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Citizens' Adoption of an E-Health System During the Pandemic

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ABSTRACT

This study aimed to determine the factors influencing the behavioral intention of PhilHealth members to adopt My PhilHealth Portal using an extended unified theory of acceptance and use of technology (UTAUT). Variables from this theory were operationalized through indicators which were then translated into a self-reported online survey questionnaire distributed through email and Facebook. Purposive-homogeneous sampling was used to determine the sample size from the target population who are Cagayan de Oro City based PhilHealth formal economy members employed in either private or public sector. The data from the online survey was tested for reliability using IBM SPSS Statistics (version 20), and the Cronbach's alpha (1951) coefficient was used to assess the validity of variables. To determine the causal relationship of variables on specific constructs, data were processed using licensed versions of IBM SPSS AMOS (version 26) to perform Structural Equation Modelling, which will further show the account for a specific impact of the constructs and moderating variables to behavioral intention. It is cross-sectional in nature and conducted within a short period of time. Citizens' perceptions towards the adoption of My PhilHealth Portal can change over time as new knowledge and experiences will be accumulated. Therefore, future studies could employ a longitudinal design to obtain more accurate findings that are relevant to the general public's adoption of government portals. Findings show that citizens' behavioral intention to adopt My PhilHealth Portal is influenced by their trust on internet, trust on government, effort expectancy, and their perceived competence. However, the selected moderating variables appear to have no significant effect on TOI, TOG, EE, and PC to BI.

Keywords: e-Health; Behavioral Intention; UTAUT; Citizen Adoption; Formal Economy Member; e-Government

ABSTRAK

Penelitian ini bertujuan untuk mengetahui faktor-faktor yang mempengaruhi niat perilaku anggota PhilHealth untuk mengadopsi My PhilHealth Portal menggunakan memperluas teori penerimaan dan penggunaan teknologi terpadu (UTAUT). Variabel dari teori ini dioperasionalkan melalui indikator yang kemudian diterjemahkan ke dalam kuesioner survei online yang dilaporkan sendiri yang didistribusikan melalui email dan Facebook. *Purposive-homo- geneous sampling* digunakan untuk menentukan ukuran sampel dari populasi sasaran yang merupakan anggota ekonomi formal PhilHealth yang berbasis di Cagayan de Oro City yang bekerja di sektor swasta atau publik. Data dari

survei online diuji reliabilitasnya menggunakan IBM SPSS Statistics (versi 20), dan koefisien Cronbach's alpha (1951) digunakan untuk menilai validitas variabel. Untuk menentukan hubungan sebab akibat variabel pada konstruksi tertentu, data diproses menggunakan versi berlisensi dari IBM SPSS AMOS (versi 26) untuk melakukan Structural Equation Modelling, yang selanjutnya akan menunjukkan akun untuk dampak spesifik dari konstruksi dan variabel moderasi terhadap niat perilaku Ini bersifat cross-sectional dan dilakukan dalam waktu singkat. Persepsi warga terhadap adopsi My PhilHealth Portal dapat berubah seiring waktu karena pengetahuan dan pengalaman baru akan terakumulasi. Oleh karena itu, studi masa depan dapat menggunakan desain longitudinal untuk mendapatkan temuan yang lebih akurat yang relevan dengan adopsi portal pemerintah oleh masyarakat umum. Temuan menunjukkan bahwa niat perilaku warga untuk mengadopsi My PhilHealth Portal dipengaruhi oleh kepercayaan mereka pada internet, kepercayaan pada pemerintah, harapan usaha, dan kompetensi yang mereka rasakan. Namun variabel moderasi yang dipilih ternyata tidak berpengaruh signifikan terhadap TOI, TOG, EE, dan PC to BI.
Kata kunci: e-Health; Niat Perilaku; UTUT; Adopsi Warga Negara; Anggota Ekonomi Formal; e-Government

INTRODUCTION

On March 11, 2020, the World Health Organization (WHO, 2020) declared the COVID-19 outbreak to be the sixth public health emergency of international concern characterized as a pandemic. To tackle the disease's long-term effects, a powerful combination of e-Governance, creative use of emerging and advanced technology, strong community cohesion, long-term e-health systems, and citizen engagement has been needed. Citizens' willingness to adopt e-Gov services is critical to its effectiveness (Shareefet al., 2011), therefore the lack of adoption impedes the successful implementation (Zhao et al., 2014; Carter & Belanger, 2005; Gupta & Dasgupta, 2008; Rana & Dwivedi 2015a). Furthermore, Venkatesh et al. (2008) state that any technology must be used inorder to be effective. According to Shareef et al. (2011), researchon this topic is still in its initial phases, with user perspectivesnot being fully explored (Van Deursen et al., 2006). To fill this gap of e-Government adoption, it is necessary to look into theadoption of PhilHealth members by investigating certain factors that influence the members' behavioral intention to use My PhilHealth Portal in order to measure and assess the success of

e-Government services in the Philippines. This study is significant because it provides information on the current state of adoption of an e-Health system in the Philippines. As a result, PhilHealth, policymakers, program implementors, and other stakeholders, including the general public, will recognize the significance of implementing e-health systems in this context, as it refers to My PhilHealth Portal, during this time of health crisis. Specifically, this research sought to answer the following questions: Q1. To what extent do trust on internet (TOI), trust on government (TOG), effort expectancy (EE), perceived competence (PC), social influence (SI) and facilitating conditions (FCs) affect citizens' intention to use My PhilHealth Portal in Cagayan de Oro are City? Q2. How does gender, age, internet experience (INEX) and voluntariness of use (VOU) moderate these associations on the selected constructs?

LITERATURE REVIEW

UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY

The UTAUT model is the result of a thorough investigation of the various models with the goal of achieving a common understanding of user acceptance (Venkatesh et al., 2003). UTAUT model is said to be capable of explaining up to 70% of the variance in behavioral intention. It has been widely used in a variety of fields, including e-health and mobile health (Nug & Aubert, 2013; Lin & Anol (2008). It encapsulates the contribution of eight (8) key theories namely: Theory of Reasoned Action (TRA) by Fishbein and Ajzen (1975), Theory of Acceptance Model (TAM) by Davis (1989), Motivational Model (MM) by Davis et al. (1992), Theory of Planned Behavior (TPB) by Ajzen (1991), Combined TAM and TPB (C-TAM-TPB) by Taylor and Todd (1995a), Model of Personal Computer Utilization (MPCU) by Thompson et al. (1991), Innovation Diffusion Theory (IDT) by Rogers (1995) and, finally, Social Cognitive Theory (SCT) by Compeau and Higgins (1995).

E-GOVERNMENT ADOPTION

Today, the government moves beyond traditional means, with the increasing use of information technology and the internet, the government is capable of delivering information and services directly to the public (Dadios et al., 2018). In this sense, e-Government is committed to providing people with more open, efficient, and effective public services (Sipior, Ward and Connolly, 2011; Reddick and Roy, 2013). Citizens' perception of the expected benefit from using e-Government systems, according to Scott et al. (2016), determines the systems' long-term viability. Many scholars, on the other hand, have studied the technical challenges concerning citizens' adoption of e-Government services (Abu-Shanab et al., 2014; Al-Rashidi, 2010), such as trust (Gilbert et al., 2004; Pieterson et al., 2007), protection and cybersecurity (Ebrahim and Irani, 2005; Schwester, 2009), resources (Angelopoulos et al., 2010; Hwang et al., 2004), the lack of ICT abilities (Norris, 2009; Norris and Moon, 2005), the absence of awareness (Aerschota and Rodousakis, 2008; Shalini, 2009), and the digital divide (Faisal and Rahman, 2008; Wang (2014); Liu & Zhou, 2010). Furthermore, Persson et al. (2015) contends that investigating the factors associated with adoptionis a way to understand their overarching priorities, and that align-ing citizens' perceptions in adopting e-Government services maybe a key to success. According to researchers, acceptance of e-Government services is a substantial contribution to the literature. (Wang et al., 2010; Wang, C., 2014).

E-GOVERNMENT ADOPTION PREDICTORS

There are numerous studies exploring the adoption of e-Government services, which exist in the literature today. In particular, these studies utilized the Unified Theory of Acceptance and Use of Technology UTAUT, one of the most recent developments in the field of the general technology acceptance model (Venkatesh et al., 2003). UTAUT explicates the individual acceptance of information technology into a unified theoretical

model (Venkatesh et al., 2003) and the subsequent usage behavior (Maranguniæ and Graniæ, 2015). The UTAUT suggests that four core constructs (effort expectancy, perceived competence, social influence, and facilitating conditions) are direct determinants of behavioral intention (BI) (Venkatesh et al., 2003). The UTAUT model also takes into account moderators that have an impact on the predictors, such as gender, age, internet experience, and voluntariness of use (Venkatesh et al. 2003).

More than the factors presented in the UTAUT model, this study focused on several more specific variables that affect the citizens' adoption of e-Government services in the context of this study.

A. Trust on Internet - The ability to trust the internet tends to be a potentially important factor in increasing adoption (Alsaghier et al., 2009; Liu and Zhou, 2010; Berdykhanova et al., 2010). Considering the indefinite and frequently changing nature of the Internet, it was hypothesized that trust would be a determinant of behavioral expectations. Due to the extreme risks (Alsaghier et al., 2009; Liu and Zhou, 2010; Berdykhanova et al., 2010), online conditions entail the establishment of trust (Langton and McKnight, 2006). Carter et al. (2016) examined a cross-country study involving the United States and the United Kingdom their results revealed that the government should use confidence-building initiatives to promote public trust in e-Government services, as TOI has a favorable impact on e-Government adoption (Carter et al., 2016). Based on these, this study hypothesized that:

H1: Trust on Internet (TOI) affects the behavioral intention (BI) to adopt My PhilHealth Portal

B. Trust on Government - Citizens' trust in the government is another critical aspect of e-Government adoption. Data protection and confidentiality appear to be the most common antecedents for trust in governments that influence the use of e-Government services. This was illustrated in Asgarkhani's (2005)

report on a pilot study of a digital government project in New Zealand. Confidence in online privacy statements has been found to be very important in predicting trust in e-Government for both experienced and inexperienced users (Beldad et al. 2012). Shareef et al. (2011) discovered that security beliefs contribute to the development of trust in e-government (Shareef et al., 2011). According to Teo et al. (2008), the impact of trust in e-Government websites on satisfaction is partly mediated by system and service quality, with service quality having a significantly stronger influence than system quality. Carter and Bélanger (2005) emphasize that citizens must have trust in both the government (TOG) and the enabling technologies in order to participate in e-Government services. Based on these, this study hypothesized that:

H2: Trust on Government (TOG) affects the behavioral intention (BI) to adopt My PhilHealth Portal.

C. Effort Expectancy - Many studies have found that effort expectancy is an important predictor of e-service use. A study of tax services in Indonesia, for example, discovered that the effort expectancy of the e-filing system has a positive impact on the country's adaptation of e-filing services (Tahar, et al., 2020). Arunachalam (2019) found similar results indicates that the more user- friendly an e-learning platform is, the more likely it is that the learning will continue. It is also supported by Beldad et al. (2012), he found out that effort expectancy of prior online government transactions has been a major impact in shaping trust in government among respondents with e-Government experience. Based on these, this study hypothesized that:

H3: Effort expectancy affects the behavioral intention (BI) to adopt My PhilHealth Portal.

D. Perceived Competence – Bhuasiri et al. (2016) examined the factors that influence citizens' intention to use an electronic tax filing and payment system in Thailand. The findings reveal

that perceived competence can augment extrinsic motivation and has a substantial indirect effect on people's willingness to use the system. Another study conducted by Tiika and Tang (2019) on the adoption of e-Government services in Ghana discovered that a lack of competency in ICT skills is a significant barrier to adopting e-services. This is consistent with the other findings in this section, as it demonstrates that, in most cases, perceived competence is proportionate to the uptake of e-Government services. Based on these, this study hypothesized that:

H4: Perceived competence (PC) affects the behavioral intention (BI) to adopt My PhilHealth Portal.

E. In the context of technological adoption, social influence is described as a person's perception that important others believe he or she should use the new system. This variable is composed of other similar ones, namely subjective norm (TRA, TAM2, TPB and DTPB), social factors (model of PC utilization) and image (IDT) (Venkatesh et al. 2003). Studies of technology adoption (e.g., Chiu et al. 2010; Park et al. 2006; Pynoo et al. 2007; Sumak et al. 2010) have also supported the positive and significant impact of social influence on attitude Susanto and Aljoza (2015) concluded in their study of the factors associated with the adoption of e-Government services in Indonesia that social influence, along with trust, is one of the most significant factors influencing the adoption of e-services. These two factors were ranked higher than perceived usefulness and perceived ease of use. Based on these, this study hypothesized that:

H5: Social influence (SI) affects the behavioral intention (BI) to adopt My PhilHealth Portal.

F. Venkatesh et al. (2003) claim that facilitating conditions become irrelevant in predicting behavioral purpose when conditions such as performance expectancy and effort expectancy are present. In the context of the research, facilitating conditions is similar to research conducted by Batara, et al. (2017) in their

study of the adoption of e-Government services among employees in two cities in two countries: Surabaya, Indonesia, and Davao City, Philippines. According to their findings, facilitating conditions, such as process redesign, structuring, and behavioral and cultural aspects in city government, have a significant impact on respondents' intentions to embrace the features required for e-Government services. Alraja (2016) reached similar conclusions in his study on government employees' adoption of e-Government services in Oman. Similar research was conducted in Saudi Arabia (Alsobhi, Kamal, and Weerakkody, 2009), which yielded similar results, perhaps because the safety of personal data, low education level, and complexity of online services provided are all factors that impede citizen adoption. Based on these, this study hypothesized that:

H6: Facilitating Conditions (FCs) affect the behavioral intention (BI) to adopt My PhilHealth Portal.

G. Moderator – Gender

In terms of gender, earlier research has revealed that men are more likely than women to find mobile e-services useful (Nysveen et al. 2005). There are also differences in security perceptions between men and women; women place a much higher value on privacy and security than men (Vega, 2015). Puschel et al. (2010), on the other hand, gathered 666 respondents in Brazil and discovered that mobile banking users were mostly men. Similarly, Joshua and Koshy (2011) found that men may use electronic banking services more than women after interviewing 553 people in India. Based on these, this study hypothesized that:

H7a: The influence of EE on behavioral intention will be moderated by gender.

H7b: The influence of PC on behavioral intention will be moderated by gender.

H7c: The influence of SI on behavioral intention will be moderated by gender.R

H. Moderator – Age

People's perceptions of e-service quality are influenced by their age (Yarimoglu, 2017). Several studies have been undertaken to look into the implications of demographics on the adoption of new technology. Early adopters of technological innovations, according to Rogers (1995), are often younger, have greater incomes, are better educated, and have higher social standing and employment. Another research on mobile banking adoption found that typical electronic banking users were young (Joshua & Koshy, 2011) or that the elderly had more resistance to change and a negative attitude toward using mobile banking services (Laukkanen et al. 2007). Several studies found that respondents aged 50 and up were the most concerned about using mobile banking services. However, the typical mobile banking users were aged 30 to 49 (Laukkanen & Pasanen 2008), and that middle-aged or older customers were the primary users of electronic banking (Laforet & Li, 2005). Based on these, this study hypothesized that:H8a: The influence of EE on behavioral intention will be moderated by age.

H8b: The influence of PC on behavioral intention will be moderated by age.

H8c: The influence of SI on behavioral intention will be moderated by age.

H8d: The influence of FCs on behavioral intention will be moderated by age.

I. Moderator – Internet Experience

Internet experience (IE) was identified as an underlying moderator of usage behavior by Venkatesh et al. (2003). Studies (Agarwal and Prasad, 1999; Jiang et al., 2008) discovered that Internet experience influences both perceived utility and ease of use, which in turn influences people's actual use or intention to use specific services. Prior experience with online transactions, according to Lee et al. (2005), is a statistically significant predic-

tor that should not be overlooked. Internet experience has a significant impact on technology adoption decisions (Lippert and Forman 2005; Alshamaila et al. 2013) because it affects people's attitudes toward new phenomena, new technology, or new online environments (Bandura 1977). Su et al. (2017) investigated how users' Internet experience influences their adoption of mobile payment and their findings show that users' experience with computers and the Internet in financial activities increases users' perceived usefulness, ease of use, and compatibility which further enhance user's intention to use mobile payment. Based on these, this study hypothesized that:

H9a: The influence of EE on behavioral intention will be moderated by IE.

H9b: The influence of SI on behavioral intention will be moderated by IE.

H9c: The influence of FCs on behavioral intention will be moderated by IE.

J. Moderator - Voluntariness of Use

In the UTAUT model, Venkatesh et al. (2003) incorporated the voluntariness of use or compliance impact. Even though they were an explicit criterion at the time of TAM creation, Davis (1989) did not add voluntariness as an explicit element. However, it was eventually incorporated as a moderator component in social influence (e.g. Venkatesh et al. 2003; Venkatesh and Davis, 2000; Agarwal and Prasad, 1997; Venkatesh and Morris, 2000; Barki and Hartwick, 1994). Based on these, this study hypothesized that:

H10a: The influence of SI on behavioral intention will be.

This research used a linear regression model (Figure 1), wherein the independent variables TOG, TOI, EE, PC, SI and FCs were hypothesized to be associated with the dependent variable Bl. The model was modified to fit the study's context, and the constructs measured are as shown in Figure 1:

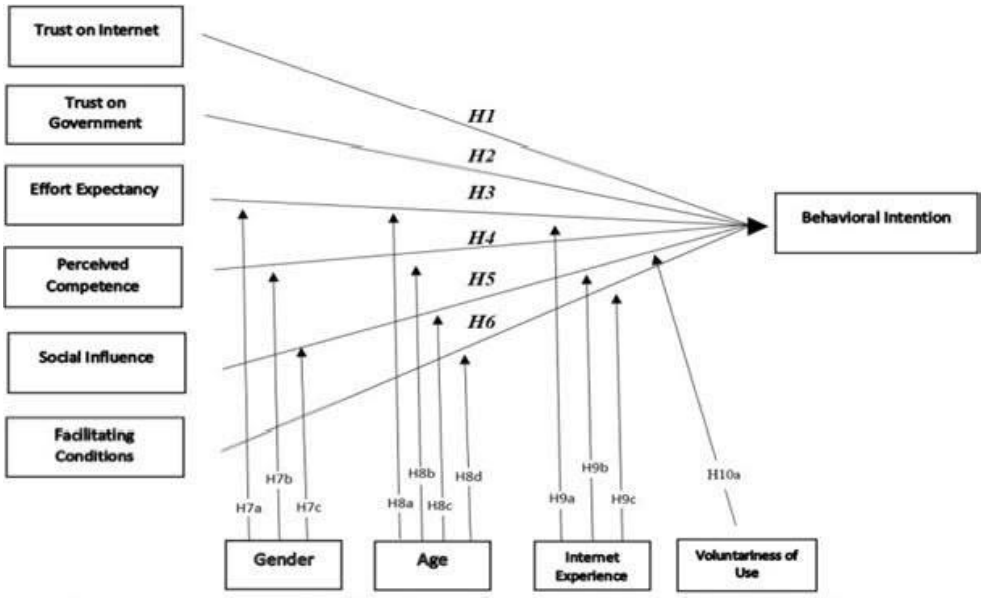

Figure 1. Research Model

Notes: Legend: *p<0.05, ***p<0.001 (statistically significant)
Source: Mina et al., 2022

RESEARCH METHOD

DATA GATHERING TECHNIQUES

In order to answer the questions and provide enough data to achieve the objectives of this study (Easterby-Smith et al., 2002), the researcher utilized an online self-reported survey questionnaire using Google forms. During the collection of data, the researcher utilized Google forms as the online self-reported survey questionnaire. Due to the government restrictions and protocols, the online self-reported survey questionnaire was distributed, filled up, and collected online. Prior to fielding, the survey questionnaire was pilot tested to ensure proper statement format and wording, as well as the reliability and validity of constructs.

RESEARCH PARTICIPANTS

This research employed a purposive homogeneous sampling in choosing the participant. The participants in this study were 400 Cagayan de Oro City-based PhilHealth Formal Economy members, 200 of which are government employees and 200 of which work in the private sector.

TREATMENT AND ANALYSIS OF DATA

The data from the online survey underwent a reliability test using IBM SPSS Statistics (version 20), coefficient of Cronbach's alpha (1951) was used to assess the validity of variables. Anderson and Gerbing (1988) explain that when computing covariance estimates between pairs of latent variables, the discriminant validity of variables must be tested. The respondents' demographic profiles were treated using descriptive statistics and frequencies using IBM SPSS Statistics (version 20). To test the hypotheses and determine the causal relationship of variables, data from each item on specific constructs in section 2 of the online survey were treated by obtaining the mean and then using licensed versions of IBM SPSS AMOS (version 26) to perform Structural Equation Modelling.

RESULT AND DISCUSSION

DEMOGRAPHIC PROFILE OF RESPONDENTS

In terms of age, the data collected shows that the majority of the participants were between the ages of 20 and 30. With regards to gender, the majority of the respondents during the conduct of the study are mostly male. The respondents' job sector was adequately represented, with 50% working in the private sector and 50% working in the government. Furthermore, data suggests that huge percentage of respondents have access to mobile data, while only a few have internet access. According to the data, a significant portion of them have more than two years of internet experience, indicating that the respondents are already familiar in using the internet.

RELIABILITY ANALYSIS

The table below reveals the reliability analysis using Cronbach's alpha, which indicates the internal consistency of indicator items such as TOI, TOG, EE, PC, SI, and FCs that measure the same construct. A minimum Cronbach's alpha value of 0.70 indicates construct reliability and validity. All constructs passed the test and demonstrated a high level of reliability.

Table 1. Validity of Constructs (N=400)

Constructs	Squared Multiple Correlation	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No of Items
Trust on Internet	.344	.778	.755	6
Trust on Government	.480	.743	.755	6
Effort Expectancy	.435	.738	.755	6
Perceived Competence	.422	.737	.755	6
Social Influence	.429	.733	.755	6
Facilitating Conditions	.380	.731	.755	6

Source: Mina et al., 2022

CONSTRUCTS AND THEIR RELATIONSHIP TO BEHAVIORAL INTENTION (BI)

Data shows that there is a significant association between behavioral intention (BI) and TOI ($p<0.01$), TOG and PC ($p<0.001$), EE ($p<0.05$), and FCs ($p<0.05$), indicating that the hypothesis is accepted at the 0.05 alpha level of significance. However, with p-value of .098 and .052 respectively, there is no significant relationship between the BI and SI, and FCs and BI, resulting in the rejection of the hypothesis. TOI and EE as shown above has a negative coefficient, the findings suggest that as the independent variables TOI and EE increases, the dependent variable BI tends to decrease. The significant relationship of the five constructs accounts for 24% in BI (with an R2 of 0.24).

Results show that trust in the government and perceived competence are highly significant to behavioral intention. The respondents of this study believe that the government has the re-

sources to deliver dependable and reliable online services, and that it can give all relevant information necessary to fulfill their needs through online transactions, as shown in Table 4.2.4. This indicates that the intention to use My PhilHealth Portal is associated to their perceived trust in the government. This is similar to the findings of Abu-Shanab (2014), who discovered that trust in government is one of the variables that predict Jordanian useof e-Government services which is also a predictor in the UTAUT model derived from Venkatesh et al. (2003).

When it comes to the perceived competence, it shows a high significance on the respondent's intention to adopt the portal. The majority of respondents have access to mobile data, and only a few have access to the internet from an internet service provider, implying that having a high-speed internet connection would increase their willingness to use the portal. They also indicated that a suitable device is a factor in their reluctance to use the portal, which, according to the findings, they are using mobile data, implying that their gadgets are mobile phones. Studies (Eschenbrenner and Nah, 2014; Berry, 1997; Fuerst & Cheney, 1982) show that when users' competency is high, typical resistance to change is reduced, and performance improves. According to Venkatesh et al. (2003), the most important factor in deciding whether or not to utilize a new technology is based on the perceived competence whether the use is voluntary or mandatory (Venkatesh et al., 2003).

Third, trust in the internet is an important indicator of their behavioral intention to use the portal. As shown in Table 2, respondents do not trust the internet as a safe place to conduct secure transactions and are unsure whether to provide financial and other personal information in the portal. In terms of effort expectancy, data shows that effort expectancy is highly associated with behavioral intention to adopt My PhilHealth Portal. This means that the ease of use of the portal (Venkatesh et al., 2003) influences the respondents' intention to adopt.

It is also revealed that the respondents' intention to use the

portal has no relationship to facilitating conditions. Based on the UTAUT model (Venkatesh et al., 2003), this variable has a direct and significant impact on the actual use of a technology but in this study, it doesn't have a significant impact on BI. Hence, as the organization's efficiency improves and more resources and support are available for users' demands, the impact of this variable increases (Venkatesh et al., 2003). Finally, the results show that there is no correlation between SI and BI. In the UTAUT model, SI is a predictor of BI (Venkatesh and Davis, 2000), but not in the context of this study. Although respondents believe that using the portal will keep them safe from Covid-19 and that people who use the portal are safe and healthy, SI appears to have no significant impact on BI. In this case, the users do not recognize the significance that others believe he or she should use the new facility or My PhilHealth Portal (Venkatesh et al., 2003). This means that as the number of users who are positive about using the portal increases exponentially, so will the number of users who are socially influenced in their immediate environment. This implies that the people influencing the respondents' behavior have little intention of using the portal.

Table 2. Relationship of Independent Variables to Dependent Variable

Relationship			Regression Weights	S.E.	C.R.	P-value	Hypothesis
TOI	→	BI	-.105	.041	-2.554	.011	Accepted
TOG	→	BI	.453	.055	8.287	***	Accepted
EE	→	BI	-.129	.063	-2.040	.041	Accepted
PC	→	BI	.227	.051	4.436	***	Accepted
SI	→	BI	.089	.054	1.655	.098	Rejected
FCs	→	BI	.093	.048	1.942	.052	Rejected

Note: Legend: ***p<0.001 (statistically significant)

Source: Mina et al., 2022

MODERATORS' INFLUENCE TO SPECIFIC CONSTRUCTS

According to the findings, the interaction between age and social influence appears to be the most significant on Behavioral

Intention (BI) with p<0.00 and the interaction of voluntariness of use and social influence has a significant impact on behavioral intention, with p<0.05. As seen in the data, there is no significant relationship between the interaction of gender to EE, PC and SI implying the rejection of the hypothesis. Furthermore, the interaction of age to PC and FCs has no effect on BI, hence the interaction of age to SI affects BI. Also, the data show that the influence of internet experience moderated by EE, SI, and FCs has no significant effect to BI. Moreover, social influence moderated by VOU has a significant effect to BI.

Table 3. Relationship Between Moderators and Selected Constructs

Dependent <--- Interaction Variable	Regression Weights	S.E.	C.R.	P-value	Hypothesis
BI <--- GEN_EE	-.089	.117	-.763	.445	Rejected
BI <--- GEN_PC	.171	.090	1.906	.057	Rejected
BI <--- GEN_SI	-.040	.103	-.393	.694	Rejected
BI <--- AGE_EE	.092	.046	1.988	.047	Rejected
BI <--- AGE_PC	-.047	.036	-1.317	.188	Rejected
BI <--- AGE_SI	.152	.042	3.603	***	Accepted
BI <--- AGE_FC	-.065	.026	-2.473	.013	Rejected
BI <--- INEX_EE	-.012	.055	-.213	.832	Rejected
BI <--- INEX_SI	-.090	.048	-1.860	.063	Rejected
BI <--- INEX_FC	-.025	.045	-.572	.567	Rejected
BI <--- VOU_SI	.169	.073	2.328	*	Accepted

Notes: Legend: *p<0.05, ***p<0.001 (statistically significant)

Source: Mina et al., 2022

IMPLICATIONS TO THEORY

In the context of the study and the context of PhilHealth Formal Economy Members, TOI, TOG, EE, and PC are pivotal indicators to the adoption of My PhilHealth Portal during the pandemic. In the unified theory of acceptance and use of technology, it suggests that four core constructs (performance expectancy, effort expectancy, social influence, and facilitating conditions) are direct determinants of behavioral intention and that these constructs are in turn moderated by gender, age, internet

experience, and voluntariness of use (Venkatesh et al., 2003). This study proves the determinants of behavioral intention and the following moderators that impact the constructs in the adoption of My PhilHealth Portal.

Despite the fact that trust in the government and trust in the internet is not included in the UTAUT model, some studies show that these are a significant predictor of resistance to using e-Government services (Abu-Shanab,2014; Mpinganjira, 2015; Teo et al.,2008), and it was discovered in this study that TOG and TOI are pivotal predictors of portal adoption. Interestingly, TOI has a negative impact on BI, implying that respondents do not trust the internet as a reliable medium for conducting secure transactions. Effort expectancy and perceived competence were discovered to be significant predictors of portal adoption, which, therefore, lends credence to some claims in the literature (Tahar, et al., 2020; Arunachalam, 2019; Ramli and Rahmawati, 2020; Hamid et al., 2016) and in the UTAUT model (Venkatesh et. al., 2003). EE has a negative impact on BI, indicating that respondents believe navigating My PhilHealth Portal is complicated. However, SI and FCs do not appear to be predictors of BI, implying those notions of prominent studies (Taylor and Todd,1995b;Chiu et al. 2010; Lee and Lin 2008; Alraja, 2016; Carter et al.,2012), including the UTAUT model (Venkatesh et. al., 2003),appear to be different in the context of this study.

Gender appears to be non - significant as a moderating variable for EE, PC, and SI. These results refute the assertions of studies (Nysveen et al. 2005; Cruz et al. 2010; Joshua and Koshy, 2011; Vega, 2015). EE, SI, and FCs appear to be moderated by age, with FCs being negatively moderated by age, as demonstrated among those in the age bracket of 50 and above. These findings validate the UTAUT model and the study of Yarimoglu (2017) and Berraies et al.(2017), which shows how users' perceptions of the availability of technical assistance to facilitate the usage of a system are influenced by their age. Internet experience, as a moderating variable is not relevant to EE, SI and FCs, which

contradicts the UTAUT model and some studies (Lippert and Forman 2005; Alshamaila et al., 2013). Finally, VOU appears to moderate SI; this finding lends support to the UTAUT model (Venkatesh et al., 2003) and other studies (Agarwal & Prasad, 1997; Chiu et al., 2017). Therefore, this study indicates that the moderators derived from the UTAUT model in the context of this study don't influence the selected constructs.

This study has shown the roles of predictors (TOI, TOG, EE, and PC) and moderators (Age and VOU) of BI in the context of this study, as seen in the validated research model (Figure 2), are the factors influencing citizen adoption of My PhilHealth Portal. The study's clear contribution to the advancement of e-government adoption literature is the examination and validation of the selected constructs' roles in the adoption of new technology or systems.

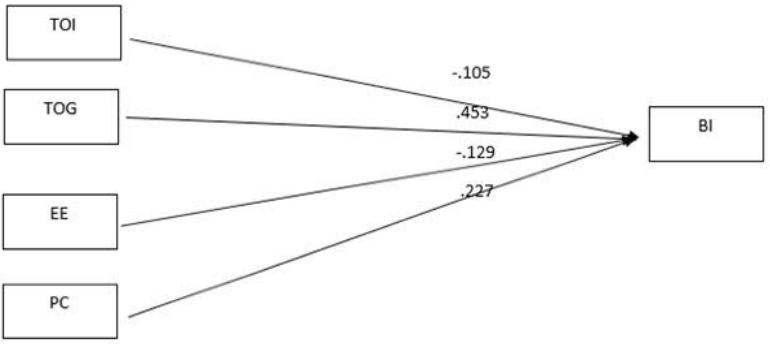

Figure 2. Validated Research Model
Notes: Legend: *p<0.05, ***p<0.001 (statistically significant)
Source: Mina et al., 2022

IMPLICATIONS TO PRACTICE

Among the six constructs on portal adoption, TOG and PC stand out as key factors. This means that, in order to increase adoption, members should be made aware of the portal's security features, as well as the agencies and staff's ability to perform online transactions faithfully. The negative impact of TOI on BI

clearly explains that in practice, proper education and understanding about the internet's safety when disclosing confidential information must be realized by the agency in order to increase the portal's adoption. Since EE has an impact on BI, the portal's features must be convenient to use, especially since there are users aged 50 and above, and it must be available 24/7. This is a critical feature for users during the pandemic because it allows them to transact their needs at any time and from any location. The agency should encourage the voluntary use of the portal in adopting it; mandating it would have an impact on the portal's adoption because citizens are accustomed to freely use the portal without being obligated to do so. Based on the findings of this study, PhilHealth can establish a national strategy to increase portal adoption, taking into account other PhilHealth member categories.

CONCLUSION

In this study, it was discovered that trust on internet, trust on government, effort expectancy, and perceived competence are all directly related to behavioral intention in the context of My PhilHealth Portal adoption. Few constructs in the UTAUT model (EE and PC) emerge as determinants of adoption, as such TOI and TOG are proven to be highly significant to BI, contributing to the broad study and theory of technology adoption. Due to the Covid-19 protocols, respondents have found the portal useful because it can be accessed from anywhere at any time without risk of virus exposure, which is appropriate for their needs in conducting transactions with the agency. Because the effect of EE on BI is moderated by age, PhilHealth should ensure that the portal is simple to use so that older adults, not just young adults, can take advantage of its features. In addition, a lack of access to a high-speed internet connection and appropriate gadgets makes it difficult for them to adopt the portal. SI and FCs did not appear to be a factor in the intention to use the portal. As a result, PhilHealth should strongly encourage the general

public to use the My PhilHealth Portal, particularly during a health crisis. Finally, it is a challenge for the agency to prioritize proper training on how to navigate the portal for all members, regardless of age, in order to increase adoption. It is concluded that, during this time of the pandemic, an e-Health system is pivotal for citizens in order to continue with their daily transactions with the government. The pandemic may have taken its toll on face-to-face transactions, but these challenges can be managed with the help of ICT and advanced technologies.

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