Extended Model of Acceptance and Support to Use Mobile Training Based on the UTAUT3 Model – Empirical Analysis in the UAE

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Abstract
Background: Mobile training in organisational become the default method for research and development recently. There is still a need to explore what make it success, therefore the proposed conceptual framework includes Performance Expectancy (PE), Effort Expectancy (EE), and Social Influence (SI), Individual Beliefs (attitude) (IB), Mobile Training Infrastructure (MTI), and Training Unit Professionalism. (TUP), Management Support (MS), Facilities Condition (FC), Technology Habits (TH), Legacy System Habits (LSH), Habits (HA), Intention to Use Mobile Training (IUMT), and support to change to mobile training (SCMT).
Objectives: the study aim to examine the impact of wide range of antecedents on the support to change to mobile training and intention to use mobile training in the General Department of Sharjah Police in the Emirate of Sharjah

Methods: The study's target population is all the staff members of the General Department of Sharjah Police in the Emirate of Sharjah, which has a total of 7,715 employees and the sample size 367. The final dataset includes 373 respondents that collected from 19 different department by using quota sampling technique.
Results: Results of intention to use mobile training (IUMT), illustrate a satisfactory predictive power; the three variables; IB, FC, and HA can explain 44.6% of the variance. The precedence of the impacts based on the path coefficient is individual belief (0.464), facilitating conditions (0.260), then habit (0.252). Results of support to change to mobile training (SCMT), illustrate a moderate predictive power; the four variables; IUMT, IB, FC, and HA can explain 63.6% of the variance. The precedence of the impacts based on the path coefficient is intention to use mobile training (711), then individual belief (0.099). The two variable facilitating conditions and habit have no significant direct effect. The three main predictors have impacts of the support to change to mobile training (SCMT) either directly or indirectly.
Conclusion: Based on the total effect, the precedence of the three main variables is individual belief (0.429), facilitating conditions (0.227), then habit (0.212). The total hypotheses of this particular study are 18 different hypothesis that allocated into six categorical sets of hypotheses. Two hypotheses are rejected, but sixteen hypotheses are accepted.
Keywords: Performance Expectancy, Effort Expectancy, Social Influence, Individual Belief, Mobile Training Infrastructure, Training Unit Professionalism, Management Support, Facilities Condition, Technology Habit, Legacy System Habit, Habit, Intention to Use, Support to Change, Mobile Training, UTAUT3

I. Introduction

The mobile learning is acritical component of higher education, and thus its acceptance and adoption receives growing interest, however, recent studies have indicated that although many universities have extended their online learning platforms to mobile services, students' interest and usage of m-learning is not as high as expected (Alexander et al., 2019). Thus, investigating the factors affecting learning acceptance of m-learning and their intentions to use it in a comprehensive and integrated manner is critical, therefore, this study examined the behavioural intentions of university students to use m-learning (Esfahani et al., 2020). To achieve the research objectives, four external variables (mobile self-efficacy, perceived enjoyment, satisfaction, and trust) were used as external variables for the proposed UTAUT model (Chao, 2019). This study employed and empirically tested the proposed UTAUT model in the context of m-learning by recruiting university students in central Taiwan and determining the effects of the four aforementioned external variables on students 'effort expectancy, performance expectancy, and satisfaction toward m-learning (Chao, 2019). This study determined how students and their behavioral intention toward m-learning can be influenced by their attitude, perceived risk was

considered to have had a moderating effect on the in terrelation ships between effort expectancy, performance expectancy, and behavioural intention (Cacciamani et al., 2018).

The mobile learning system developers should improve the user friendliness of the user interface through touch screen, light pen data entry, handwriting recognition and even voice recognition mechanism (Wang et al., 2009). This will make old people perceive-learning systems as easier-to-use and thus more likely to adopt them in the future (Reid, 2019). Besides, policy makers and educators promoting the usage of m-learning can program and deliver some education and training courses in various mobile computing technologies to build old people's (Montrieux et al., 2015). Even if these courses are not directly related to m-learning, can still help older people develop positive ease-of-use beliefs, which can in turn influence their behavioural intention to use m-learning (Al-Emran et al., 2020). Mobile learning in school learning needs to enable infrastructure. Infrastructure that supports human activities is divided in two cooperating infrastructures: a universal service infrastructure which enables the functioning of things in general and work-oriented infrastructures which support more specific practices (Ott, 2017). Work oriented infrastructure is dedicated to the performance of specific, complex tasks, drawing on the concept of information infrastructure and the notion of universal service infrastructure and work oriented infrastructures describe the analytic approach to infrastructure for learning (Greenhalgh et al., 2019).

Infrastructure for mobile learning is not static but emerges through practice, it is potentially endless, and what is included depends on what is under study, for example, an analysis of infrastructure for learning might not include the same resources when the same group of students studies different subjects (Ott, 2017). For analytical purposes, Infrastructure for mobile learning is layered and is connected to and sometimes difficult to separate from general infrastructure (Nun et al., 2019). Mobile learning appears to be ideally suited to teachers as it provides a process of learning for professionals who differ from others in the contexts and ways in which they work and learn (Zou et al, 2020).

However, the cost of investing in new technology is expensive and time consuming (Jonson et al., 2020). When educators or students resist new technology, the opportunity cost of non-use, wasted effort and resources, and the failure to realise the full benefits of the new technology can drive that cost even higher (Blue, 2017). Most learning environments now incorporate some form of technology to assist instruction and learning, however this technology must capture the interest of students and motivate them to be more engaged within the learning context (Gupta & Belford, 2019). Mobile technology is thought to have the ability to build interesting learning environments that engages learners (Harley et al., 2019). Students who are more motivated are more likely to succeed in their learning, compared to students with low levels of motivation who are more likely to disengage (Fredricks et al., 2019). The motivating learners is, therefore, an important issue for educators the first principle of effective teaching is ensuring that you capture students' interest, which includes making the learning of unit material a 'pleasure' for students (Kunter et al., 2008). This concept was further elaborated how educators can capture student's attention by actively engaging and developing them and by using outcome focused learning environments (Desjardins & Bullock, 2019).

II. Literature Review

A. Conceptual Framework

The particular study proposed a model of the impact of individual belief (attitude), (performance expectancy, efforts expectancy, and social influence), as well as facilitating conditions, (mobile training infrastructure, training unit professionalism, and managerial support) moreover, habits, (technology habits, and legacy system habits) constructs, towards explaining support to change to mobile training. While intention to use mobile training used as mediation to meet the objective of the study. Figure 1.1 shows the research framework for this particular study.

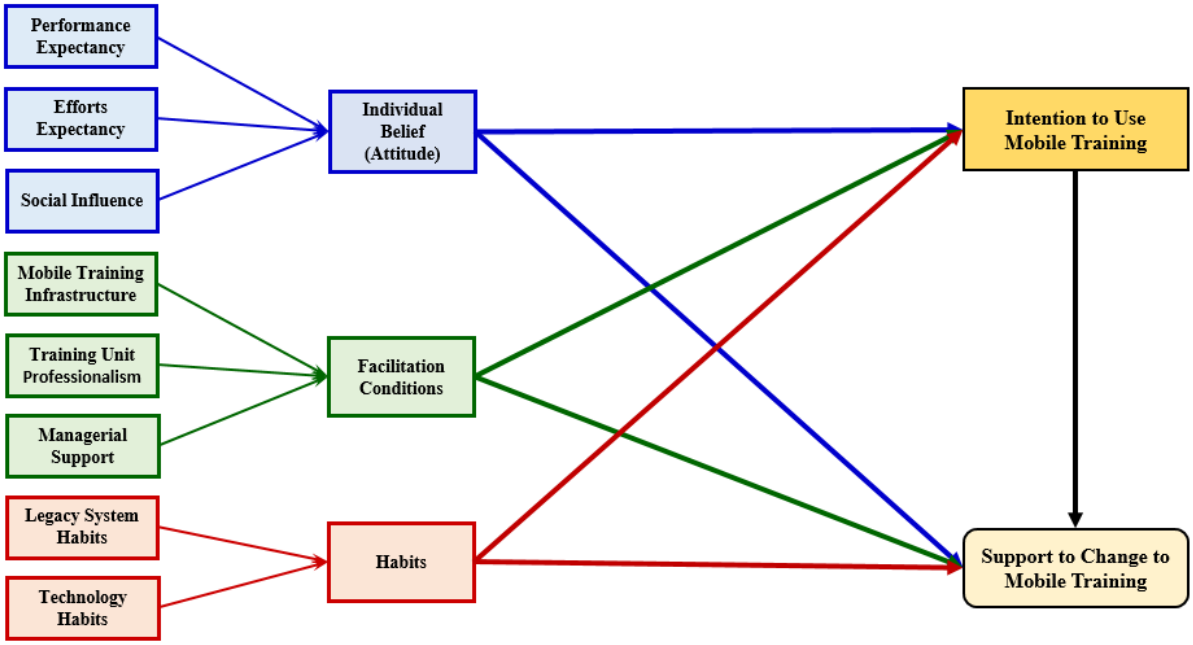

Figure 1: Research Framework

B. Relationship between performance expectancy, efforts expectancy, social influence and individual belief (attitude),

The performance expectancy, Performance expectancy has the most substantial influence on attitude followed by effort expectancy then by facilitating conditions. Therefore, the perceived benefit of the use of the technologies to learning is the most important determinant of attitude towards the mobile learning technologies (Kasim, 2015). In addition (Attuquayefio& Addo (2014) pointed out that the performance expectancy and effort expectancy in UTAUT are similar to perceived usefulness and perceived ease of use in TAM, social influences is similar to the factor ‘‘subjective norm’’ in TAM2, an extension of TAM and facilitating conditions is having the same meaning of compatibility construct from diffusion of innovation theory (DOI). Based on this discussion the following argument is assumed.

- There is a positive relationship between performance expectancy and individual belief (attitude) toward acceptance of mobile training system.

In the context of effort expectancy in the use of mobile learning in community colleges, it seems likely that effort expectancy will affect behavior most strongly during the initial and early stages of mobile use of academic or library content and the effort expectancy will decrease over time as the user gains greater experience (Badwelan et al., 2016). Furthermore, the moderating effect of gender on effort expectancy will be strongest in women than in men, in a study on the adoption rates of mobile services, found effort had a direct and positive effect on individuals’ intention to use mobile services and devices (Wong et al., 2020). Based on this discussion the following argument is assumed.

- There is a positive correlation between effort expectancy and individual belief (attitude) toward acceptance of mobile training system

Social influence is the extent to which users perceive that other important to them believe that the users should use a new information system UTAUT uses three constructs from existing models to capture the concept of social influence (Wu & Chen, 2017). Research suggests that social influence in a mandatory context is an important determinant in user acceptance of information systems/technology (Madigan et al., 2017). It also suggests that this may be due to mandatory compliance in behavior acceptance, which causes social influence to affect intention (Wu & Chen, 2017). Based on this discussion the following argument is assumed.

- There is a positive correlation between social influence and individual belief (attitude) toward acceptance of mobile training system.

C. Relationship between mobile training infrastructure, training unit professionalism, managerial support, and facilitating conditions

This conceptualisation of social infrastructure for mobile learning, however, has been emphasising technology too much as a necessity for social infrastructure, instead, social infrastructure can be considered to be a precondition of technological infrastructure as the social and technology infrastructure co-evolve (Ott, 2017). With less focus on technology and more focus on the situated nature of the social infrastructure, developing the social infrastructure framework as tool for the design and the evaluation of the integration of technology-based tools into classroom practice (Thirumalai et al., 2019). Based on this discussion the following argument is assumed.

- There is a positive correlation between the mobile training infrastructure and the state of the facilitating conditions towards acceptance of the mobile training system.

The mobile learning increase in higher education to meet academic standards, and this calls for attention to be directed to the provision of effective professional development on the part of teachers, researchers, educational institutions (Sulaimani et al., 2017). Professional training development in mobile refers to an educational movement that advocates defining educational goals in terms of precise measurable description of the knowledge, skills and behaviours teachers should possess at the end of a course of study (Grimus, 2020). Based on this discussion the following argument is assumed.

- There is a positive correlation between the implementation of training unit professionalism and facilitating conditions towards acceptance of the mobile training system.

The success of M-learning managerial support system might may depend on users‟ willing to utilize new technology which different from what they have used before (Al-Emran et al., 2016). Therefore, investigating factors influencing students‟ acceptance of M-learning is an essential step before the implementation stage in order to ensure that time and money invested in M-learning is used efficiently (i.e., to promote successful adoption and use) (Chavoshi& Hamidi, 2019). Based on this discussion the following argument is assumed.

- There is positive association between implementation of managerial support and facilitating conditions towards acceptance of the mobile training system.

D. Relationship between technology habits, and legacy system habits, and habits

Since legacy systems habits, due to their historical presence in the organization, become deeply rooted in an institution’s thinking about how work should be organized (Weber & Glynn, 2006). The recognize the phasing out and replacement of legacy systems as a multidimensional, continual and opaque problem area (where "opaque" is employed to signify organizational complexity, which transcends the domain of information technology (Alexandrova et al., 2015). While the number of scholarly studies and reports on legacy systems habits in industry and government has dwindled in the last decade, this by no means suggests that legacy systems are no longer a salient issue today (Alexandrova et al., 2015). Based on this discussion the following argument is assumed.

- There is negative association between implementation of legacy system habits and Habits towards acceptance of the mobile training system.

One of the cyclical challenges in studying technology habits is the question of how to define them, as well as how to describe the set of qualifying behaviours (Craig, 2019). In the years since the first study of telegraph habits, researchers have directed attention to habits across a range of technological innovations (Fernandez & Matt, 2020). As demonstrated in the above sections, tech

habit research is challenged by the inherently dynamic nature of technology itself, as well as what tech habits are perceived to be, societal narratives defining new-er habits as technology habits correspond to the "technology-as-novelty" perspective (Bayer & LaRose, 2018). Based on this discussion the following argument is assumed.

- There is positive association between implementation of technology habits and Habits towards acceptance of the mobile training system.

E. Relationship between Individual Belief (Attitude) to support to change towards acceptance and Intention to Use Mobile Training

Individual Belief (Attitude) developments have also led to the use of mobile technologies for educational purposes, the successful integration of mobile learning (m-learning) (Al-Emran et al., 2016). Previous studies have confirmed that learning at anywhere and anytime are only possible with mobile devices. Individual Belief (Attitude) is support of mobile learning are also in support of modern mobile technologies (Viberg&Grönlund, 2017). Based on this discussion the following arguments are assumed.

- There is positive association between implementation of individual belief (attitude) and support to change towards acceptance of the mobile training system.
- There is positive association between implementation of individual belief (attitude) and intention to use towards acceptance of the mobile training system.

F. Relationship between facilitating conditions to support to change towards acceptance and Intention to Use Mobile Training

In this study, facilitating conditions construct did not have a significant direct effect on intention to use mobile learning (Hoi, 2020). The positive but insignificant impact of facilitating conditions on behavioral intention was not surprising as literature shows inconsistent findings in regards to the impact of facilitating conditions on the adoption of technology as reported in the meta-analysis (Alam et al., 2020). The construct of facilitating conditions was originally suggested by Venkatesh et al. (2003) to be a primary predictor of actual usage and not behavioral intention. Based on this discussion the following arguments are assumed.

- There is positive association between implementation of facilitation conditions and support to change towards acceptance of the mobile training system.
- There is positive association between implementation of facilitation conditions and intention to use towards acceptance of the mobile training system.

G. Relationship between habits to support to change towards acceptance and Intention to Use Mobile Training

In terms of activities done using smartphones, students mostly use instant messengers though students are more active on social networking sites and almost of the student sample use it several times for streaming and mobile learning (Lau et al., 2020). However, this study focuses on the Unified Theory of Acceptance and Use of Technology (UTAUT) and Theory of Habitual Behavior (Almetere et al., 2020). The unified theory of acceptance and use of technology (UTAUT) was formulated with four determinations of intention including performance expectancy, effort expectancy, social influence and facilitating conditions with four moderators (gender, age, experience and voluntariness of use) as a key relationship (Jayaseelan et al., 2020). Based on this discussion the following arguments are assumed.

- There is positive association between habits and support to change towards acceptance of the mobile training system.
- There is positive association between habits and intention towards acceptance of the mobile training system.

H. Relationship between intention to use mobile training and Support to Change to Mobile Training

Intention is simply defined as how hard persons are willing to try and how much determinations they are. planning to use towards performing a behaviour. Behavioral intention (BI) refers to "a person's subjective. probability that he will perform some behavior" (Fishbein and Ajzen, 1975). When learners become more confident and capable of learning with mobile learning and its derivatives such as blended learning environments, they will likely expect more benefits from the use of these environments, foster positive learning climate, and, overall, be more satisfied with the learning (Hunsaker, 2020). These challenges mean that adaptation to mobile learning is not an easy work, and users may incline to not accepting mobile learning, thus, the success of mobile learning may depend on cost-effectiveness, wireless infrastructure reliability, and comfort level learners with the mobile learning (Edwards, 2017). A number of studies investigated the intention of using mobile learning by adopting Technology Acceptance Model as a foundation for research design (Chau & Hu, 2002). A major deficiency of TAM is being lacking outer variables that have the effects on intention of users for using technology (Elshafey et al., 2020). The results of the study indicated that performance expectancy, effort expectancy, social influence, perceived playfulness, and self-management of learning were important moderators of behavioral intention to use mobile learning (Al-Emran et al., 2020). Moreover, researchers investigated the effect of gender and age differences on moderators of mobile learning acceptance in the study, according to the researchers, there were three main results about effects of gender and age differences on mobile learning acceptance of pre-service teachers (Alasmari& Zhang, 2019). First, no gender or age differences on behavioral intention although effects of performance expectancy and perceived playfulness on behavioral intention were significant (Gupta & Arora, 2019). Second, the effect of social influence on usage intention was moderated by gender and age (Akar et al., 2019).This research extents the TAM by adding three new variables digital literacy, information and communications technology (ICT) anxiety, and ICT teaching self-efficacy to determine a more complete picture of lecturers' behavioral intention to use mobile learning (Chang et al., 2017). According to the TAM, the intention to use new technology is determined by two factors, the perceived usefulness and perceived ease of use (Imawati et al., 2018).

- There is positive association between implementation of intention to use mobile training and support to change towards acceptance of the mobile training system.

I. Relationship of intention to use mobile training as mediatingbetween individual belief (attitude), facilitation conditions, and habits

UTAUT and its constructs is a resultant model from a cross examination of technology acceptance models whose intention was to improve the predictive powers of behavior of intentions to use a technology (Francis, 2019). Perceived usefulness has direct influences on attitude and behavior intention, while perceived ease of use has direct effects on attitude. perceived usefulness and perceived ease of use mainly decide student's acceptance of mobile learning (Elkaseh et al., 2016). Based on this discussion the following arguments are assumed.

- Intention to use mobile training mediates the relationship between individual belief (attitude) and support to change towards acceptance of the mobile training system.
- Intention to use mobile training mediates the relationship between facilitation conditions and support to change towards acceptance of the mobile training system.
- Intention to use mobile training mediates the relationship habits and support to change towards acceptance of the mobile training system.

III. Methodology

Research design is a structure and strategy to investigate research question. The nature of this study is quantitative approach. Sekaran and Bougie (2016) have identified business research have three types like 1) exploratory, 2) descriptive and 3) causal. This research is exploratory in nature because it explores new areas of the public sector in the UAE. Research hypotheses are constructed based on previous studies regard to relationship between different antecedents to predict the acceptance of mobile training use among UAE public work force. The measurement used on each variable is cited through previous studies where the items will be applied in order to answer the research questions. The study design is one-shot or cross-sectional as the data will be gathered just once, perhaps over a period of days or weeks or months, in order to answer research questions. Questionnaire will be distributed to all respondent and collect after complete answer the measurement. The proposed model have three independent variables, one variable mediation related, and one dependent variable. The study has 15 direct relations, 3 indirect effect relation. The validity of the survey instrument is observed in its content and one of the methods of checking validity is by using the face validity method, in which a test is subjectively viewed as covering the concept it purports to measure. It refers to the transparency and relevance of a test for the purpose of collecting data from the intended respondents. (Flick, 2018).

The questions that asking for variables perceptions, are designed to be answers in ordinal scale of five point, in which 1 is the high level of disagreement (extremely disagree) and 5 is the high level of agreement (extremely agree). This scale is known as Likert-5 scale which is mostly used by scholars is social based studies. A Five-point Likert-type scale was used to increase response rate and response quality along with reducing respondents' "frustration level" (Babakus and Mangold 1992). A five-point Likert scale ' was employed as it has been most recommended by the researchers that it would reduce the frustration level of patient respondents and increase response rate and response quality. The questionnaire development for support to change to mobile training (SCMT) variable were taken from the study performed by (becker, 2010), intention to use mobile training (IUMT), individual belief (Attitude) (IB), performance expectancy (PE), and efforts expectancy (EE) performed by (Amoako-gyampah& Salam, 2004; Alsharif, 2013). According to the Social Influence (SI) performed by (Alsharif, 2013; Kim &Kankanhalli, 2009). But facilitating conditions (FC) self-developed by (Alsharif, 2013). Mobile training infrastructure (MTI), and training unit professionalism (TUP) performed by (Alam et al., 2016). However management support (MS) performed by (Rai, 1994). Habits (H), legacy system habits (LSH) performed by (Venkatesh et al., 2012) but technology habits (TH) performed by (Schrum et al. 2008). The analysis conducted a pilot study as a pre-test reliability and validity technique. The pilot team comprises of 37 participants (Employees from Public Sector in Bahrin) employed for feasibility of the survey. In this study, data will check the reliability and normality analysis using Statistical Package for the Social Science (SPSS) version 25. Further SEM-PLS is also being used for structural equation modelling.Using PLS-SEM is common in the management studies in the recent decades, such as the studies of Salem and Salem (2021) and Alkadash and Alamarin (2021)

IV. Findings

A. Validity and Reliability of Constructs

The paper follow the steps and rule of thumb that proposed by (Hair Jr, Hult, Ringle, & Sarstedt, 2016; Sekaran & Bougie, 2016). As revealed and shown in Table 1the proposed design model

with all the items have proper loading above 0.708 except three items, and those items are (FC1, IB4, and MS4). The three items have weak loading and have been deleted before proceeding to the tests of relationships. In addition Figure 2 shows the structural model of this particular study. The results of all the study variables, which show an acceptable level of reliability. For composite reliability, all the values are within the range between 0.882 and 0.954, which shows an adequate internal consistency. For Cronbach's Alpha reliability, the valued are ranged from 0.818 to 0.936, which shows adequate level of internal consistency. As all results are in the range between 0.7 and 0.95, the dataset is internally reliable and consistence. Therefore, the final dataset of 373 respondents have the proper level of internal consistency.

Table 1: Constructs Reliability and Validity

construct	Item	Loading	AVE	Cronbach's alpha
Support to Change to Mobile Training (SCMT)	SCMT 01	0.838	0.913	0.872
	SCMT02	0.820		
	SCMT 03	0.812		
	SCMT 04	0.927		
Intention to use Mobile Training (IUMT)	IUMT 01	0.940	0.954	0.936
	IUMT 02	0.926		
	IUMT 03	0.932		
	IUMT 04	0.865		
Individual Belief (Attitude) (IB)	IB 01	0.928	0.918	0.865
	IB 02	0.900		
	IB 03	0.834		
	IB 04	x		
Performance Expectancy (PE)	PE 01	0.868	0.924	0.890
	PE 02	0.886		
	PE 03	0.885		
	PE 04	0.831		
Efforts Expectancy (EE)	EE01	0.793	0.889	0.836
	EE02	0.791		
	EE03	0.861		
	EE04	0.822		
Social Influence (SI)	SI 01	0.729	0.879	0.818
	SI 02	0.838		
	SI 03	0.842		
	SI 04	0.801		
Facilitating Conditions (FC)	FC 01	x	0.950	0.921
	FC02	0.918		
	FC03	0.963		
	FC04	0.908		
Mobile Training Infrastructure (MTI)	MTI 01	0.845	0.882	0.822
	MTI 02	0.793		
	MTI 03	0.800		
	MTI 04	0.791		
Training Unit Professionalism (TUP)	TUP 01	0.799	0.891	0.837
	TUP 02	0.779		
	TUP 03	0.878		
	TUP 04	0.821		
Management Support (MS)	MS 01	0.813	0.882	0.799

construct	Item	Loading	AVE	Cronbach's alpha
	MS 02	0.887		
	MS 03	0.834		
	MS 04	x		
Habits (H)	HA 01	0.827	0.897	0.845
	HA 02	0.915		
	HA 03	0.830		
	HA 04	0.731		
Legacy System Habits (LSH)	LSH 01	0.805	0.928	0.897
	LSH 02	0.817		
	LSH 03	0.960		
	LSH 04	0.907		
Technology Habits (TH)	TH 01	0.788	0.902	0.856
	TH 02	0.863		
	TH 03	0.840		
	TH 04	0.845		

The Fornell&Larcker criterion matrix. The matrix is a refined matrix of the latent variable's correlations. The test is successful if the value in the diagonal is higher than any other value within the crossed column and raw. For instance, FC has the value of 0.930, which is higher than all the other scores within the shared column and raw. The rest of the study's variables have a good adequate level of the discriminant validity. In order to assure the discriminant validity, cross loading test is also used, in which the items must have a proper and higher loading in its associated variables than any other loading in any foreign variable. Table 2 shows the results of cross loading of all items in the rows and all variables in the columns. Based on the Fornell&Larcker criterion matrix and the cross loading table, the dataset of this particular study is free of any discriminant validity problems and can proceed to the next statistical examinations.

Table 2: Discriminant validity – Fornell-LarckerCriterion

	EE	FC	HA	IB	IUMT	LSH	MS	MTI	PE	SCMT	SI	TH	TUP
EE	0.817												
FC	0.292	0.930											
HA	0.220	0.160	0.828										
IB	0.321	0.111	0.239	0.888									
IUMT	0.479	0.352	0.405	0.553	0.916								
LSH	0.049	0.071	-0.311	0.101	0.007	0.875							
MS	0.127	0.388	0.122	0.096	0.211	0.070	0.845						
MTI	0.369	0.539	0.219	0.225	0.481	0.045	0.243	0.808					
PE	0.288	0.187	0.210	0.258	0.416	0.055	0.027	0.222	0.867				
SCMT	0.414	0.309	0.352	0.505	0.795	0.043	0.177	0.431	0.375	0.851			
SI	0.163	0.093	0.237	0.300	0.366	-0.050	0.015	0.180	0.198	0.299	0.804		
TH	0.032	0.147	0.093	0.132	0.154	0.066	0.097	0.150	0.036	0.173	0.158	0.835	

TUP	0.194	0.503	0.116	0.066	0.204	0.040	0.219	0.225	0.114	0.219	0.067	0.132	0.820

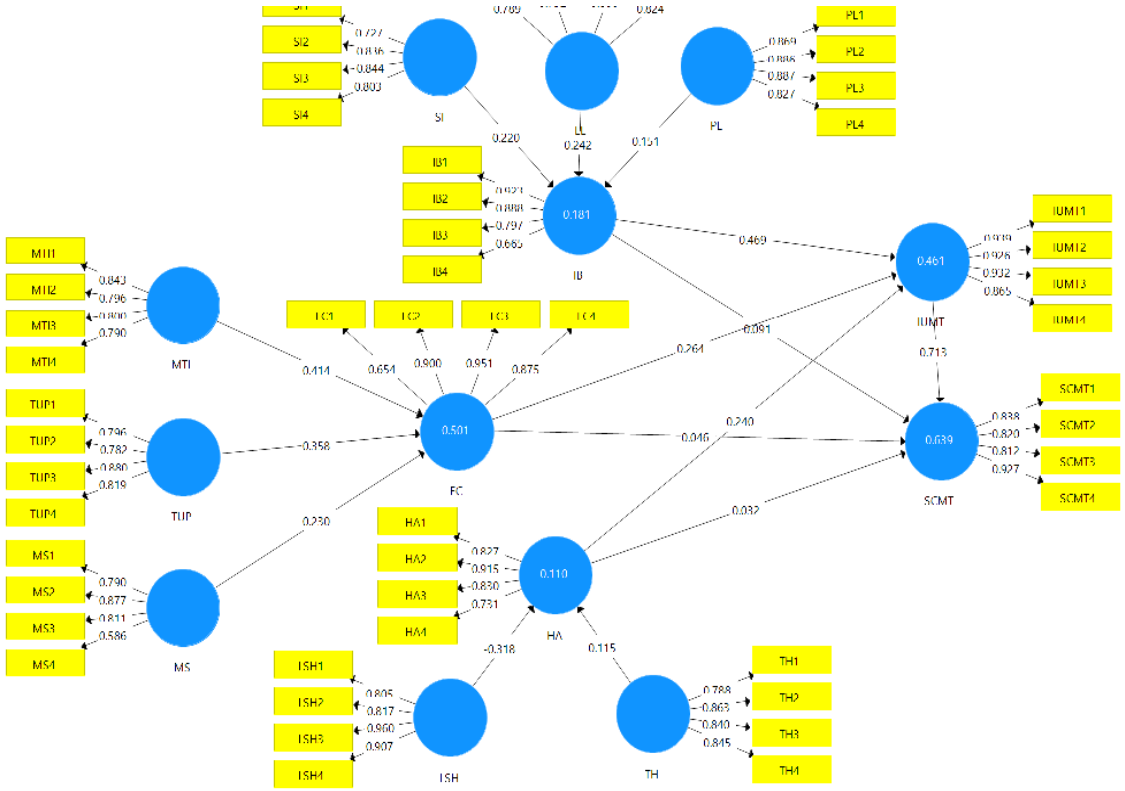

Figure 2: Structural Model Outer Loading Estimates

B. Relationships Examinations and Discussions

To assess the power of the model construct in predicting the outcome variables, predictive power R^2 and predictive relevance were used (Hair Jr et al., 2016). The predictive power and predictive relevance of the endogenous latent variables; individuals' attitude (IB), facilitating conditions (FC), habits (HA), Intention to Use Mobile Training (IUMT), and support to change to mobile training (SCMT). Results of individual belief (IB), illustrate a low predictive power and a small predictive relevance. As seen in the table 3 the related R square value is 0.178 (explanation power of 17.8%) and the related Q square is 0.140 (explanation relevance of 14.0%). The three variables; PE, EE, and IS can explain 17.8% of the individual belief (IB) variance. Results of facilitating conditions (FC), illustrate a satisfactory predictive power and a large predictive relevance. The related R square value is 0.480 (explanation power of 48.0%) and the related Q square is 0.414 (explanation relevance of 41.4%). The three variables; MTI, UTP, and MS can explain 48.0% of the facilitating conditions (FC) variance.

Results of habits (HA), illustrate a low predictive power and a small predictive relevance. The related R square value is 0.105 (explanation power of 10.5%) and the related Q square is 0.073 (explanation relevance of 7.3%). The two variables; LSH and TH can explain 10.5% of the habits (HA) variance. Results of intention to use mobile training (IUMT), illustrate a satisfactory predictive power and a medium predictive relevance. The related R square value is 0.446 (explanation power of 44.6%) and the related Q square is 0.372 (explanation relevance of 37.2%). The three variables; IB, FC, and HA can explain 44.6% of the intention to use mobile training (IUMT) variance. Results of support to change to mobile training (SCMT), illustrate a moderate predictive power and a large predictive relevance. The related R square value is 0.636 (explanation power of 63.6%) and the related Q square is 0.452 (explanation relevance of

45.2%). The four variables; IUMT, IB, FC, and HA can explain 63.6% of the support to change to mobile training (SCMT) variance. Overall, the model is successful because the main outcome variable support to change to mobile training (SCMT) has the explanation power of 63.6%. Besides, the moderating variable intention to use mobile training (IUMT) has the explanation power of 44.6%.

Table 3: Predictive Power and Predictive Relevance of Proposed Model

	Predictive Power		Predictive Relevance	
	R Square	Status	Q Square	Status
Individuals' Beleif (IB)	0.178	low	0.140	small
Facilitating conditions (FC)	0.480	satisfactory	0.414	large
Habits (HA)	0.105	low	0.073	small
Intention to Use Mobile Training (IUMT)	0.446	satisfactory	0.372	medium
Support to Change to Mobile Training (SCMT)	0.636	moderate	0.452	large

Accepting the results at 5% level of significance is used in different management studies such as Alkadash, Almaamari, Mohsen Al-Absy, and Raju (2020) in leadership and Salem and Salem (2018) in marketing. Table 4 shows the path coefficient assessment along with the values of T statistics and P values. The table revealed the results of the 15 hypotheses with direct effects between the variables. The results show that 13 hypotheses are significant but two are non-significant. The rejected hypotheses are for the hypothesis 13 (FC -> SCMT) with a path coefficient of 0.043 and P value of 0.202, and hypothesis 14 (HA -> SCMT) with a path coefficient of 0.033 and P value of 0.277. Both are rejected because the P values are above the threshold of 0.05 or 5% significance level. The other 13 hypotheses is accepted because the P values are less than 0.05. The discussion for the results of every hypothesis are illustrated in the next sections. Figure 3 show the model with the t statistic values. For the predictors of the individual's belief (IB); the precedence of the impacts based on the path coefficient is efforts expectancy (0.243), social influence (0.233), and then performance expectancy (0.143). For the predictors of the facilitating conditions (FC); the precedence of the impacts based on the path coefficient is mobile training infrastructure (0.406), training unit professionalism (0.366), and then management support (0.209). For the predictors of the habit (HA); the precedence of the impacts based on the path coefficient is legacy system habit (0.318), then technology habit (0.115). For the predictors of the intention to use mobile training (IUMT); the precedence of the impacts based on the path coefficient is individual belief (0.464), facilitating conditions (0.260), then habit (0.252). For the predictors of the support to change to mobile training (SCMT); the precedence of the impacts based on the path coefficient is intention to use mobile training (711), then individual belief (0.099). The two variable facilitating conditions and habit have no significant direct effect.

Table 4: Path Coefficient Assessment of the Study Variables

	Path Coefficient	Standard Deviation	T Statistics	P Value (one tailed)	Status
EE → IB	0.243	0.048	5.023	0.000	Significant
PE → IB	0.143	0.054	2.641	0.009	Significant
SI → IB	0.233	0.045	5.111	0.000	Significant
MTI → FC	0.406	0.041	9.891	0.000	Significant

TUP → FC	0.366	0.039	9.333	0.000	Significant
MS → FC	0.209	0.040	5.251	0.000	Significant
LSH → HA	-0.318	0.046	6.880	0.000	Significant
TH → HA	0.115	0.054	2.108	0.036	Significant
IB → IUMT	0.464	0.035	13.280	0.000	Significant
FC → IUMT	0.260	0.040	6.552	0.000	Significant
HA → IUMT	0.252	0.036	7.055	0.000	Significant
IB → SCMT	0.099	0.044	2.256	0.024	Significant
FC → SCMT	0.043	0.033	1.277	0.202	Non-Significant
HA → SCMT	0.033	0.030	1.088	0.277	Non-Significant
IUMT → SCMT	0.711	0.058	12.282	0.000	Significant

First mediating hypothesis states that intention to use mobile training (IUMT) mediated the relationship from the individual belief (IB) to the support to change to mobile training (SCMT). The results in the table show the direct effect, indirect effect, and total effect. The direct relationship (IB -> SCMT) is significant with P value of 0.024 (less than 0.05) and path coefficient of 0.099; the indirect relationship (IB -> IUMT -> SCMT) is significant with P value of 0.000 (less than 0.05) and path coefficient of 0.330; and the total effect is significant with P value of 0.000 (less than 0.05) and path coefficient of 0.425. The mediating effect of IUMT on the relationship between IB and SCMT is partial because both the direct and indirect effects are significant.

Second mediating hypothesis states that intention to use mobile training (IUMT) mediated the relationship from the facilitating conditions (FC) to the support to change to mobile training (SCMT). The results in the table show the direct effect, indirect effect, and total effect. The direct relationship (FC -> SCMT) is not significant with P value of 0.202 (not less than 0.05); the indirect relationship (FC -> IUMT -> SCMT) is significant with P value of 0.000 (less than 0.05) and path coefficient of 0.184; and the total effect is significant with P value of 0.000 (less than 0.05) and path coefficient of 0.227. The mediating effect of IUMT on the relationship between FC and SCMT is full because only the indirect effect is significant.

Third mediating hypothesis states that intention to use mobile training (IUMT) mediated the relationship from the Habits (HA) to the support to change to mobile training (SCMT). The results in the table show the direct effect, indirect effect, and total effect. The direct relationship (HA -> SCMT) is not significant with P value of 0.277 (not less than 0.05); the indirect relationship (HA -> IUMT -> SCMT) is significant with P value of 0.000 (less than 0.05) and path coefficient of 0.179; and the total effect is significant with P value of 0.000 (less than 0.05) and path coefficient of 0.212. The mediating effect of IUMT on the relationship between HA and SCMT is full because only the indirect effect is significant. The three main predictors have impacts of the support to change to mobile training (SCMT) either directly or indirectly. Based on the total effect, the precedence of the three main variables is individual belief (0.429), facilitating conditions (0.227), then habit (0.212).The results are illustrated in Table 5.

Table 5: Mediating Assessment of Effective Internal Control

Relationship	**Direct Effect**			**Indirect Effect**			**Total Effect**		**Status (Mediation)**
	Beta	P-Value	Status	Beta	P-Value	Status	Beta	P-Value	
CE -> EIC -> RM	0.055	0.131	Non- Sig	0.025	0.141	Non- Sig	0.081	0.062	No- mediation
RA -> EIC -> RM	0.274	0.000	Sig	0.084	0.001	Sig	0.358	0.000	Partial mediation
CA -> EIC -> RM	0.201	0.000	Sig	0.089	0.004	Sig	0.290	0.000	Partial mediation

IC -> EIC -> RM	0.102	0.013	Sig	0.041	0.061	Non- Sig	0.142	0.001	No- mediation
MO -> EIC -> RM	0.161	0.001	Sig	0.111	0.000	Sig	0.272	0.000	Partial mediation

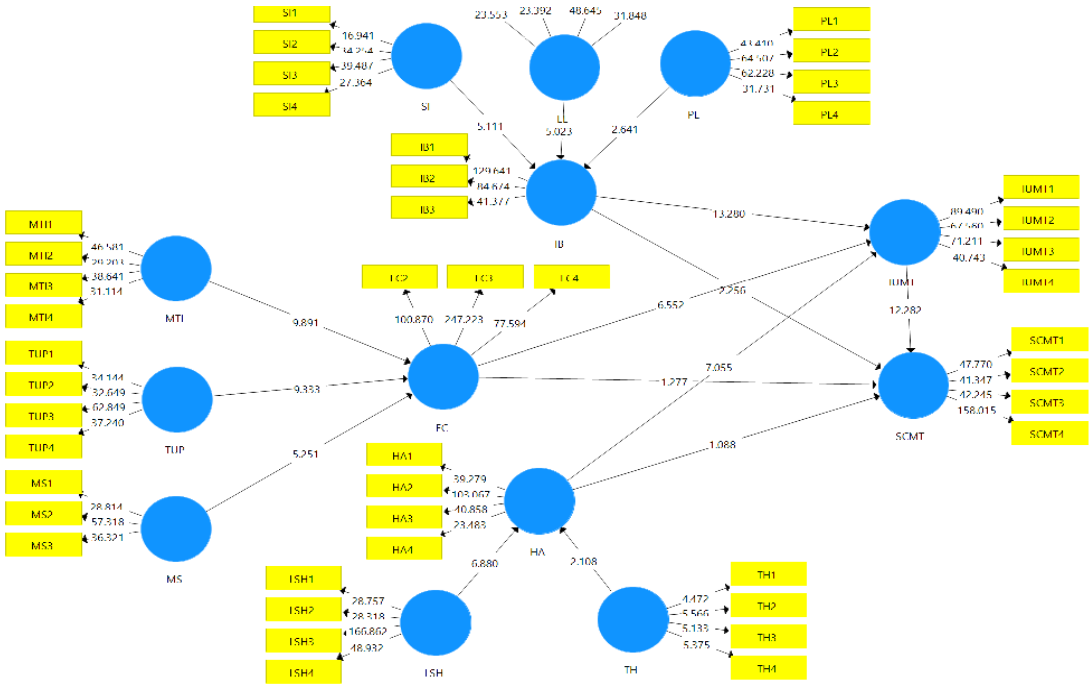

Figure 3: T Statistics Estimates of the Proposed Model

V. Contributions and Recommendations

This research is limited to the is the relationship between individual belief, habits, and facilitating conditions; and support to change to mobile training among employees in the Sharjah police general command of the ministry of interior – UAE. That means, the results are limited and only represents a specific group of the specific area employees. In addition, similar industries in other countries could have different contextual conditions, which may output different results. The public sector is one of the significant sectors in the UAE, but there are many other essential sectors such as SMEs, education, and many other sectors that have a major interest in the acceptance of mobile training. The results are limited and the perceptions are associated with public sector only. Data collection of closed questions can limit the perceptions of the respondents to the pre-defined questions. This study used closed end questions and there are no open-end questions. While this approach is common in deductive approach, but adding open-end questions can provide an insight for further inductive results, which may be useful for extra investigation. The study proposed a developed model with new constructs and relations. While the model was assessed successfully, but further research is needed to assess the model in different environments. One of the constraints is the limited approach of implementation, which reduces the generalization; therefore, replicating the same study in other context such as education or SMEs in the UAE and in other countries is recommended to get a better understanding and generalization. Another constraint is the participants' types and selection, employees in the Sharjah police general command of the ministry of interior – UAE, which reduce the generalization, therefore replicating the same assessment in other industries such as energy or other sector is recommended to get a better understanding and generalization. Recommendations are extended, to test the model and the instrument in other ministries or even to test whether this model can be suitable for other sectors. Simply, the recommendation is for testing the model in different scenarios and conditions to enhance the generalization of the theory. Further studies must focus in exploring, and examining additional factors, other than

individual beliefs, habits, and facilitating conditions. The model can explain 64% of the support to change and 45% of the intentional use of mobile training, which leaves a gap to add more variables and improve the power of the model. The two variable facilitating conditions and habit have no significant direct effect. The rejected hypothesis could have a significant impact in other environments. And the impact of mediating variables can be different and vary from positive to negative or vice versa. More qualitative research studies can be made using interviews to explain this result.

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