Examining the Impacts of Behavioral factors on Wireless Village Services among Rural Community in Malaysia

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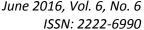[2]Institute for Social Science Studies, Universiti Putra Malaysia

ABSTRACT

The main attempt of this study is to examine the impacts of behavioural factors on wireless village services among rural community in Malaysia. The study was quantitative in nature where a developed questionnaire was used as the main instrument in collecting the data. Via a multi stage cluster sampling, a total of 400 villagers from four districts in Malaysia have been selected as the respondents for the study. It can be confirmed that all of the behavioural factors studied have a positive and significant relationship with usage of wireless village services. A number of discussion have been highlighted and it is a hope that such discussion can act as a basis for interested parties in constructing concrete strategies to further narrowing the digital gap between the rural and urban communities in Malaysia.
Keywords: Rural development, community development, ICT, behavioural factors

COMPLETION OF 1MALAYSIA WIRELESS VILLAGE

The difference between internet penetration rate by the urban households (75.8%) and the rural households (24.2%) were 51.6%, leading us to believe that the rural communities were still lacking in terms of ICT exposure (Malaysian Communications and Multimedia Commissions, 2014).Due to the digital gap that exists between the rural and the urban community in Malaysia, the government decided to provide a free internet access of 4Mbps Wi-Fi within a radius of 50 metres through a satellite dish and called it the 1Malaysia Wireless Village project. In cooperation with Universal Service Provider (USP), the Malaysian Communications and Multimedia Commissions (MCMC) have succeeded in implementing 4,803 1Malaysia Wireless Villages since 2011 by erecting a satellite dish in a Community Broadband Centre (CBC)-to-Home technology infrastructure or Collective Broadband Access (CBA) phase 1 technology infrastructure (MCMC, 2014). The Wireless Village concept is to give internet exposure to the rural communities without any fee. The locals living nearby within 50 metres from the service centre can access the free Wi-Fi and its access depends on the installer. The installer would either opt to have the Wi-Fi access open to all users or by requiring them to register them beforehand to obtain a username and password. This
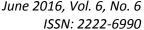
study aims to identify whether the utilization of internet by the rural communities could imply the factors studied in Extended Technology Acceptance Model (ETAM) may affect their internet usage and whether attitude can become the new factor in ETAM.

EXTENDED TECHNOLOGY ACCEPTANCE MODEL

As this study focused on examining the internet acceptance among 1Malaysia Wireless Village communities, an Extended Technology Acceptance Model was used as a determinant of the rural internet utilization. Davis's Technology Acceptance Model (TAM) was originally a model to study individual behaviour in applying Information and Communication Technology in their daily life, extended by adding task-uncertainty reduction in internet behaviour to understand an individual's belief, attitude and performance as a basis towards understanding their behavioural intention in accepting an information system. A number of previous studies have placed their efforts to improve and modify TAM (Shih, 2004; Trombley and Lee, 2006; Hernandez et al. 2008; Venkatesh and Davis, 1996; Luarn and Lin, 2004; Lee and Brown, 2007) and the main reasons why they were tried to modify the model was due to TAM has been argued for the lack of task focus, limited explanatory and predictive abilities and its application revealed mixed results in information technology evaluations (Dishaw and Strong, 1999).

In response to this, a number of scholars have run several studies in their effort to further improve TAM and one of them is Hu et al. (2003). Hu et al. (2003) have introduced an extension model of TAM, known as Extended Technology Acceptance Model (ETAM). ETAM consists of behavioural factors such as job relevance, compatibility, self-efficacy, perceived ease of use, perceived usefulness and subjective norm. Understandably, ETAM is lacking of one of most influential behavioural factors for ICT usage which is the attitude. Attitude is another common behavioural factors in understanding technology usage – indeed, it has a strong influence on technology usage, yet, has been discounted in ETAM model. Attitude can be referred as how much the individual like or dislike towards something. Attitude can gear people to exhibit either he likes or dislikes person, place, thing or event and within the scope of present study – the wireless village services (Breckler and Wiggins, 1992).

Hu et al. (2003) has dropped attitude from ETAM model – claiming that less impact of attitude can be seen on the adoption behaviour. Nevertheless, Kim et al. (2009) has claimed that such decision has been developed without theoretical consideration and confines the search for an inclusive understanding of technology acceptance. Kim et al. (2009) further clarified that attitude is a stable and predictive behaviour of technology usage. A number of previous studies (Breckler and Wiggins, 1992; Bhattacherjee and Premkumar, 2004; Dixon, 2009; Shiro, 2008) has supported Kim et al. (2009) findings and confirmed the influence of attitude on technology usage. They accentuated on the importance to understand people attitude as this behavioural factor will determine on how much he or she like or dislike towards something which then influence their degree of technology usage. In general, the studies further provided a simple conclusion on the influence of attitude on technology usage by stating people with positive attitude towards technology usage will have a better technology usage compared to those with negative attitude. Proves by scholars across the globe has confirmed on the impacts of attitude on technology usage, however, a query has been forwarded - can attitude be included as one of the ETAM variables within the context of wireless village services in Malaysia? Furthermore, several previous studies has looked

onto the influential power ETAM in predicting ICT usage among various groups of community such as pharmacist (Dasgupta et al., 2003) teacher (Hu et al., 2003); students (Wu and Gao, 2010); bankers (Oyo et al., 2010); physicians (Chismar and Wiley-Paton, 2003; Kim et al., 2009), however a similar scenario cannot be found on the case of the rural community. Rooted by this, the main research question that emerged is whether attitude can be included as one of the variables in ETAM? And can ETAM provide influence on usage of wireless village services among the rural community?

The present study has three main contributions. Firstly, its contributes to the body of knowledge whereby the modification of the ETAM model via the inclusion of attitude as one of the independent variables are expected to contribute to the existing literature and providing a basis for future researchers to conduct more studies related to usage of wireless village services among the community. Secondly, the present study is expected to contribute to practice. It emphasizes on the key areas that influence wireless village services among the rural community that can gear towards a better internet usage which eventually will further narrow down the digital gap that still exist between the rural community and their counterpart in the urban areas. Thirdly, the study contributes towards policy. Accordingly, by identifying factors that influence wireless village services among the rural community, it offers valuable data for the concern parties such as MCMC and Ministry of Rural and Regional Development as it can be referred in constructing strategies for technology adoption that is fit to the SSFM interest, need and ability.

IMPACTS OF BEHAVIOURAL FACTORS ON INTERNET USAGE

Job relevance can be referred as the relation of the technology with the community daily routine. A number of studies have proven on the ability of job relevance to influence ICT usage such as by Comfort et al. (2005) and Joseph and Andrew (2007), nonetheless, a study done by Aboh (2008) has denied on the influence of job relevance on ICT usage. Compatibility is another behavioural components studied within ETAM. Compatibility can be understood as their ICT skills and knowledge that are considered as in line with the existing values, past experience and needs of potential users. In another words, a person is seen as compatible in using ICT when they continuously use ICT in their daily routine. A number of past studies have looked onto the ability of compatibility to influence ICT usage among the community such as by Gulbahar and Guven (2008) and Al-Gaith et al. (2010). Furthermore, self-efficacy is also incorporated in the ETAM model, self-efficacy can be defined as the individual's belief in his or her ability to successfully perform a specific behaviour. A number of past studies have successfully proven on the ability of this behavioural factor to influence ICT usage among the community (Venkatesh and Morris 2000; Venkatesh et al., 2003 and Lewis et al., 2003) nevertheless, there are also a number of studies that opposed the facts that self-efficacy can influence ICT usage (Bolt et al., 2001 and Gallivan et al., 2005).

Perceived ease of use is one of the behavioural factors that are included in the original model of TAM and then maintained in the extension model – ETAM. Perceived ease of use can be considered as the degree of easiness associated with ICT usage, usually, the less complicated the technology, the higher possibility that the community will use the ICT offered to them A number of past studies have looked onto the ability of perceived ease of use in impinging ICT usage such as by Ramli et al. (2013), Shaffril et al. (2010) and Meso et

al. (2005). In addition to perceived ease of use, perceived usefulness is another behavioural factor included in ETAM. Perceived usefulness can be understood as the perception of the community on the benefits gained which is resulted from the ICT usage. Perceived usefulness is considered among the prominent and influential behavioural factors on ICT usage and this has been confirmed by studies done by Sahharon, (2014), Ramli et al. (2013), and Venkatesh and Morris (2000). Subjective norms can be understood as the social influence that impinge community ICT usage and within the rural community settings, the social influence can be among the colleagues, family members and village leaders. In a number of studies such as by Shaffril et al. (2010), Gilligan (2005), Zulkifli et al. (2009) and Pee and Kankanhalli (2010) have confirmed on the ability of social influence to further enhance ICT usage among the community. Attitude is the additional behavioural factor included in this study. Attitude can be defined as an evaluative character resulted from cognitions, affective reactions, behavioral intention and past behaviors and impinge people like or dislike on something or someone (Dixon, 2009; Shih, 2004; Shiro, 2008).

METHODOLOGY

The study involves human subject research and therefore ethical declaration for the study has been approved by Institute for Social Science Studies Ethical Committee Board for Research.

The participant provided verbal informed consent to participate in this study before they were told to respond to the items of the questionnaire, their consent was obtained and they are free to accept or reject the invitation to be involved in the study. The written consent was not obtained due to time limitation besides verbal consent was deemed as adequate to obtain their permission to participate in this study. The participant consent was recorded in the questionnaire and the Institute for Social Science Studies Ethical Committee Board for Research did not have any problem in approving this procedure.

For the respondents who are on-going school children (15 to 17 years old) the verbal consent was obtained from the respondents parents to participate in this study. The research team paid a home visit to the concerned parents to obtain their permission for their children to participate in the study prior to the data collection process. The concerned parents are free to accept or reject the invitation for their children to be involved in the study. The written consent was not obtained due to time limitation besides verbal consent was deemed as adequate to obtain their permission to participate in this study. The concerned parents consent was recorded in the questionnaire and the Institute for Social Science Studies Ethical Committee Board for Research also did not have any problem in approving this procedure.

The study is based on quantitative research design. Questionnaire was used as the main instrument in collecting the data. The questionnaire was developed based on review of literature and questions of previous studies. Originally, the questionnaire consists of six parts, however, for the purpose of fulfilling the objective of this paper which is to examine impacts of behavioural factors on wireless village services among rural community in Malaysia, the current paper will only highlights findings on three parts namely demographic factors, wireless village services and the behavioural factors. Overall, these two parts consisted of 84 questions (refer Table 1). For the demographic part, the respondents were

given an option of open-ended or closed-ended answers while for the usage wireless village services part, the respondents were given an option of four likert scale which range from 1 (strongly disagree) to 4 (strongly agree). For the behavioural part, it was constructed based on the definition of each factor and the respondents were given an option of five likert scale which range from 1 (strongly disagree) to 5 (strongly agree).

Table 1. The Questionnaire

Factors	Definition of factors	Number of items
Demographic	Their demographic background	7
Wireless village services	Purposes of using of the wireless village services which are related to their socio-economic routines.	15
Perceived usefulness	How much a person perceive that usage of the wireless village services can assist him or her in improving his or her work performance.	11
Job relevance	How much the wireless village services can assist the villagers either in their personal matter or their works.	11
Attitude	The degree of the individual like or dislike towards something. Attitude can gear people to exhibit either he likes or dislikes person, place, thing or event and within the scope of present study – the wireless village services	10
Self-efficacy	The belief in one's abilities to complete and implement a number of actions needed to organize future situation. Understandably, self-efficacy within the scope of this study covers to rural community belief and ability to use the wireless village services	5
Perceived ease of use	How much a person perceive that using the wireless village services is effortless	11
Subjective norm	Social supports or pressure the person receive from several sources to carry out a specific behavior (to use or not to use the wireless village services)	8
Compatibility	Within the scope of this study, compatibility refers to the rural community working or lifestyle compatibility with the hardware and software that is available when using the wireless village services.	6

The developed questionnaire was then pre-tested among 30 villagers at district of Tanjung Karang, Selangor. The pre-test resulted in Cronbach alpha value of .809 which exceeded the recommended value of .700 suggested by Nunally (1978). To determine the number of respondents, this study are referring to the calculation of Krecjie and Morgan (1970) who suggested that for the population over 100,000 the suitable number of respondents are 384. The study attempts to have 400 respondents and to have a bigger number of sampling is not a problem as Muhammad Najib (1990) have concluded that a bigger sample size will strengthen the reliability and validity of the instrument.

The respondents were selected based on a multi stage cluster sampling whereby at the first stage of sampling, four out of five zones in Malaysia was randomly selected and the selected zones are south, central, east coast and Sabah/Sarawak. Then, at the second stage, all of the states in Malaysia were grouped into their zones and then a state was randomly selected to represent their respective zones. At this stage a total of four states were selected and there were Selangor (represented central zone), Negeri Sembilan (represented southern zone), Terengganu (represented east coast zone) and Sabah (represented Sabah/Sarawak zone). At the third stage of sampling all of the districts of each selected state were listed and then a district was randomly selected to represent their respective state and the selected district was Kuala Selangor (represented Selangor), Jelebu (represented Negeri Sembilan), Marang (represented Terengganu) and Ranau (represented Sabah). At the final stage of sampling, a total of 100 villagers who stayed at the areas where the wireless village services are provided were randomly selected as the respondents.

The data collection process have been conducted for five months (started from February 2014 and ended in July (2014). The data collection process was assisted by trained and experienced enumerators and monitored by the research members. On average, the respondents took between 20 to 25 minutes to complete the questionnaire. The collected data were then cleaned and analysed using descriptive and inferential analyses such as frequency, percentage, mean score and pearson product moment correlation.

RESULTS
Table 2 indicated that a majority of the respondents are male (56.0%). The mean score recorded for the respondents age was 23.6 with a majority of them were in the age group of 15-17 years old. Slightly more than three quarter of the respondents were Malay while the rest were Dusun. A combination of 72.5% of the respondents were possessing PMR/SRP and SPM/SPMV level of education while a total of 60.8% of them are still unemployed – such scenario is not surprising as most of them were still students. The average of household income recorded was RM1, 761.50 (roughly equal to USD590) which exceeded the poverty level set by Economic Planning Unit of Malaysia which is RM720 (USD240) and a majority of them were included in the group of RM751-RM1000 (USD250 – USD333). Most of the respondents are considered as the senior villagers as a total of 29.5% of them have stayed for more than 21 years and 26.5% of them have stayed in the village between 16 to 20 years old.
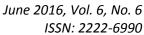
Table 2. Demographic background of the respondents

Factor	Frequency	Percentage	Mean
Gender			
Male	224	56.0	
Female	176	44.0	
Age			23.6
15-17	142	35.5	
18-20	66	16.5	
21-24	57	14.3	
25-30	39	9.8	
$\geq$31	96	24.0	
Race			
Malay	303	75.8	
Dusun	97	24.2	
Education achievement			
Never been to school	8	2.0	
Primary school	10	2.5	
PMR/SRP	132	33.0	
SPM/SPMV	158	39.5	
Skill certificate/STPM	46	11.5	
Diploma	33	8.3	
Degree/Master/PhD	13	3.3	
Employment status			
Employed	157	39.3	

Unemployed	243	60.8	
Household income			RM1,761.50
<RM750	67	16.8	
RM751-RM1000	110	27.5	
RM1001-RM1500	75	18.8	
RM1501-RM2000	57	14.3	
>RM2001	91	22.8	
Duration of stay in the village inhabited (years)			17.3
<5	54	13.5	
6-10	52	13.0	
11-15	70	17.5	
16-20	106	26.5	
>21	118	29.5	

Usage of wireless village services

Table 3 demonstrates the level of usage on wireless village services among the rural community. As been mentioned earlier (refer to the methodology part), the usage of wireless village services were measured based on 15 purposes of using the services. The resulted mean score of 2.87 has confirmed that in general, the rural community within this study had recorded a moderate level of usage on the wireless village services. Specifically, a majority of the respondents were recorded a moderate level of mean score (49.7%), another 40.5% of them recorded a high level of mean score while only 9.8% of them recorded a low level of mean score.

Table 3. Level of wireless village services among the rural community.

Level	Frequency	Percentage	Mean
Usage Wireless Village Services			2.87
Low (1.00-2.00)	39	9.8	
Moderate (2.01-3.00)	199	49.7	
High (3.01 – 4.00)	162	40.5	

Table 4 demonstrates the level of behavioural factors studied. Out of seven behavioural factors studied, Perceived usefulness has recorded the highest mean score (M = 3.97). The second highest mean score was recorded by job relevance (M = 3.87) and third highest mean score was recorded by and self-efficacy – both behavioural factors recorded M = 3.78. Moreover, it can be confirmed that the lowest mean score was recorded by compatibility (M = 3.57). Analysis performed has concluded that a total of four behavioural factors namely perceived usefulness, job relevance, self-efficacy and attitude recorded a high level of mean score while the remaining three behavioural factors namely perceived ease of use, subjective norms and compatibility recorded a moderate level of mean score.

Table 4. Levels of behavioural factors

Behavioural factors	Frequency	Percentage	Mean
Perceived usefulness			3.97
Low (1.00-2.33)	10	2.5	
Moderate (2.34-3.67)	107	26.8	
High (3.68 – 5.00)	283	70.8	
Job relevance			3.87
Low (1.00-2.33)	14	3.5	
Moderate (2.34-3.67)	128	32.0	
High (3.68 – 5.00)	258	64.5	
Attitude			3.78
Low (1.00-2.33)	11	2.8	
Moderate (2.34-3.67)	138	34.5	
High (3.68 – 5.00)	251	62.8	
Self-efficacy			3.78
Low (1.00-2.33)	9	2.3	
Moderate (2.34-3.67)	153	38.3	
High (3.68 – 5.00)	238	59.5	

Perceived ease of use   3.65

Low (1.00-2.33)   21   5.3

Moderate (2.34-3.67)   162   40.5
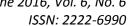
High (3.68 – 5.00)   217   54.3

Subjective norm   3.58

Low (1.00-2.33)   27   6.8

Moderate (2.34-3.67)   174   43.5

High (3.68 – 5.00)   199   49.8

Compatibility   3.57

Low (1.00-2.33)   24   6.0

Moderate (2.34-3.67)   190   47.5

High (3.68 – 5.00)   186   46.5

To determine any relationship that might occur between behavioural factors studied and usage of wireless village services, inferential analysis – pearson product moment correlation was performed. All of the seven behavioural factors studied have been found to have positive and significant relationship. The range of r which was from .413 to .516 has confirmed that six out of the seven behavioural factors studied, namely attitude, self-efficacy, perceived ease of use, compatibility, job relevance and subjective norms have a moderate strength of relationship with usage of wireless village services while perceived usefulness ($r = .388$) was detected to have a low strength of relationship with usage of wireless village services (Table 5).

Table 5. Relationship between behavioural factors studied and usage of wireless village services

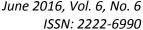| Variables	r	P
Job relevance	.516	.0001
Perceived ease of use	.516	.0001
Attitude	.483	.0001
Compatibility	.462	.0001
Subjective norm	.416	.0001
Self-efficacy	.413	.0001
Perceived usefulness	.388	.0001

DISCUSSION

The resulted findings had provided answers for the study three main questions. First, can the attitude be included in ETAM as one of the variables that influence technology usage? The answer is yes. Previous studies has looked onto this issue, Kim et al. (2009) for example has confirmed on stability and predictive power of attitude on technology usage while Breckler and Wiggins (1992), Bhattacherjee and Premkumar (2004), Dixon (2009), and Shiro (2008) had stressed on the importance to understand people attitude in order to determine the influence of their 'like' or 'dislike' on their technology usage . Within the scope of this study, based on a high level of mean score recorded, it can be confirmed that rural community are having a positive attitude towards wireless village services. In Malaysia, previous studies have concluded that rural community are always welcoming any development projects. Understandably, projects such as 1 Malaysia Internet Centre, Rural Internet Desa and Medan Info Desa are examples of rural ICT projects that are highly accepted by the rural community and a similar things can be seen within the scope of the wireless village services (Sahharon, 2014; Shaffril et al., 2010). Having this acceptance can gear towards a consistent usage and exposure towards ICT. This then can result in people recognition on the importance of ICT which eventually develop positive attitude among the rural community towards ICT usage.

Conversely, the resulted findings also provided an answer for second question – can other variables in ETAM influence the wireless village services among the rural community? The answer is yes. The study has concluded that compatibility is one of the influential behavioural factors towards wireless village services among the rural community in Malaysia. Such finding is not surprising as it is in tandem with findings of Gulbahar and Guven (2008) and Al-Gaith et al. (2010). Both of the studies have concluded that people with higher compatibility use ICT more compared to those with lower compatibility as they are equipped with a higher level of ICT technical aspects, knowledge and experience. Within the scope of this study, rural community are seen to be a compatible person on using wireless village services which are potentially caused by their consistent usage of the services. Looking back at the earlier result, this consistent usage can be potentially resulted as a huge majority of them are using the services from moderate to a high level (refer to S3 Table) and according to D'Silva et al. (2010), a person is seen as compatible in using technology when they afford to consistently work with it.

Moreover, the preent study found that the rural community has a high self-efficacy on technology usage and it drives them to use the wireless village services. Having this findings is in line with previous studies done by Venkatesh and Morris (2000), Venkatesh et al. (2003) and Lewis et al. (2003) who stressed that self-efficacy is one of the factors for ICT usage among the community. A high self-efficacy on ICT usage are associated with a higher level of ICT usage and those with lower self-efficacy on ICT usage are usually demonstrating a lower level of ICT usage. Older people for example, are always associated with a lower self-efficacy on ICT usage as they belief that they are not able to use ICT and they belief that they can use traditional tools more effectively than ICT.

The present study also confirmed on the influence of job relevance on the usage of wireless villages services usage among the rural community and it is in line with previous studies done by Comfort et al. (2005) and Joseph and Andrew (2007). It confirmed that the services offered has helped them much in their personal matter or their works. Within the scope of this study, a specific analysis has confirmed that the wireless services was found to relate to their routines on knowledge and information seeking. Hassan et al. (2009) has provided an
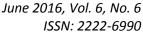
explanation of such scenario by stressing on the eagerness of the rural community to use internet for seeking knowledge and updated information as it enables them to be in line with their counterpart in the urban areas in term of knowledge possession. Although they were found to wisely use internet to profit their routine specifically for increasing their knowledge and information possession, nevertheless, the rural community were found to less effectively rely on the wireless services offered to seek for a better job or seeking for any income generating activities.

Perceived ease of use is another significant behavioural factors on wireless village services. It is the degree of easiness associated with ICT usage. Basically, less complicated ICT tool or services are preferred by the rural community (Ramli et al., 2013; Shaffril et al., 2010; Meso et al., 2005). Within the scope of this study, rural community are expecting technology that is easy to be used and wireless services are invented to offer simplicity to the rural community. Itcan be considered as a simple and easy service as it merely needs the users to login to start using the wireless services offered. These easiness and simplicity then are resulting a higher level of wireless services usage. There are several reasons why rural community in Malaysia are seeking for easiness and simplicity in using the technology. First is the technophobia – fear of the unknown outcome resulted from the technology usage, second is the decreasing capability and focus to process complex task, less ability to learning, a lower memory capabilities and development of psychophysiological restructuring (World Youth Report, 2003; Hassan et al., 2011).

In addition to perceived ease of use, perceived usefulness is another significant behavioural factor on wireless village services usage. A number of studies such as Ramli et al. (2013) and Venkatesh and Morris (2000) has clarified that ICT usage among the rural community are highly related to the benefits and advantages offered by the ICT tool. Within the scope of the present study, there are several benefits offered that gear the rural community to use the wireless village services. First, the offers them with connection and networking (Shaffril et al., 2010). Understandably, the services connecting them to a broader part of the world which makes possible for them to communicate with anyone and provide a better access to expansive information. Now, they are free to share their ideas and be part of the nation. Second, wireless village services provides economic impacts to them (Sahharon, 2014). It offers opportunities to improve their living standards by offering online job opportunities, attracting more entrepreneurs and potential stakeholders. Thirdly, the wireless village services is an affordable internet service (Sahharon, 2014). The wireless village service is an initiative by the government which is free, hence, everyone in the rural areas, regardless their economic background are able to access the internet as there are no more financial barriers for them to embrace the wireless services. Additionally, the wireless village services are used by the rural community as it exposes them to online services (Sahharon, 2014). These online services such as registration, online banking, customer complaints and utility payment have facilitated the needs of the rural community in so many ways.

In the case of subjective norms, the findings of this study is in line with previous findings of Shaffril et al. (2010), Gilligan (2005), Zulkifli and Sulaiman (2009) and Pee and Kankanhalli (2010). Doubtless, within the scope of this study, there are several sources that are found to provide influence for the rural community to embrace technology in their daily routine. First is the village leaders of also known as Village Development and Security Committee Members (VDSC). According to Hassan et al. (2011) VDSC have the influential power due to their consistent encouragement, a good exemplary use of internet and added by a large amount of influence they have over the rural community. Furthermore, within the scope of

this study, family members and colleagues can be seen as potential influence provider for technology usage among the rural community. Hassan et al. (2011) concluded rural community are always consider their family members and colleagues as influential, closed and trusted and such relationship are resulted from the frequent and daily interaction. Science Daily (2014) further demonstrated the power of coleagues and family members has on the rural community where they concluded that both of the sources do influence others to use technology up to 40 percent of the time.   In conclusion, it can be said that VDSC, family members and colleagues are the potential social sources for technology usage among the rural community in Malaysia.

Based on the findings, it simply concluded that all the variables included in ETAM have demonstrated their predictive power of attitude on technology usage specifically on rural community usage of technology. ETAM should be relied more by the local scholars in examining the technology usage among the rural community. There are still a number of government initiatives on community technology usage that need to be assessed and measured its success. The findings have constructed a basis for more future studies to be conducted especially one that looking onto the roles of attitude in providing influence for the rural community to embrace technology usage in their daily routine. As the rural areas are associated with the problems of unemployment, low living standards and the migration of youth to the urban areas, it is an ample time for the interested scholars to look onto the potential economic impacts of the wireless village services to the rural community.

CONCLUSION

The wireless village project is one of the government initiatives to further narrow down the digital gap that occurs between those in rural and urban areas. It is vital to ensure that this project is persist and one of the ways to do it is by placing focus on the behavioural determinants of the users – which behavioural factors lead towards wireless village services usage among the rural community. The present study provided the answers for this query and based on the findings, it can be concluded that   all of the ETAM variables which inclusive of one additional behavioural factor namely attitude were proven to have significant impacts on ICT usage. It is a hope that by having such findings it can guide the concern parties in constructing the best strategies in developing the best plan for ICT usage among the community and expectantly behavioural factors will be one of their consideration. This study has several limitations, firstly, it has been conducted at four areas and with 400 respondents and the results might be enriched if bigger number of respondents and other areas are included. Secondly, the study use only ETAM as the theoretical basis though there are several others ICT model that can be used.

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