revealed that employees holding master’s degrees demonstrate significantly higher job performance compared to those with BA/BS degrees (W1,  $p < 0.05$ ). Furthermore, employees with MPhil-level education exhibit significantly higher performance than those with BA/BS level education (W2,  $p < 0.05$ ). Both interaction effects (Int\_1) are significant and it is evident that the relationship between smartphone usage and job performance of employees with master’s degrees considerably differs, being notably higher than those having BA/BS degrees. In addition, the relationship between smartphone usage and the job performance of employees holding MPhil degrees is significantly higher than those having BA/BS level degrees. These results confirm the moderating role of education. Thus, H3 is accepted.

The fourth hypothesis H4 of the study assessed the moderating role of age level (see Table 6) on the relationship between smartphone usage and job performance. For this purpose, simple moderation analysis was performed in Process Macro v4.2 to gauge the moderating effect of age on the relationship between independent and dependent variables. Taking age as a moderator, the current research sought to identify potential variations in smartphone usage influencing job performance depending on age. This test gives a clear and straightforward measure of moderation effects to better understand the nuanced association between smartphone usage, job performance and age.

Table 6 shows the analysis of the unconditional interaction indicating a significant change in the R-squared value ( $\Delta R^2=.102$ ) due to the interaction between smartphone usage and job performance, confirming the presence of a moderation effect of age.

**Table 6**  
*Moderation Effect of Age on Relationship Between Smartphone Usage And Job Performance*

Variable	B	SEB	t	Sig.	LLCI	ULCI
Constant	33.55	3.75	8.95	<.0001	26.19	40.92
Smart Phone Usage	.429	.056	7.61	<.0001	.318	.540
W1 (Middle-age, Younger)	8.79	6.30	-5.39	.004	-21.1	-3.59
W2 (Old-age, Younger)	-18.82	7.81	-4.41	.016	-34.1	-3.47
Int_1	.101	.094	4.07	.021	.083	.286
Int_2	-.312	.117	5.66	.008	.081	.543

Note: *R square change*=.102, *F* (2,394) = 10.35, *p*=.021

The results revealed that middle-aged employees have significantly higher job performance than younger employees (W1,  $p < 0.05$ ). Furthermore, older employees exhibit a significantly lower level of performance in comparison to middle-aged employees (W2,  $p < 0.05$ ). Both interaction effects (Int\_1) are significant and it is evident that the relationship between smartphone usage and the job performance of middle-aged employees

considerably differs, being notably higher than younger employees. Moreover, the relationship between smartphone usage and job performance of older employees significantly differs, being notably lower than that of younger employees. These results confirm the moderating role of age. Therefore, H4 is supported.

### Discussion

The findings of the study reveal a positive and significant relationship between smartphone usage and job performance among electronic media personnel in Pakistan which means that digital devices, especially smartphones, serve as a valuable tool for them to potentially enhance their productivity, communication, and access to information, ultimately raising their job performance. The findings of the main hypothesis are consistent with previous studies carried out on evaluating the relationship between smartphones and job performance as Vaataja (2012) noted that the job competency of smartphone-laden media men surges when they are in the field as the mobiles assist them in capturing, finalizing, and forwarding the footage or any news-related material to the team directly from where they are standing. Similarly, Hessari and Nategh (2022) found that smartphones enhance job performance among its users. The results are also aligned with the former research of Ayyad et al., (2022) who discovered a strong support from journalists regarding ICTs use in media houses in order to have a robust impact on their job performance and stability. Furthermore, mobile journalists asserted that learning journalistic skills like crafting catchy headlines, capturing real-time stories for viewers and quickly editing different recordings from their smartphones is a favorable approach to improve their work efficiency (Lee, 2021). This demonstrates that electronic media personnel use smartphones to boost their journalistic practices and increase their job performance with prompt submission of assignments.

Electronic media personnel in developing countries like Pakistan are persistently relying on smartphone technologies to stay in touch with their sources and colleagues along with completing their tasks on time. This practice has not only enabled the media professional to carry out their task and cover stories but also curbed the need for state-of-the-art equipment as most of the small media houses in Pakistan cannot afford such technologies to run their transmission. Hence, smartphones streamline the workflows of Pakistani journalists including managing their schedules, and deadlines more efficiently while offering greater flexibility in the fast-growing media industry.

In the context of the electronic media field in Pakistan, the relationship between smartphone usage and job performance is underscored by gender differences as both males and females engage with smartphones for their work, which in turn affects their job performance. The study indicates that gender (male and female) did not moderate the relationship between smartphone usage and job performance among electronic media personnel in Pakistan. The evidence turned out in denial to the previous study of Chesley (2006), who found that the relationship of smartphone usage patterns, work, and family-related tasks differed by gender and the type of technology used. Similarly, Lee et al., (2013) and Deursen et al., (2015) also found a strong role of gender regarding smartphone usage, with females demonstrating a higher tendency to develop habitual smartphone attitudes due to spending more time on their smartphones compared to males. Moreover, the results of the current study also oppose the findings of Nayak (2018), who revealed that male respondents were observed to ignore their work due to smartphone usage rather than utilizing them for job-related tasks.

While exploring the moderating role of education between smartphone usage and the job performance of Pakistani media personnel, the results show that employees with higher educational qualifications demonstrate a significant relationship between smartphone usage and their job performance. This suggests the need for organizations and policymakers to consider the academic background of employees in regard to smartphone usage in the workplace. The result aligns with the past study of Permana et al., (2021), who explored the moderating effect of education level and age factors etc on the acceptance and usage of advanced technology by its users. The findings also come in contradiction to the research of Kee (2019), who found no significant effect of education on the attitude toward using smartphone applications for work.

The last hypothesis H4 which states, "Age moderates the relationship between smartphone usage and job performance among electronic media personnel in Pakistan", is supported by the results of the study. This indicates that younger individuals, middle-aged workers, and those in old age experience distinct effects of smartphone usage on their job performance within the electronic media sector in Pakistan. The findings correspond with prior studies conducted by Ng and Feldman (2008) and Tams (2022), which concluded that older employees exhibit lower job performance in ICT-related tasks compared to younger counterparts. Likewise, Deursen et al., (2015) found that elderly users are less likely to develop addictive or habitual behaviors towards smartphone use. The results also differ from the findings of some existing studies (Almahdi, 2017; Shely Khatun et al., 2017; Connolly et al., 2018).

This is frightening at a time when employees are rapidly getting old and technologies are booming.

Analysing the relationship between smartphone usage and job performance through the lens of established theories, electronic media professionals use smartphones to gratify their several needs. The study finds that they primarily utilize handheld devices to efficiently carry out work tasks and access relevant information using desired mediums. This aligns with the fundamental principle of uses and gratifications theory (Thomas, 2021). Recognizing these dynamics can help in formulating different strategies to embrace smartphone usage in media houses to improve the job performance and overall well-being of the personnel. This research intends to contribute to the existing literature on ICTs, especially from the perspective of smartphone usage and journalism, through empirical evidence to provide a strong base for future researchers aspiring to explore this area more. Additionally, it can help the media owners devise the policies and strategies to facilitate their workers in easy utilization of smartphones for work-related tasks. Understanding how smartphone influences the work efficiency of their users is crucial for both field practitioners and academics.

This study is well-founded as it employs valid and reliable research instruments that have undergone pilot testing procedures. The sample size possesses all the characteristics to provide sufficient statistical support for conducting empirical study along with application of appropriate analyses. Furthermore, ethical guidelines are religiously adhered to keep participants' information confidential to avoid biasness and disclosure of identity.

Despite the abovementioned contributions, the research has certain limitations which can be overcome in future studies. The research work is limited to discussing the relationship between smartphone usage and job performance with exploring moderating effects of gender, education and age. However, the impact of specific individual applications and online portals can also be explored along with inspecting the moderating effect of regional affiliation (Urban or Rural) and organizational experience. The study solely deals with quantitative methodology, but the impact of technologies on job performance through examining the experiences of the users by employing interviews/phenomenology approach can further be investigated. Research can also be carried out on evaluating the association between technologies and other variables like job satisfaction, job turnover intention, etc. Moreover, as this study is restricted to a specific target audience and location, therefore, it may not be generalizable to other professions/industries or localities.

### Conclusion and Recommendations

The rapid evolution of digitization demands a thorough approach of how to quickly adopt and use advanced technologies. It is concluded that collective efforts from media practitioners, media owners, and technology specialists are required. By working jointly, they can recognize emerging tech trends, challenges, and develop innovative solutions to ensure the smooth adoption of ICTs. There is a dire need of arranging special sessions and training for media personnel to make them aware of new technologies. Moreover, providing an environment of learning within media outlets can notably alleviate other technology-related issues, such as technostress, which leads to job dissatisfaction and turnover intention.

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