An interaction effect of perceived government response on COVID-19 and government agency’s use of ICT in building trust among citizens of Pakistan

Mahnaz Mansoor
Hamdard University – Islamabad Campus, Islamabad, Pakistan

Abstract

Purpose – Among the digital age players, one of the fastest-growing digital channels is social media. In the past few years, developing nations’ government entities and political parties started using social media platforms to broadcast important information regarding decisions made at the state level. Pakistan is among those countries. Therefore, this study aims to empirically investigate the impact of the government agency’s provision of quality information on social media in establishing trust among citizens of Pakistan in a government agency with an underlying mechanism of citizens’ perception about agency’s transparency and responsiveness along with moderating role of perceived government response on COVID-19.

Design/methodology/approach – Data was collected from 542 social media followers of the Associated Press of Pakistan (a government news agency) and was analysed using measurement and structural models by using SmartPLS 3.3.0.

Findings – Results revealed that the interactive effect of government response on COVID-19 and government agency’s provision of quality information on social media strengthens the association of government presence on social media with citizens’ perception of the agency’s transparency and responsiveness and their trust in the agency.

Practical implications – Furthermore, the current study will contribute to the body of knowledge regarding the government agency’s use of information and communication technology and the government’s resultant response on COVID-19.

Originality/value – An extensive study of the literature revealed a gap available regarding the mediatory role of the citizens’ perception about agency’s transparency and responsiveness in between the association of government agency’s provision of quality information on social media and citizens’ trust in the government agency. Also, to the best of the author’s knowledge, no study to date has investigated the moderating role of government response on COVID-19 in between the relationship of government agency’s provision of quality on social media and citizens’ trust in the government agency and their perception about agency’s transparency and responsiveness. Thus, the current study aimed to address these existing gaps in the literature.

Keywords Perceived responsiveness, Perceived transparency, Government agency’s ICT use, Government response on COVID-19, Trust in government agency

Paper type Research paper

1. Introduction

Over the past years, digital transformation has demarcated new administrative features, changing internal processes and the association between government entities and the public (Todisco et al., 2020). In this digital advancement course, government agencies are massively adopting various social media apps, i.e. Twitter, Instagram, Facebook, micro-
blog, etc., to accelerate effective and reliable communication based on their unique features, affordance and effectiveness (Guo et al., 2020). The main motive behind adopting information and communication technology (ICT) among government entities is to reach many citizens in a short time to provide quality information (Houston et al., 2016). Nowadays, the importance of providing quality information by the government agencies to overcome multiple challenges is multifold, especially during the COVID-19 pandemic.

In addition, social media is one of the rapidly advancing digital channels with 3.8 billion monthly active users worldwide in 2020 as per the global social media research summary 2020. Specifically, Pakistan being a developing country, experienced a significant increase in the number of monthly active users (35 million) of social media in recent years (Arshad and Khurram, 2020). In the past few years, in Pakistan, political parties and government entities started using social media platforms for broadcasting important information regarding decisions made at the state level (Ali et al., 2013). Notably, during an outbreak of COVID-19, several frequent appearances of the Prime Minister of Pakistan on social media sites to address the public for many important announcements regarding COVID-19 reflects the importance of social media among the public entities for disseminating valuable information to a large number of audiences to overcome and reduce the damaging effects of uncertain situations.

Moreover, with the sudden outbreak of the COVID-19 pandemic, the governments of different nations announced multiple measures, such as lockdown, closure of educational institutions, shopping malls and recreational places, to decrease the spread of the virus. The government of Pakistan announced similar measures by attaining citizens’ confidence at each step using social media platforms. Besides, an extensive study of the literature revealed that there is a gap available regarding the mediating role of the citizens’ perception about agency’s transparency and responsiveness in between the association of government agency’s provision of quality information on social media and citizens’ trust in the government agency (Arshad and Khurram, 2020). Also, to the best of the author’s knowledge, no study to date has investigated the moderating role of government response on COVID-19 in between the relationship of government agency’s provision of quality on social media and citizens’ trust in the government agency and their perception about agency’s transparency and responsiveness. Thus, the current study aimed to address these existing gaps in the literature and intends:

- To empirically investigate the direct and indirect association of government agencies’ provision of quality information on social media with citizens’ trust in the agency in the presence of citizens’ perceived transparency and responsiveness as mediators.
- To examine the interactive effect of the perceived government response on COVID-19 (PGRC) with the government agency’s provision of quality information on social media to enhance the citizens’ perceived transparency and responsiveness and their trust in the agency.

To achieve the above-stated objectives, an online survey was conducted among the followers of the government agency’s (Associated Press of Pakistan (APP)) social media platforms, i.e. Twitter, Facebook and Instagram.

2. Literature review and hypothesis development
2.1 Government agency’s provision of quality information on social media and citizens’ trust in agency
For the overall system’s smooth functioning, trust is a prerequisite as the public with greater trust in government bodies more easily follows the rules and regulations (Cheng et al., 2017).
On the other hand, trust has become a central issue in online and offline information systems research because these technologies have completely changed the way citizens interact with government bodies (Capistrano, 2020). According to Al-Aufi et al. (2017), e-government platforms such as social media aid the public gets involved with government bodies to have easy access to relevant and timely information resulting in a higher level of trust among citizens. The United Nations has defined e-government as “the use of ICTs and its application by the government for the provision of information and public services to the people” (Capistrano, 2020, p. 57). In connection to that Rotchanakitumnuai (2013), stated based on its two-way interactive nature social media is likely to act as a bridge between government entities and citizens by facilitating them to have direct access to the information, thus, providing them with a platform to voice their concerns resulting into enhanced perceptions about government’s trustworthiness. Therefore, on the grounds of the above arguments, it is posited that:

H1. There is a positive association between the government agency’s provision of quality information on social media and citizens’ trust in the agency.

2.2 Government agency’s provision of quality information on social media, perceived transparency, perceived responsiveness and trust in agency

Government transparency is meant to enhance the understanding of the public through the disclosure of information about the activities and functions of the government entities (Porumbescu, 2016). In their study, while exploring social media usage in the public sector, Todisco et al. (2020) asserted that the effective application of ICT tools could enhance efficacy in the public sector and expedite the design of policies to improve transparency. Likewise, Bertot et al. (2012) stated that creating a culture of transparency is one of the most significant benefits of social media usage by government agencies. Moreover, the elected government needs to be responsive to the public’s opinions and needs to gain their trust level (Purwanto et al., 2020). As social media have become one of the major sources of communication; therefore, it is evolving as an operational tool to enhance responsiveness (Arshad and Khurram, 2020; Hickmann et al., 2017). Similarly, as Chakiri et al. (2020) stated, citizens, have direct access to comment and share government information via social media platforms reflecting government entities’ responsiveness. Thus, based on the above literature, it is hypothesized that:

H2a and H2b. There is a positive association between the government agency’s provision of quality information on social media and citizens’ perception of its transparency and responsiveness.

There is ample literature available depicting that the trust between citizens is developed and maintained by the e-government platforms to enhance citizens’ perception of transparency (Nulhusna et al., 2017). This perspective reflects that citizens’ misconception about government agencies’ performance reduces significantly after disclosing information on social media platforms. It further implies that citizens draw inferences from the state’s reasonable decisions and understand the contribution of those decisions to public welfare (Tolbert and Mossberger, 2006).

Moreover, good governance needs to be implemented to attain the maximum level of public trust in the government’s decisions (Jameel et al., 2019). According to Parker and Bradley (2000), the government’s responsive decisions in the best interests of the citizens significantly impact the trust of the public in government entities. A study conducted by
**2.3 Mediation**

Citizens’ perceptions about government transparency develop from e-government platforms such as social media, which facilitate citizens to have easy access to government information that ultimately results in a higher level of citizens’ trust in government entities (Bertot et al., 2010). The World Bank states that e-government is “the pragmatic use of the most innovative ICTs, such as the internet, to deliver efficient and cost-effective government services, information and knowledge” (Capistrano, 2020, p. 57). Further, Warren et al. (2014) stated that in addition to developing a positive perception about government transparency and responsiveness, citizens’ trust is built when government entities provide up-to-date information on social media platforms. Moreover, in their study, Tolbert and Mossberger (2006) revealed that citizens get a clearer picture of the government’s actions through e-government channels. Therefore, based on the above arguments and the existing gap, it is proposed that:

**H4a and H4b.** Citizens’ perception of government agency’s transparency and responsiveness mediates the relationship between the agency’s provision of quality information on social media and citizens’ trust in the agency.

**2.4 Moderation**

Different nations responded differently to the COVID-19 outbreak in terms of measures adopted to sustain during the pandemic and the time taken to respond (Hale et al., 2020). “The Oxford COVID-19 Government Response Tracker” analysed in detail the organized cross-national measure to access the response of the government during the pandemic, and it further illustrates that this response affected the trust of the public in government directly (Hale et al., 2020). In a study conducted in health and medical science, Henderson et al. (2020) found that government response to COVID-19 plays a vital role in shaping public trust in government decisions. Besides, Covid-19 has by and large paralyzed global socio-economic activities, and it has severely affected society’s livelihood; experiences vary from country to country. In Pakistan, the government response to combat this pandemic was good, keeping in view the resource constraints. The government has quickly recognized the pandemic’s disastrous effect and established a main National Command and Operation Centre and COVID-19 Health Advisory Platform by the Ministry of National Health. An important step was that districts and tehsil level administrative and health staff were mobilized and necessary resources were provided at the grass-root level.

Moreover, the disaster management authority has been mobilized, and with the establishment of the coordinating bodies, free and fair interactions have emerged. In all these efforts, social media played an important role in providing the necessary input to respond to the challenges. This helped streamline the process for implementing better health practices and restoring the public trust in government in hard times. Further, Arshad and Khurram (2020) revealed that government agencies’ information regarding important
decisions through social media is considered a reliable source of information and further enhances the audience’s trust level. Therefore, based on the above arguments, it is hypothesized that:

**H5.** PGRC will moderate the association between the government agency’s provision of quality information on social media and the public’s trust in an agency such that the relationship will be stronger in case of higher values of PGRC.

Some of the past research reflects that transparent and responsive governance practices influence the public’s response to uncertainties and natural disasters (Karp and Banducci, 2008). Liao et al. (2020) conducted a study after the coronavirus outburst in 2019 and witnessed a significant positive link between the government response to the COVID-19 pandemic and perception of government responsiveness among the citizens. Besides, Ojiagu et al. (2020) examine the relationship of transparency with nation-building, using the COVID-19 experience as a yardstick and found a positive association. Although multiple studies examined the association of the government’s provision of quality information on social media and citizens’ perception about government transparency (Ma et al., 2020) and citizens’ perception of government responsiveness (Arshad and Khurram, 2020). However, the interactive effect of government response to COVID-19 and government’s agency’s provision of quality information on social media on citizens’ perception about agency’s transparency and responsiveness is less explored; therefore, to fill this gap, it is hypothesized that:

**H6a and H6b.** PGRC will moderate the association between the government agency’s provision of quality information on social media and citizens’ perception of the agency’s transparency and responsiveness such that the relationship will be stronger in case of higher values of PGRC.

2.5 *Theoretical framework of the study* (Figure 1).
3. Research methods

3.1 Sampling and data collection

The model of the study was empirically tested by selecting a case study of the APP (a national news agency of Pakistan). An online survey was conducted by using quantitative research design to gather data from the followers of the official Facebook, Twitter and Instagram page of APP, which are used to communicate political and nonpolitical official news to spread the messages of the government regarding multiple decisions taken at the state level to the maximum audience. Since the eruption of COVID-19, APP continuously remained active to convey the government’s response and measures to protect the citizens and mitigate the impact of Coronavirus. The researcher selected the APP case because it is a government-owned news agency; therefore, it is highly responsive to provide transparent and timely information to the public directly from the state, particularly during COVID-19 every news reaches the citizens through APP. It was considered suitable to approach APP followers who directly receive the APP contents on social media platforms and express their feeling of trustworthiness towards information provided to them by the agency. While the choice of only three social media sites, i.e. Facebook, Twitter and Instagram, was purely based on the popularity of these platforms among Pakistan citizens based on their fellowship details. Active users of the above-mentioned three social media platforms of the APP were identified and approached. A message was sent to them with a cover letter carrying all important details regarding the reason for conducting this research, as well as ensuring them that their details would be kept anonymous and there are no bad intentions of the researcher to contact them and gather their valuable views, opinions and behavioural responses. A total of 1,100 followers of APP were contacted, out of which 596 appeared to be willing to be a part of the survey. A questionnaire with statements inquiring the demographic profile of the respondents and adapted items regarding all study constructs was sent to them. Additionally, to avoid bias elements, a written note was sent to the respondents along with the main questionnaire in which anonymity of their response was also ensured. A total of 573 respondents filled the questionnaire. After careful screening, it was found that 21 responses were with missing values and 10 were unengaged; therefore, they were not included in further analysis. Thus, in total, 542 responses were considered for this study.

3.2 Measures of study

A survey consisting of 33 items was used to collect data from the study respondents (Appendix). “Five-point Likert scale” was used to assess all items. “Government agency’s provision of quality information on social media” was measured with a seven-item scale adapted from Park et al. (2016). PGRC was measured with a 12 item scale adapted from Conway et al. (2020), including four reverse coded statements to ensure the respondents’ engagement filling the questionnaire. Citizens’ perception of government agency’s transparency was measured with a four-item scale adapted from Al-Aufi et al. (2017). A negatively worded six-item scale adapted from Al-Aufi et al. (2017) was used to access the citizens’ perception of government agency’s responsiveness. Trust in the agency was measured with a five-item scale adapted from Park et al. (2015).

3.3 Demographic characteristics of the respondents

In addition to that, while giving answers regarding the number of year’s respondents are using social media, it was found that almost 38% of them were using social media for 1–3 years. In contrast, 35.42% were using social media networks for 4–6 years. It reflects that majority of the respondents (73.42%) were using social media networks for six years or less.
than six years. This reflects a significant change in the adoption level of modern technologies among Pakistani citizens. In response to a question related to the intensity of visiting APP social media pages and sites, it was found that about 43% of respondents visit APP pages/accounts on an hourly basis, followed by 29% who visit APP pages/accounts daily, whereas 20.84% and 10.33% reported visiting APP pages/accounts twice a week or once a week, respectively. This information reveals that most of the respondents were active followers of the APP.

4. Data analysis and results
This study used the SmartPLS version 3.3.0 to perform structural equation modelling (SEM) analysis. Before empirically investigating the hypothesized links, an analysis of variance (ANOVA) was conducted to identify the impact (if any) of the respondents’ demographic characteristics on the dependent variable. The ANOVA results revealed a significant influence of two demographic variables, i.e. occupation and education, on the dependent variable; therefore, both constructs were controlled during further analysis.

4.1 Assessing the measurement model
To investigate the psychometric properties of the measures, confirmatory factor analysis was conducted by using SmartPLS3. “Cronbach’s α” and “composite reliability (CR)” were calculated to assess the reliability of measures as per directions provided by Henseler et al. (2009). Table 1 depicts the reliability of all the reflective measures based on values of Cronbach’s α (above 0.70) and CR. Besides, the measure’s “convergent and discriminant validity” was assessed. As “factor loadings” of all indicator variables were in the range with a significant loading of each item (p < 0.001) onto its underlying variable and “average variance extracted” AVE of latent variables was above 0.50 for all study constructs, therefore, “convergent validity” was established (Hair et al., 2010; Noor et al., 2021).

4.1.1 Discriminant validity. Henseler et al. (2015) suggested that Heterotrait-Monotrait (HTMT) ratio is a more accurate measure of discriminant validity while using smart PLS (Mansoor et al., 2020). The HTMT ratio value should be less than 0.9, as depicted in Table 2 that all values were less than 0.9 for the entire model (Figure 2).

4.2 Assessing the structural model
4.2.1 Direct hypothesis. The study results show a positive and significant relationship of GAPQIS with CTIA (β = 0.141**, t = 2.827), PAT (β = 0.239***, t = 4.093) and PAR (β = 0.210***, t = 3.874). Similarly, a positive significant association of PAT (β = 0.248***, t = 4.340) and PAR (β = 0.189**, t = 3.154) was found with CTIA. Therefore, H1, H2a, b, and H3a, b, are fully supported by the results.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>AVE</th>
<th>CR</th>
<th>Cronbach’s α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goat. agency’s provision of quality information</td>
<td>0.616</td>
<td>0.918</td>
<td>0.837</td>
</tr>
<tr>
<td>Perceived agency’s transparency</td>
<td>0.618</td>
<td>0.866</td>
<td>0.811</td>
</tr>
<tr>
<td>Perceived agency’s responsiveness</td>
<td>0.589</td>
<td>0.895</td>
<td>0.837</td>
</tr>
<tr>
<td>Citizens’ trust in agency</td>
<td>0.638</td>
<td>0.875</td>
<td>0.802</td>
</tr>
<tr>
<td>Perceived govt. response on COVID-19</td>
<td>0.590</td>
<td>0.920</td>
<td>0.843</td>
</tr>
</tbody>
</table>

Notes: CR, Composite reliability; AVE, Average variance extracted

Table 1. Factor loadings, reliability and validity
4.2.2 *Mediating hypothesis.* The mediation hypotheses *H4a* and *H4b* are supported by the study’s findings. An indirect and positive effect of the GAPQIS on CTIA was found in the presence of PAT and PAR as underlying mechanisms with values \(B = 0.231^{***}, \ t = 3.990\) and \(B = 0.209^{**}, \ t = 2.958\), respectively. The formal two-tailed significance test assuming a

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Mean</th>
<th>STD.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAPQIS</td>
<td>3.910</td>
<td>0.032</td>
<td>0.784</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAT</td>
<td>3.832</td>
<td>0.039</td>
<td>0.621</td>
<td>0.786</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAR</td>
<td>4.021</td>
<td>0.042</td>
<td>0.670</td>
<td>0.711</td>
<td>0.767</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CTIA</td>
<td>3.793</td>
<td>0.047</td>
<td>0.590</td>
<td>0.634</td>
<td>0.649</td>
<td>0.798</td>
<td></td>
</tr>
<tr>
<td>PGRC</td>
<td>4.231</td>
<td>0.051</td>
<td>0.723</td>
<td>0.677</td>
<td>0.654</td>
<td>0.728</td>
<td>0.768</td>
</tr>
</tbody>
</table>

*Notes:* The square roots of AVEs of the constructs are shown in Italic in diagonal. Where: GAPQIS = Govt. Agency’s Provision of Quality Info. on Social Media; CITIA = Citizen’s Trust in (government) Agency; PAT = Perceived Agency’s Transparency (Citizens’ Perception of Agency’s Transparency); PAR = Perceived Agency’s responsiveness (Citizens’ Perception of Agency’s Transparency); PGRC = Perceive government Response on COVID-19

**Figure 2.**

Full measurement model
normal distribution also exhibited that the indirect effect was positive and significant for citizens’ perception of the agency’s transparency and responsiveness. Further, results showed the non-zero value for the lower limit and the upper limit confidence interval, which means that findings were significant.

4.2.3 Moderating hypothesis. To assess the moderating effect of a construct in PLS-SEM, interaction terms between the moderator, PGRC and predictor GAPQIS were created using the product indicator approach to examine its effect on CTIA and their perception of the agency’s transparency and responsiveness. The results reflect a significant effect of interaction terms, GAPQIS*PGRC on CTIA ($\beta = 0.158$, $t$-values = 2.958, $p = 0.010$), PAT ($\beta = 0.124$, $t$-values = 2.521, $p = 0.032$) and PAR ($\beta = 0.192$, $t$-values = 4.521, $p = 0.000$). Following the moderation result, the $R^2$ change between the main effect model and the model with moderation effect was also examined. The $R^2$ for the main effect of independent and mediating variables on CTIA was 0.629, whereas its $R^2$ with the moderating effect of PGRC increased to 0.783. The $R^2$ change suggested that the inclusion of an interaction term increased the explanatory power of CTIA by 19.41%; likewise, by including an interaction term in the explanatory power of PAT and PAR was increased by 17.26% and 22.5%, respectively. These enhanced explanatory powers in CTIA, PAT and PAR will further strengthen the association between citizens and government for a sustainable period.

Further, based on the simple slope analysis drawn in SmartPLS 3.3.0, it is evident (Figure 3) that the line labelled for a higher level of PGRC has a steeper gradient compared to the lower level of PGRC for the association of GAPQIS and CTIA. Thus, H5 was supported.

Similarly, shown in Figure 4, the line labelled for a higher level of PGRC has a steeper gradient compared to the lower level of PGRC for the association of GAPQIS and PAT. Thus, H6a was also supported.

Figure 5 depicts similar results as the line labelled for a higher level of PGRC has a steeper gradient compared to the lower level of PGRC for the association of GAPQIS and PAR. Thus, H6b was also supported (Figure 6).

5. Discussion, implications limitations and future directions
5.1 Findings of the study
The study aimed to empirically investigate the association of GAPQIS with citizens’ trust in agency along with their perception about the agency’s transparency and responsiveness. The specific agency chosen for the current study was the APP. The study’s findings represent that government agencies’ provision of quality information on social media significantly predicts the follower’s trust level directly (Agostino and Arnaboldi, 2016; Porumbescu, 2017; Tolbert and Mossberger, 2006). Moreover, the significant findings related to the association of perceived responsiveness with trust in government suggest the importance of responsiveness element in good governance for building and sustaining citizens’ trust in local governments. In context to that during Covid-19, everyone has been provided with free access to the best health facilities without any discrimination of class and creed depicting the responsiveness of the government. Likewise, the relationship of perceived transparency with trust in Government is consistent with the outcomes of Bertot et al. (2010), which states that transparent information dispersed by the government always results in the winning of the public trust level on government.

Results also depicted the significant underlying mechanisms of citizens’ perception of agency’s transparency and responsiveness in between the association of that government agency’ provision of quality on social media and citizens trust in government based on the fact that trust is the prerequisite for the smooth function of any government entities and is established when governments provide the right information at the right time to the public

Perceived government response
regarding the actions taken by the government in different circumstances reflecting that citizens are more important. Therefore, when government officials frequently appear on social media to communicate their decisions with the citizens, it reflects their transparent and clear intentions.

Finally, the findings also revealed that PGRC positively and significantly interacts with the GAPQIS and results in enhanced trustworthiness of the citizens in the agency and increase
citizens’ perception of the agency’s transparency and responsiveness. As the disclosure of information from government agencies results in a reduction in the fallacies of the public by making them understand the motives behind decisions made by the government, resulting in a higher level of trust among residents in government (Vigoda-Gadot and Yuval, 2003). Thus, the
provision of quality information by APP on social media in Pakistan expressively boosts the acuity of their followers regarding the responsiveness of the agency resulting in a higher level of trust among citizens in the agency providing two-way communication on social media by not only empowering the public to have an insight about the relevant information provided by the agency but also to connect directly with government ultimately resulting into an enhanced perception of the public about the responsiveness of the government.

5.2 Theoretical and practical implications
The current study will contribute to creating awareness regarding inherent benefits linked with social media platforms, especially in days of COVID-19. During intense and uncertain situations of the COVID-19 pandemic, the government has taken advantage of social media platforms to effectively disseminate the news to the masses. At large, the current study contributes to the body of knowledge about the benefits of government presence on social media platforms and governments’ timely response on COVID-19 in unpredictable circumstances to disseminate the important news on time in the public’s best interest. Therefore, the current study contributes to an enhanced public sectors’ perception of the usefulness of new technologies and proposes that the active use of advanced ICT infrastructure by the government agencies, as well as the citizens will move digital society further in the direction towards improved collaborative governance. This implies that by focusing on developing an immense IT infrastructure in the future, the government entities can anticipate uncertain situations and manage those in the best possible way by winning the public trust in a timely and effective manner.

This study can provide valuable insight not only to the APP but also other agencies of the government as well by apprehending that their vigorous usage and provision of quality information on social media vintages many constructive results, and on the top of that is the enhanced trust among their followers regarding responsive functioning of the agency. Further, government agencies may take measures to inspire their followers to provide their suggestions and opinions and express their views to participate more in state functions. Along with this, the governments of all countries should understand the need to develop proper IT infrastructure worldwide to provide internet facilities to all citizens, especially to those living in remote areas, to be a part of an online community. This way, many citizens will have access to e-government channels to express their views at a higher level. Likewise, it is the citizens’ responsibility to realize that various benefits can be extracted for the overall smooth functioning of the countries’ governance system from their active participation and cooperation with the government agencies. Finally, it is a peak time during the COVID-19 pandemic that government and the public of the developing countries recognize their respective role in the development of a comprehensive society enrich with ICT infrastructure for the prosperity of the nation.

5.3 Limitations and future directions
Despite several significances, there are also few limitations of the study, which include; first, the current study focused on collecting data by gathering the opinions of social media followers of a single agency (APP), limiting the generalizability of the results. However, future researchers can broadly examine other agencies’ opinions based on their social media usage intensity. They can compare the data collected from different agencies in terms of the authenticity of the information provided by them and the development of variable trust levels of citizens on different agencies. Further, a longitudinal research design facilitates researchers to better understand the association among the study constructs based on the variable nature of the trust. Finally, in current research, only quantitative methodology is
applied. While future studies can be conducted on a mixed-method approach in which, along with a quantitative examination of the opinions of the respondent’s in-depth interviews can also be conducted to have a deep inquiry of the results and also to identify the other possible constructs involved in the trust-building process of citizens on government.

References


**Corresponding author**
Mahnaz Mansoor can be contacted at: mahnaz.mansoor@hamdard.edu