DEMOGRAPHIC VARIABLES' AFFECT ON MALE AND FEMALE AWARENESS TO USE OF E-GOVERNMENT SERVICE IN PAKISTAN

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ABSTRACT

The e-Government (electronic government) is a global phenomenon, which involves the of information and communication technology in the management practice, social re-engineering and innovative administrative for all types of users (male and female). As Pakistan is moving ahead but still worlds behind from many developed countries, such the use of e-Government services, that aiming to modernize e-Government procedures, 24-hour clock accessibility, quality information for all type of business and citizens (male and female) without any gender disparity. This paper aims, to analyze the demographic variables that affect on male and female awareness to use of e-Government service by incorporating an influencing factor in the original UTAUT model. Moreover, these newly added constructs were missing in all earlier technology acceptance models and less literature available in developing countries on male and female context paradigm. However, this research also provides the statistical outcomes from the research objectives and fills the study objectives gap. To achieve these goals, data was collected from the pilot survey study, compiled by using mixed approaches and taken close-ended questions from both Pakistani male and female randomly. The significances of this preliminary research reveal that citizens' female awareness level is very low as compare to male to use e-Government services, had a dominant gender certainty and did not up to the mark because of the effects of the less female participation in Pakistan background. The practical findings of this study in a real work setting that hoped to be useful for researchers, practitioners and policy makers to capturing the citizens' awareness to use of e-Government services without any gender differences in emerging countries like Pakistan.

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Keywords: *Demographic, Variables, e-Government, Pakistan, Awareness, UTAUT Model.*

INTRODUCTION

Pakistan is developing country facing many fundamental factors that create the barrier to use of e-Government services for the citizens and government as well. The initiatives in e-Government are still in the infancy stage regarding ICT development, convenient faster e-services, and more citizens' awareness that may improve the outcomes from the modern technology(Kayani et al., 2011). While it is also observed to be substantial growth to use e-Government services in development (Akman et al., 2005),2012), (Santhanamery and Ramayah, 2015). E-Government services cannot be accomplished without the wide-ranging managerial reform, support of government and all types of users' adoption willingness (Dunleavy et al., 2006).However, citizens can access e-Government websites to obtain secure and useful information anywhere, and anytime but the government must make sure all these necessary implementation processes of e-Government services. On the other hands, it is stated by the Pakistani former federal secretary (Rukhsana Shah, August 24, 2015) that Pakistan ranked 135th out of 136th countries in the Global Gender Gap Index (GGGI) that report in the world economic forum, in 2015. Same as in the year 2014, more eight nations were merged in this informative report, but unfortunately, Pakistan remainsstayed2ndlast position at 141th out of 142nd states in this gender study(Tambunan, 2009). Furthermore, it is noteworthy that Pakistan ordered at 112th in 2006, and every year the GGGI position steadily decline from Pakistani gender perspectives(Witvliet et al., 2014).

- ***Research aim and objectives***

The most genuine intention of this study is to determine and investigate the important factors as key challenges. Also, inspect the influential factor to citizens awareness to use of the e-Government by Pakistaninationals in the demographic background. The supreme and ultimate goals are to improve a better first knowing about the break research issues. That prevails between the e-Government services and response to citizens' awareness to adoption in Pakistan, for this motive, the present's research has improved and incorporated new variable an original UTAUT model. Moreover, chosen it as the platform theoretical model foundation to address. Also, to deal this research gap in the literature contextual empirically, by utilizing and

developing the validated UTAUT model. In this study, research has recognized the crucial elements that affect the citizens' awareness to use of e-Government perspective by investigating UTAUT model. The main findings obtainable may have significant implication for other less developing countries like Pakistan.

- ***Research Question***

According to (Al-shawi, Al-alwany, and Iran et al., 2009, p.77) (Alshawi and Alalwany, 2009), discoursed a critical issue to address the little awareness of e-Government services by citizens' in most of the developing countries like Pakistan. It is an argument that the use of e-Government services in the emerging economies is a very bottom level stage (Qaisar and Khan, 2010). Also, no existing research and examinations have done and led before in this particular study area context. Therefore, the researcher is annoying to figure out the important, influential factors and to determine how this knowledge can create a more efficient dissemination on the prompting. The consequently, study concept offered a necessary justification and motivation for developing countries likewise Pakistan, and research question acknowledged fulfilling the research aims, which constructed on the central study research question based on hypothesis questions.

- RQ-1 "What is the importance of citizens' awareness to use of e-Government services for future deployment in Pakistan?

It is recognized that on the above central research question, next to research issues that have formulated carefully to attempt the initial determination of this investigation. That further, distributed into the hypothesis research questions.

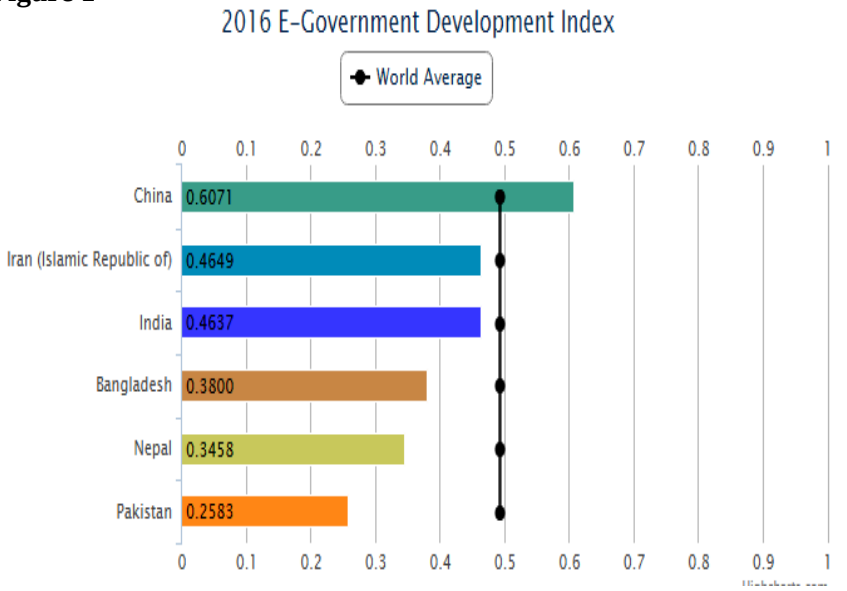
LITERATURE REVIEW

E-Government adoption has been extensively studied in the Pakistan context regarding implementation, development challenge and ICT components, perspectives. However, there is relatively a smaller amount empirical research that focuses on demographic variables by using citizen awareness to use of e-Government services, that effects by considering the gender behavior intention issues based on a validated in conceptual study model (Weiser, 2000). Consequently, a practical studyfocused on e-Government technical views to help governments and decision makers. But

there is a great need to understand such demographic variables that direct effect the citizens' awareness issues and to use of e-Government services, so that the level of citizens adoption can be increased (Rehman et al., 2012), (Kayani et al., 2011). Many scholars mentioned that citizens awareness is a critical subject to any e-Government system and has a significant role tocapturing the citizen's overall knowledge, theexcellence of the e-Government system (Dinev and Hu, 2007). Therefore, citizens awareness has a positiveevaluation ofan e-Government design features that includes helping to fulfill users' achieving need, awareness on the publicwebsites, updated information and users willingness to use e-government system functions content (Mishra and Mishra, 2012). Further, these are analysis, measured by the reliability and validity that incorporated in the conceptual study model, quality information, quick feedback response from the service provider etc. (Ahn, Ryu, and Han, 2007); (Zhong and Ying, 2008); (Novak,2009); (Urban et al., 2009); (Schaupp etal., 2006). This study allows to the researcher to examining its relevant variables in the proposed researchmodel presented.

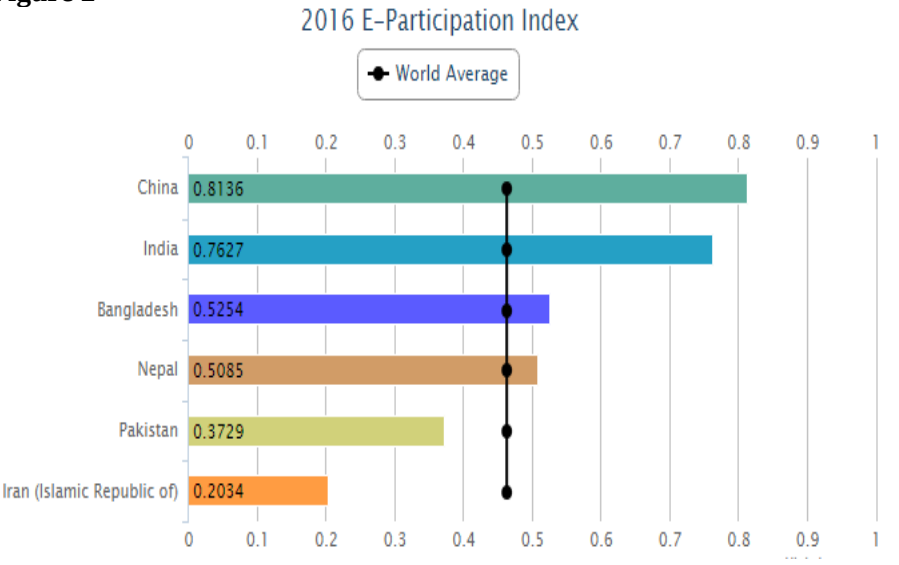
The following figures 1 and 2 presents a complete picture of e-Government development and e-participation index concerns by comparing the other different Asians countries. Whereas, it can clearly see that Pakistan holds the last position in e-Government development index and second last position in the e-participation indexing (fig.2) as reported by the United Nations Survey, 2016 (UN e-Government Survey, 2016). Similarly, the performance of literacy rate among the population of Pakistani gender perspective is also very unsatisfactory with comparing the Pakistani male and female from the year 1975 to 2015, which can see in figure 3, 4 and Table no. 1 presentation (United Nations Educational, Scientific and Culture Organization, 2016).

Figure 1



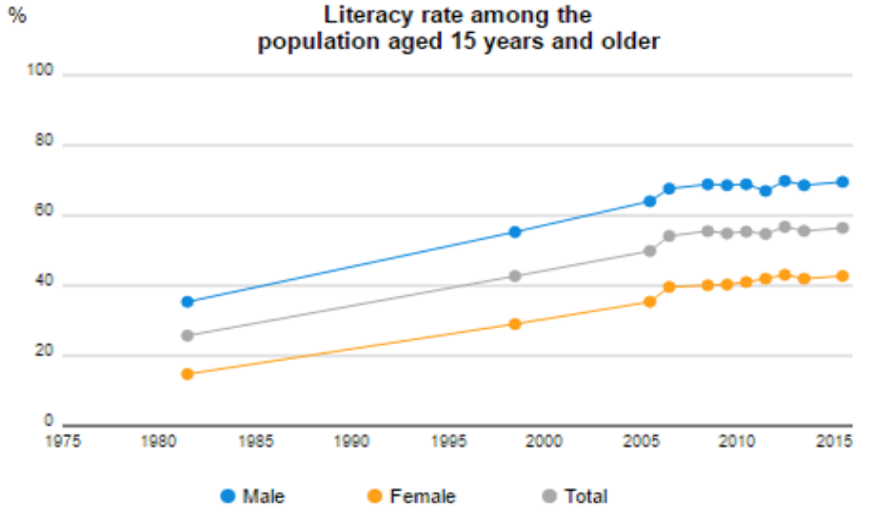
Source: UN Survey, 2016

Figure 2



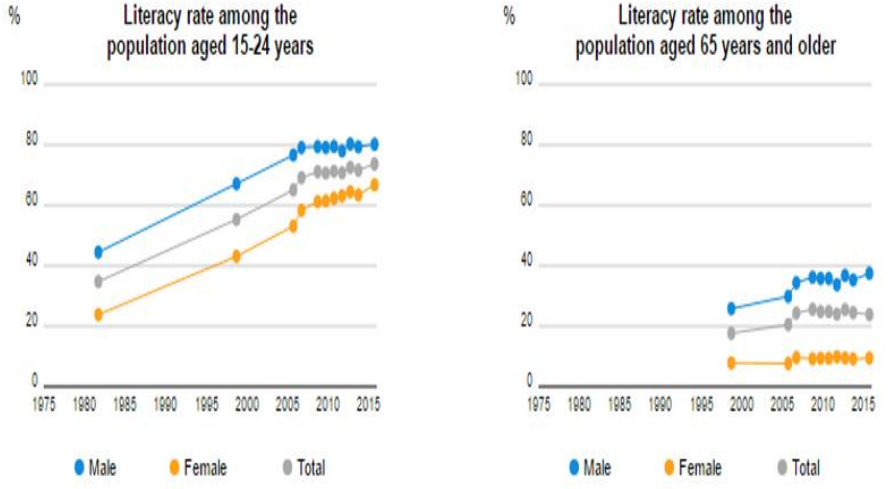
Source: UN Survey, 2016

Figure 3



Source: uis.unesco.org

Figure 4



Source: uis.unesco.org

Table 1

	TOTAL	MALE	FEMALE	
Literacy rate (%)				
15-24 years	73.71	80.23	66.8	(2015)
15 years and older	56.44	69.57	42.73	(2015)
65 years and older	23.87	37.51	9.44	(2015)

Source: uis.unesco.org

Hence, the government of Pakistan may focus on this above serious issues and take direct maximum possible measurements to improve the present situation, to explore the root causes barrier factors in the demographic variables, ICT infrastructure, and internet knowledge context that profoundly effects to use of e-Government services among all Pakistani citizens. Furthermore, the researchers also believe that citizens awareness to use of e-Government is a critical factor that effects on the economic and social development, which should emphasize the result in lower use of e-Government services by creating growing gender gap (Weiser, 2000), (Afreen, 2004). Likewise in Pakistan, computer literacy education rate is lesser than other neighbouring counties unique in information technology education (Kundi et al., 2008). Therefore citizens are not more aware of the core benefits of deploying e-Government services in Pakistan.

Further, it also cannot ignore the infrastructure development in Pakistan is not well developed to support the e-Government services entirely. Such as shortage of electricity in the whole country has created the most changeling barrier to using e-Government by their citizens(Haider et al., 2016). Therefore, this study expects to fill this research gap in the literature by directing an empirical research on the demographic age, gender and internet knowledge effect towards awareness to use of e-Government services in the Pakistan context. This research is grounded in an extended UTAUT model to determine and explain the effects of variables that influencing the adoption of e-Government services. The UTAUT model was chosen as the base theoretical model for this study because of its comprehensiveness and high explanatory power in the examination to other technology acceptance and use models. The results of this study will help decision makers to pick

up a better understanding of the elements that determine citizens' acceptance and use of e-Government service perspectives.

- ***Literature review: citizens awareness to use e-Government services***

Summary of following relevantresearch shows the citizens awareness to use of e-Government services main challenges are described as under:

No	*Authors*	*Study Area topic*	*Findings*
1	Alshehri M, Drew S, Alhussain T, et al. (Alshehri et al., 2012)	The Effects of awareness on Adoption of E-Government Service: An Empirical Study Applying UTAUT Model Using SEM.	It is to provide citizens with more possible, accurate and real time with high quality of awareness programs using factor on the acceptance of G2C
2	Faruq Muhammad, Dennis C, Alamanos E, et al.(Al-Qeisi et al., 2014)	Website design quality and usage behavior: Unified theory of acceptance and use of technology	Public awareness design quality is a multi-dimensional construct with a higher-order structure that, when successfully incorporated into the UTAUT model, out performs existing models
3	Al Weiss K I, Al-Abdallah G M. (Al Qeisi and Al-Abdallah, 2014)	Awareness and Usage Behavior: An Application of the UTAUT Model for Internet Banking in the UK	How to do these, in turn, influence public awareness behavior Adopting the UTAUT as the theoretical foundation
4	Jaradat M-I R, Bani Khaled M. (Jaradat and Banikhaled, 2013)	Undergraduate Students' Adoption of awareness of website service quality by Applying the UTAUT in Jordan	Awareness of the public websites design and quality becomes a critical success factor especially for Electronic University
5	Al-Qeisi., K., Dennis, Cron., Alamanos, E., &Jayawardena et al., (Al-Qeisi et al., 2014)	Citizens awareness programs quality and usage behavior: Unified theory of acceptance and use of technology	The successfully incorporated into the UTAUT model outperforms existing models and constructs
6	Chang S-S, Lou S-J, Cheng S-R, et al. (Chang et al., 2015)	Exploration of awareness and usage behavioral model construction for university library electronic resources	The pairs of variables are correlated; public or private and school type has limited significant mediating effect; knowledge has an important positive influence on behavioral intention.

7	Malak G, Sahraoui H, Badri L, et al. (Malak et al., 2010)	Modeling web quality using a probabilistic approach: An empirical validation	A model is built four-step process consisting of collecting quality characteristics, refining them, making a model structure, and deriving the model parameters.
8	Harwood M. (Harwood, 2010)	Public awareness projects strategies in Web applications and social networking	Building awareness and Test Plan and Functionality Checklist for e-Government deployments
9	Kwok T Y, Mok L S. (Kwok and Mok, 2004)	Personal information knowledge and awareness of e-Government programs	Disclosed for accessing personal Web site or executing electronic
10	McKnight et al.,2002, P. (Agenda, 2000)	Developing Reality checks 2000	Find other ways to monitor awareness quality in public sectors

- ***Citizens' (Male and Female) awareness***

According to the (Lewicki et al., 1999); (Carter and Belanger et al., 2004), stated in developed countries the government considers citizens' as a valued customer that utilizes the e-services or e-Government services provided by the government authorities. One of the purposes of this study output results also to provide the citizen's awareness ofall types Pakistani citizen's about e-services, state available online information servicesand also analysis their users having demographic gender, age, and internet knowledge effects on it. Moreover, to use of e-Government services for citizens'(male and female) attitude male or female towards mentioned services and as well Pakistani citizens (Ke and Wei, 2004). The small response from the female user to use in Pakistan by their citizens indicates that more female citizens are not well aware of e-Government services and different level of utilization(Rehman et al., 2012).

- **The Importance of citizens awareness factor in the proposed research model**

Today, in many developing nations, e-Government structure is the initial phase of transformation and in the implementation process. This new phenomenon must be reflected and considered by the researcher to get enough citizens awareness to use of e-Government system by their demographic variables such as gender, age and internet knowledge. According to (Rehman et al., 2012), (Baker and Bellordre, 2004); (Al-

Awadhi and Morris, 2009). It has become an urgent need for the many governments to develop a public awareness through various programs. That is converted into a strategic goal for many companies and governments as several researchers agreed that awareness as citizen's knowledge about the exit system of e-Government services, that entirely related to people's awareness, technology, the organization as well citizens (Nambisan, Agarwal and tanning 1999). According to (Norris and Moon, 2005), stated that before people can decide, whether to utilize the new technology they must focus on the much and get aware of the existing system, advantages, and disadvantages without any gender differences(Almarabeh and AbuAli, 2010). The functionality and benefits of the e-Government services that are serving in the public sector for all types of citizens'.

In the information age of the Internet, public awareness programs are playing an important role to manage the effectiveness and to make more use of e-Government implementation, to promote the individual's intention with any gender differences to use the innovative technology and more participating by their citizens that could get benefits. That affected their different attitudes or personal beliefs that have been previously recognized as determinants to utilization in the UTAUT model. As stated by many scholars including (Thomas, Kunstelj, et al., 2007); (Van Dijk et. al., 2008); (Overedge and Varley et al., 2009); (Shareef et al., 2011) and (Davi et al., 2012). In additionally, the raising the citizen's awareness of the use of the system (e-Government) through interpersonal communication sources is less successful than mass media channels, during the early time of the implementation of e-Government services launched in most of the countries. The relevant literatureview shows that ICT expert in developed countries believed that prospective users are well aware of the e-Government system. These developed countriesand not demographic discrimination and had higher citizens awareness as compared to less developing countries (Rogers, 1995); (Dimitrova and Chen, 2006); (Al-rewashed et al., 2012). The conferring to (Bamberg and Moser, 2007); (Aladwani and Palvia, 2002), it will be painful for any government to lead the citizens not involvement to benefits from the open government online services features mainly avoiding demographic variables. However, it is observed that there is more lack of citizens awareness in developing states rather than industrial countries especially in respect of the use of e-Government programs with the gender differences(AlAwadhi and Morris, 2008), (Susanto and Goodwin, 2010). That are fully introduced to the public by the respective governments (Rehman et al., 20012). However, as

many scholars identified that less awareness or knowledge of such programs is a chief reason for low e-Government adoption in their different countries unfortunately like Pakistan.

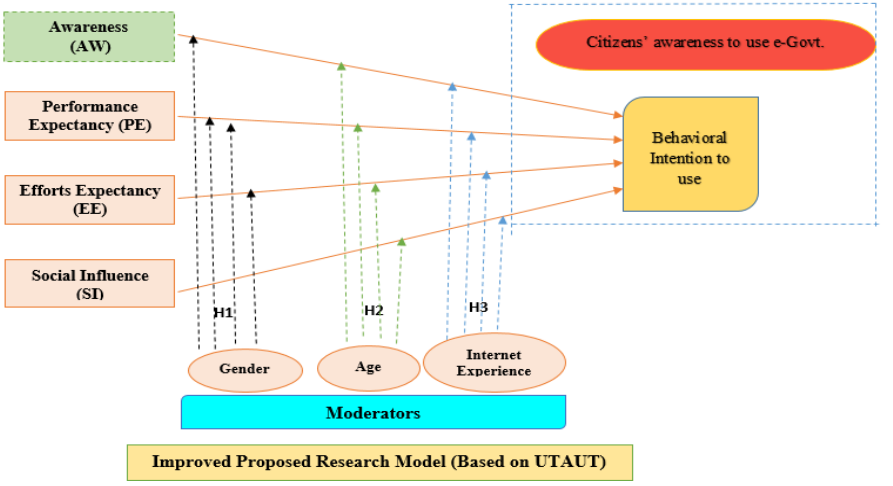
The (Economist Intelligence Unit, 2012), noted that a lack of citizens awareness hinders introduction of e-commerce and e-Government services. Besides, how to use these, new technologies is difficult for the developing nations like Pakistan. Furthermore, (Amtpmop, 2009); (Papadomichelaki and Metz et Al.,2009); (Flow and Treiblmaier 2006), conducted the survey to know the public awareness about the government websites usage context. To achieving customer satisfactions, easy to use with efficiency, users support, and appearance. They found significant predictors of intention to use the citizen's awareness of the system. Besides, confirmed that there is a significant relationship between citizens awareness and type of users demographic variables on the system relationship affects the actual use of online service or e-Government services. Moreover, (Ahn et al., 2007); (Collier and Bienstock 2009); (Nelson et al., 2005); (Parasuraman et al. 2005); (Lin and Lu 2000); and (Wixom and Todd 2005). To conclude, it is clear that citizens awareness has a relation between the demographic variables to use behavior intention. It is a significant predictor of behavioral intention to use (Charbaji and Mkdashi 2003),(Colesca and Dobrica, 2008). The empirically investigated the demographic i.e. gender, age, and internet knowledge has a great influencing to use of e-Government services factors among the different of the world. That are why it has a significantly influenced behavioral intention to use e-Government services (Ven, Cheung, and Shen 2014.),(Ahmad et al., 2012)

- ***The Proposed conceptual research model***

The proposed amended conceptual research model that based on the Unified Theory of Acceptance and Use of Technology (UTAUT) presented by the (Venkatesh et al., 2003). The researcher uses theunique model as a theoretical foundation for this piece of research, and the hypothetical driver of the motivation has already explained in the literature review. However, the validity and reliability is core object of this study in Pakistan context that lacks before in all previous research. This study has a comprehensively discussed with all dependent and independent variables, which constructs factors, and demographic modifiers (gender, age, computer knowledge) in this proposed research model that is presented in more detail Figure 4 as follow.

Figure 4:

Improved proposed research model (Based on UTAUT model)



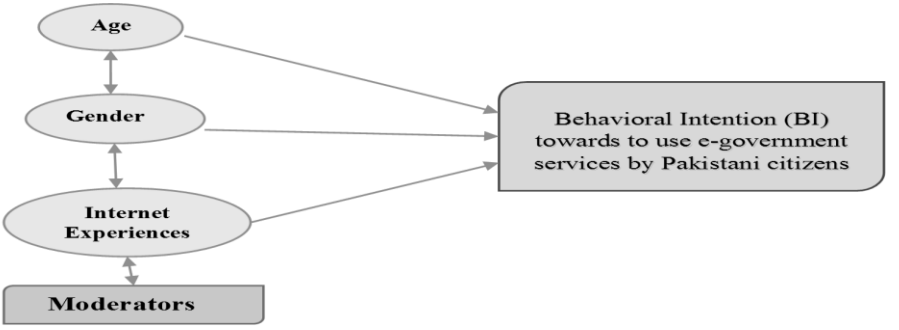
AW=Awareness, PE=Performance Expectancy, EE= Effort Expectancy, SI= Social Influence and FC= Facilitating Conditions

- ***Moderating Hypotheses***

It describes a set of hypotheses that will be tested with the help of moderating variable categories such as gender, age and internet experiences to continue with other citizens variable, that is interacting the relationship between dependent and independent variables. In additional, this moderation is probably the most tricky to understand (Wu and Zumbo et al., 2007); (Fishbein and Ajzen 1995). In this research, the author used the amended analysis model to consider the influence of the three moderators, which includes as gender, age and internet experience in this proposed model of a study. Furthermore, the purpose of this current study is also to investigate the impact of these moderators on the behavioral intention to use of e-Government services in Pakistani by all citizens' perspectives, which, also depending, on the nature of data. In this research, these relevant hypotheses very much connected to research question i.e. age, gender, and the internet experiences as a moderator in this study. Therefore, the following moderation hypotheses are presented as follow:

Figure 5

Moderators for proposed Research model



- ***Demographic Characteristic Model***

It is described by the (Jackson, Scott, 2000) and (Venkatesh et al., in the year 2003), that demographic characteristic model with moderator describe as a gender-categorized separation between male and female users implanted in both solid cultural performances in public organization. According to (Anderson et al., 1999); (Choudrie and Lee, 2004); (Venkatesh, 2003; and Straub, 1997), stated that demographic effects on gender have a significant role when considering to use newtechnology with behavior intention to use it. The populationgender moderators are important constructs that determinants of behaviorintention to use and can be employed as a descriptive and explanatoryvariable in this inquiry. Some researcher such as (Anderson 2007); (Young, 1999); (Choudrie and Lee, 2004); (Venkatesh et al., 2003), found that role of the gender in the use of the technology is unique and pay a significant part. The effort expectancy-behaviour intention (Stogner for female), as a consequence of adding citizens awareness variable as an independent construct, the research hypothesized the relationship between (Stronger for male usersverse female user in the use of e-Government). Hence, the demographic gender, age, internet experiences as one of the most important variables in this research context. During the use of such technology and the moderators in this hypothesis are usefulness on the behavior intention was moderated by demographic variables are as under:

Table 3 Hypotheses for Gender (Moderator)

Hypotheses Sub-Code	GENDER Moderator	Descriptions of the Hypotheses (Moderators)
H1a	AW-BI	CitizensAwareness–Behaviour Intention to use e-Government services by Pakistani citizens is stronger for female than male users
H2a	PE-BI	Performance Expectancy–Behaviour Intention to use e-Government services by Pakistani citizens are higher for men than female users
H3a	EE-BI	Effort Expectancy– Behaviour Intention to use e-Government services by Pakistani citizens are stronger for female than male users
H4a	SI-BI	Social Intention–Behaviour Intention to use e-Government services by Pakistani citizens are higher for female than male users

- ***Age (Moderator)***

As many scholars like a (Morris and Venkatesh, 2000; Venkatesh et al., 2003); (Anderson et al.,), have found the evidence that age as a moderator of the relationship between the proposed UTAUT model. That have a direct significantmoderating effect of the age on the behavioral intention to use e-Government services. Moreover, usage behavior and adoption of new technology, a study conducted in the United States of America(Carter and Bélanger, 2005). The majority of these groups adoption computer in the USA is 15-17 years oldage and followed by the other age group like 26-25 and 26-45 years oldpeople. They found that younger and middle-aged groups were expected to be more unconcerned to use of e-Government services in Pakistan. Whereas; the Mid age of group people is projected to be relevant to the new adopters. And between 26 to 45 found senior users based on more experiences and use of technology. This description based on the above Performance expectancy behavior intention was stronger for the younger worker; collectiveintention Behaviour Intention SI-BI was original for olderworkers under necessary use conditions. Facilitating conditions to use of action, was more substantial for older workers with increased experience. Based on the above findings results in the current research that age as a moderator was hypothesized as under:

Table 4 Hypotheses for Age (Moderator)

Hypotheses Sub-Code	AGE Moderator	Descriptions of the Hypotheses (Moderators)
H1b	AW-BI	Citizens Awareness–Behaviour Intention to use e-Government services by Pakistani citizens are stronger for younger users than older users
H2b	PE-BI	Performance Expectancy–Behaviour Intention to use e-Government services by Pakistani Citizens are stronger for younger users than older users
H3b	EE-BI	Effort Expectancy–Behaviour Intention to use e-Government services by Pakistani citizens are more reliable for younger users than older users
H4b	SI-BI	Social Intention–Use Behaviour to use e-Government services by Pakistani citizens are stronger for younger users than older users

- **Internet Experience**

In the developing countries, internet knowledge that is facilitating mostly at an early stage of technology development, in this experience research moderator was renamed as the web involvement. The researcher implemented this moderator and treated from the original UTAUT research model. The previous research based on the internet experience has a strong influence on the intention to use a new technology system such e-Government. (Jiang et al., 2000); (Van Dijk et al., 2008). However, the users with the internet experience are more likely to use e-services efficiently and quicker than female users. As below hypotheses will be verified by empirical data analysis methods with the help of different statistical tools, which has been used to test this hypothesis among the variables in this study research UTAUT model as under conditions:

Table 5 Hypotheses for Internet Experience (Moderator)

Hypotheses Sub-Code	Internet Experience Moderator	Descriptions of the Hypotheses (Moderators)
H1c	AW-BI	Citizens Awareness–Behaviour Intention to use e-Government services by Pakistani citizens are stronger for experienced users than inexperienced users
H2c	PE-BI	Performance Expectancy–Behaviour Intention to use e-Government services by Pakistani Citizens are experienced users than inexperienced users
H3c	EE-BI	Effort Expectancy–Behaviour Intention to use e-Government services by Pakistani citizens are experienced users than inexperienced users
H4c	SI-BI	Social Intention–Use Behaviour to use e-Government services by Pakistani citizens are stronger for experienced users than inexperienced users

- **Research Design and Methodology**

This study describes and explains the comprehensive research methodology toward initial assessment of this work that presented in this paper.As e-Government remains, a novel phenomenon in many theories and models frameworks assist the government to lead, to implement in under developing countries like Pakistan. Where citizens awareness to use of e-Government at thebeginning stage and experiencing many difficulties (Wescott, 2001). An investigation research method describes the research activities, data analysis measurements, methods purpose, and analysis applications procedures (Colesca, 2009). The investigators used both research methods techniques as mixed methods for collecting the information data randomly. For the procedureto examine and look at to evaluate the refine the developed proposed UTAUT model aspects. For this purpose reason, the researcher took 117 set of closed-ended multiple choice of questionnaire data information were gathered as a first hand (primary data) at this point and validation of the questionnaire great review from the literature work review based on their feedback, demographic variables, modifications were made. In this process, the researcher used different kind of mathematical, statistical techniques were implemented. Such as Cross-

tab, One-way ANOVA test, a t-test was adopted to analyze the data, which were involvedin demographic variables with three great moderators connected relationships as explained in detail abovesections.

The construction of the socialcontents that are designed in the light of reality (Merriam, 2014). Therefore, the researcher was interested to gain to improved and enhanced betterunderstanding of the relevant experiences of gender (male and female). That could not be possible by analyzing single individual, and so, larger groups categories could be studies analyzed through this strategy approach. Thisemphasis (target) group involved of five Pakistanicitizens from a different demographic level of learning Internet knowledge, gender, and age. This study will support to understand the author multi-stage research design and validate the proposed research model that practical realistic and further the effect the Pakistani citizens' awareness to use e-Government services in Pakistan.

Moreover, to answer the research question (such as citizens,' knowledgeto use of e-Government services, influential factors). In additional, the use behaviors intention to use of e-Government was significantly influenced by to adopt citizens awareness exception of e-Government services in Pakistan and research methods used to help to identify the influential factors to develop an e-Government adoption in Pakistan. Moreover, e-Government services are initiatives stage in the Pakistan with this newly-development. Therefore, it hasan insufficiency of citizen's awareness due to the poor or lack of citizens' awareness in the Government and the e-Government system. There is more need that people awareness of the internet experiences using e-Government in Pakistan.Hence, this study justified by determining greatest mostappropriate research philosophical, practical approach, procedures, techniques issues. Such as explains the research hypotheses, data collections technologies/strategies, population sample, data analysis methods, reliability and validity of the research approach. Also consideration ethicalissues for the present study.

- **Data Analysis and Presentation**

This studydescribes data analysis presentation and outcomes of results in this section. The determination of a researcher used quantitative data collection measurement scale analysis from the survey set of questionnaires.Moreover, for the descriptive data analysis set out pertinent analyzed illustrative study facts. That will offer the assessment using the charts, figures, and tables. The reliability and validity of the data considered

and understood in more accurately to influence the citizens' awareness to use of-of e-Government in Pakistan context. Further screening, results of the participants' demographic analysis and conferred moderators in this proposed research model. Includes newly added variables and demographic aspects variables take into thestudy that will develop the preliminary research inquiry findings to ensure the accuracy of analysis information and missing data from the research context. The scholar will also assess to evaluate the advanced statistics computation before the test of the reliability and validity of the data. Moreover, the cause and effect relationships between different aspects variables also assess to calculate by using the inferential examination and use factor analysis to load entirely correlated factors withing one group.

- ***Investigating Univariate Normality***

This approach used to test analyze the data may generate the typical standard theoretical distribution submission, before the empirical test fitting the distribution to the data. According to the (Ma-Kallen and Hair et al., 2006), normality refers to the forms of data submission for individual variables. The univariate normality may be tested graphically and statistically for the research. These methods used for the individual's techniques for the univariate testing normality.Therefore, on the other side, histogram used for the visual graphical analysis purpose compares the experimental data values and distribution of the data (Field et al., 2005). Finally, below table indicates that all critical principles value fo the demographic variables in this study.

- ***Demographic frequency data from the respondents' analysis***

Table 6

Item	***Variables***	***Frequency***	***Percentage %***
Gender	Male	107	90
	Female	10	9
Age	18 – 35	33	28
	36- 65	21	17
Computer familiarity Education level	Bachelor	61	51
	Master	50	42
Total respondent are 117	Citizens (M&F) Government employees	71 46	59 38

The above Table 6 indicates the totalfrequency of respondents for the demography data analysis that is 90 % male responses and 9 % female respondents' feedback from the construct citizens awareness to use of e-Government services; it may be cultural restrictions or adoption. Whereas, between, 18-35 age grouped are dominant with 28% more use of e-Government services. The computer familiarity (knowledge) at bachelor level is higher with 51 % and master level just behind 42% respondents respectively. The government employees to use of e-Government services between the age group of 18-35 year are leading with 38 % because most the respondent are government employees.

- **Frequency of technical variables**

Table 7

Technical Variables	***Value***	***No. of defendants***	***Total Percent %***
Hold Computer	No	45	6.5
	Yes	573	80.5
Hold Internet Experiences	No	171	22.8
	Yes	445	62

- ***The frequency of citizens awareness to use of e-Government services in Pakistan.***

Table 8

Variables	***Value***	***No. of defendants***	***Total Percent %***
Citizens Awareness	I am not well aware	45	6.5
	Yes, I am aware,but I don't use it mostly	573	80.5
	I am much aware, and I use it mostly	171	22.8

- ***Citizens awareness by gender users***

The data analysis results shown in Table 8 that 08.4% of female and 22.7 of male were most aware and have the intention to use e-Government services. On the other hand,80.5 are aware, but they don't use frequently,and 6.6 are more aware, and 22.8 are aware but do not use mostly at all.The following t-Test in gender, t=1.266 $ sig. (2-tailed_=1.266, it presented there is a high significant difference between male and female to use e-Government

services in Pakistan perspective.

- ***Crosstab of CitizensAwareness and Gender perspectives***

Table 9

Gender	***I am not well aware***		***Yes, I am aware, but I don't use it mostly***		***I am much aware, and I use it mostly***		***Total***
	Freq.	%	Freq.	%	Freq.	%	Freq.
Female	50	24.2	30	28.6	14	1..4	94
Male	117	52.6	60	50.2	115	52.6	292

- ***Citizens awareness by age perspectives***

The data analysis results show in Table 9 among the citizen's awareness between the age group 18-35-year-old residents is the highest user group, and 36-65 followed lesser awareness.The result of this data analysis also shows that f=6.955 and sig = .000 means there is a significant difference between the ages in the citizen's awareness to use e-Government services in Pakistan context.

- ***Crosstab of CitizensAwareness and age perspectives***

Table 10

Citizens Awareness	***I am not well aware***		***Yes, I am aware, but I don't use it mostly***		***I am much aware, and I use it mostly***		***Total***
	Freq.	%	Freq.	%	Freq.	%	Freq.
18- 35	113	33.4	153	43.4	72	21.4	630
36-65	61	21.6	151	52.2	75	26.6	287

- ***Citizens awareness have Internet knowledge perspectives***

The data analysis results shown in Table 9 among the citizen's awareness between the age group 18-35-year-old citizens is the highest user group and 36-65 followed lesser awareness. The result of this data analysis also shows that f=6.955 and sig = .000 means there is a significant difference between the age group in the citizen's awareness to use e-Government services in Pakistan context.

- ***Crosstab of CitizensAwareness and age perspectives***

Table11

Age	***I am not well aware***		***Yes, I am aware, but I don't use it mostly***		***I am much aware, and I use it mostly***		***Total***
	Freq.	%	Freq.	%	Freq.	%	Freq.
18- 35	113	33.4	153	43.4	72	21.4	630
36-65	61	21.6	151	52.2	75	26.6	287

- **Citizens awareness having Internet experiences**

Table 12

Variables		***I am not well aware***		***Yes, I am aware, but I don't use it mostly***		***I am much aware, and I use it mostly***		***Total***
		Freq.	%	Freq.	%	Freq.	%	Freq.
Internet Experiences	No	21	31.4	17	13.4	10	15.7	64
	Yes	96	14.3	100	33.6	107	29.5	115
Internet Having	No	42	19.6	46	22.2	15	8.5	110
	Yes	65	14.3	70	33.5	99	18.9	90

The data analysis about the citizen's awareness having the internet experiences and presented the respondents who holdinternet experience access were more awareness 25.2 of using e-Government services.

- ***Focus Group Analysis (FGA)***

It is mentioned and discussed in all above sections to concentrate two focus groups were studied analyzed and to endorse the finding results of the quantitative analysis as referred. The determination of analysis focuses group focuses on the UTAUT constructs-model as the leading research question. The Group "A" as a first focus group that consisted of five IT staffs' individuals working in Pakistani Government sector were mentioned labelled. The discovery and finds in below hold demographic information for each participant in this study. The Group "B" as a second focus group that depended on five Pakistani citizens, who had a right level of Internet experiences they are found labelled as shows that offer an entirely clear image of the demographics information about all the members of this group study?

Table 13

Cronbach's Alpha Reliability Test Results

Constructs	No. of Items	Cronbach' Alpha (α)	Remarks
Performance Expectancy (PE)	4	0.72	High Reliability
Effort Expectancy (EE)	4	0.74	High Reliability
Social Influence (SI)	4	0.85	High Reliability
Facilitating Conditions (FC)	β	0.92	Excellent Reliability
Awareness (AW)	4	0.43	High Reliability
Behavioural Intention to use (BIU)	3	0.91	Excellent Reliability

The above table 13, 14, 15 and 16 to prove that these scales are satisfied the model constructs consistently and accurately, a scale reliability coefficient. The researcher used software SPPS to analysis the reliability coefficient; the result may show in Table 13 and presents the Cronbach's alpha (α) range scale value for each item (variable). Further obtainable the results that construct gained a high reliability of more than 0.7. Cronbach's got value results between 0.73 to use behavior and 0.95 for the facilitation condition. Finally, results in outcome display that alpha values of the study instrument are strong and exhibit properly construct for the reliability in this study.The analysis of citizens awareness scale. The following all tables' shows four set of questionnaire statements used to know the effect of citizens' awareness to use of the e-Government services in Pakistan. The four scales variables items (AW1 to AW4) analysis the correlation matrix that greater > than (0.3).Also, both using the KMO and Bartlett's analysis KMO (0.696), highly significant finding results. Whereas, Bartlett's test is also highly significant ($p<0.0001$), presents the factor loading items that higher than the cut-off level. Finally, four items scale measures the citizen's awareness is uni-dimensional in this study context.

Table 14

Construct	Variable Code	Questionnaire Statement
Awareness (AW)	AW1	Awareness increase the more citizens participation
	AW2	Positive awareness behaviour have a significate impact on use of e-Government
	AW3	Lack of awareness prevent the citizen participation from e-Government adoption
	AW4	Citizen awareness behaviour motive public services

Table15

Correlation Matrix for AW Scale (item)

Construct	Variable Code	AW1	AW2	AW3	AW4
Correlation	AW1	1.000	0.406	0.337	0.732
	AW2	0.406	1.000	0.833	0.537
	AW3	0.437	0.833	1.000	0.619
	AW4	0.732	0.537	1.619	1.000

Determinant = (0.102)

Table 16

KMO and Bartlett's Test for AW (item)

KMO and Bartlett's Test (Awareness)		
(Kaiser-Meyer-Olkin, Ali Measure of the Sampling Adequacy)		*0.696*
Bartlett's Test of Sphericity	Approx. Chi-Square	291.374
	df.	11
	Sig.	0.000

Table 17

Factor Loading for AW (item)

Component Matrix[a]	(Awareness)
	Component
	1
AW1	0.627
AW2	0.758
AW3	0.780
AW4	0.896

Extraction Method: Principal Component Analysis
a.1 Component extracted.

CONCLUSIONS AND FINDINGS OF RESEARCH

This research provides an indispensable contribution permitting to administration and another stakeholder including policy makers as well private sectors. In general, the aims of this research was to understand the effect of key demographic factors both male and female that contribute to use e-Government services and improve the relationship with all categories of the citizens. The Government of Pakistan much ensures all process of raising the level of more female' citizen's awareness among all Pakistani people to use e-Government services or another source of electronic media. The administration must focus to spread the citizens' awareness to learn modern digital applications because the use of e-Government level is very

low from female users' sites in Pakistan. For this purpose government must have to think strategically about using such e-services and to increase the literacy level by introducing friendly users' online learning programs with all possible ICT facilities. Moreover, it filled the gaps in a Pakistani level investigation by testing findings of this research is creative and changed from previous studies conducted in Pakistani male and female citizens' concentrated aspects. This study also suggests that government also a play role in encouraging citizens both sides and developing web portal in the local language and more focus female ICT training programs. Despite the useful outcome results of this work also have many limitations which should be acknowledged by the researchers such as sample size was limited respondents and study entirely depends on in Pakistan context. Therefore, this study may incorporate other relevant variables based on the latest research work.

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