Factors affecting the Adoption and Meaningful Use of Social Media: A Structural Equation Modeling Approach

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Abstract. As the number of university students using social media increases, the interest in assessing the adoption of social media applications and the factors encouraging it whether inside or outside classrooms has also risen. Nevertheless, evaluating the educational outcomes of integrating social media in the university teaching has not been researched sufficiently. Therefore, this study aims at exploring these educational outcomes and assessing a research model of antecedents and the cost of social media use. It also determines the factors of implementing social networking media for e-learning in the United Arab Emirates higher education institutions utilizing the Technology Acceptance Model (TAM) which stresses the Perceived Ease of Use and Perceived Usefulness along with the Behavior Intention to use social networking media. The quantitative response of 408 university students embedding social media in their teaching methods was analyzed. To predict an Emirati student's behavioral intention to use social networking media for e-learning, a partial least squares (PLS) analysis points out that Perceived Ease of Use and Perceived Usefulness are important factors. Accordingly, the proposed model in this study illustrates the ways social media educational use positively influences efficient performances in the classroom.

Keywords: *University students, Social media network, Technology Acceptance Model (TAM).*

1. Introduction

An online community that gathers people of similar opinions, activities, experiences and interests through sharing their videos, photos, events and news creates a social network (Al-Emran & Salloum, 2017; S. A. Salloum, Al-Emran, Monem, & Shaalan, 2017; S. A. Salloum, Al-Emran, & Shaalan, 2016, 2017a; S. A. Salloum, AlHamad, Al-Emran, & Shaalan, 2018). Essentially, a user's representation (many times a profile) and his social connections along with many other additional services make up a social network. Moreover, users can enjoy the interaction with each other over the internet like instant messaging and email through these online communities (Al-Emran & Malik, 2016; Al-Maroof & Al-Emran, 2018; Mhamdi, 2016). Facebook, LinkedIn, and Google+ are among the most famous social networking sites (Faizi, El Afia, & Chiheb, 2013; Mhamdi, Al-Emran, & Salloum, 2018; S. A. Salloum, Al-Emran, Abdallah, & Shaalan, 2017; S. A. Salloum, Al-Emran, Monem, & Shaalan, 2018; S. A. Salloum, Al-Emran, & Shaalan, 2017b; S. A. Salloum, Mhamdi, Al-Emran, & Shaalan, 2017).

As a social media networking system, Facebook was initially built for tertiary students (Mohammed Habes, Alghizzawi, Khalaf, Salloum, & Ghani, 2018; S. A. Salloum, Al-Emran, & Shaalan, 2018; S. A. Salloum & Shaalan, 2018a, 2018b). Users can make and upgrade their own profiles with their videos, photos, and information on Facebook (Mhamdi, 2017c). Facebook friends can browse each other's' profiles and exchange messages (Wiid, Cant, & Nell, 2013). Facebook can be a very influential tool for sharing information along with collaborating with students though being away from them (M. Habes, Alghizzawi,

Salloum, & Ahmad, 2018; S. A. Salloum, Al-Emran, Shaalan, & Tarhini, 2019; S. A. S. Salloum & Shaalan, 2018; Wiid et al., 2013). The members on Facebook groups are not necessarily friends of each other and they can swap and upload files, links, articles, information, and videos for free and that too with comfort and speed (Wiid et al., 2013). There has been an exceptionally rapid growth of social media, mainly owing to the technological factors like the availability of the broadband greater than before, the enhancement of software tools and the creation of more powerful computers and mobile devices (Al-Qaysi & Al-Emran, 2017; Mhamdi, 2017a, 2017b).

In fact, this kind of media has become Omni-present and a routine of life for millions of people worldwide. Moreover, it has a significant influence on every aspect of professional and personal lives (Al-Mohammadi, 2014a; Faizi et al., 2013). Similarly, methods of teaching and learning are significantly affected by social media since a considerable number of internet users is comprised of students and teachers (Faizi et al., 2013; Lachheb, 2014; Malik & Al-Emran, 2018). The study mainly aims at analyzing the students' perceptions regarding the use of social media networking systems while they are studying far away from the tertiary learning institutions. This includes the assessment of the comfort level of the students while using social media networking systems, the easy availability of information on these social media networking systems and whether it is considered to be an efficient and trouble-free way to study the course content. Accordingly, this paper embarks on with a background and a summary of the literature review associated with the social media acceptance. Then it moves to illustrate the research model in section 3. The methodology that drives the research is presented and discussed in section 4. The presentation and discussion of findings are tackled in section 5. Eventually, the study is concluded by a summary of the major findings, implications and contribution, major limitations and directions for further research.

2.   Literature review

Surveying the literature is an essential step before carrying out any research study (Al-Emran, 2015; Al-Emran & Shaalan, 2015b; Al-Emran, Zaza, & Shaalan, 2015; Al-Qaysi, 2018; Al Emran & Shaalan, 2014a, 2014b; Zaza & Al-Emran, 2015). The creation and dissemination of information all over the globe has utterly changed in the aftermath of the revolution of the internet with regard to speed, sharing, storage and retrieval of information in any form regardless of the people's locations (Al-Emran, Mezhuyev, & Kamaludin, 2018b; Mhamdi, 2016). Many web technologies developed through the internet, among which the social media networks, are the technology making waves in consideration to information sharing and communication. The emergence of social media prevails upon all aspects of society with both negative and positive influence (Mingle & Adams, 2015). Faced with this changing context, education made no exception. The use of short forms, elypsis, and abbreviations has become shared traits of writing among social media users (E. Derbel & Al-Mohammadi, 2015). This has obviously affected students' use of written language which makes it a serious concern as language is said to be the bearer of the history, values, ethics, and culture of any society (Al-Mohammadi, 2014b; E Derbel, 2014; Emira Derbel, 2017). Generally, learning, education, research, and communication are influenced and transformed through social media (Al-Emran, Mezhuyev, Kamaludin, & AlSinani, 2018a; Mhamdi, 2017d). To connect people globally, the most attractive and advanced tool among many other available online tools for communication is the social networking sites (SNS) (Aghazamani, 2010). The perspectives of both the students and educational institutions regarding the social media use have been studied widely (Akar & Mardikyan, 2014). It is even argued that reading, writing, and exchanging texts and messages are useful for the cognitive skills of learners (Al-Mahrooqi, 2014).

It came out to be that these social media platforms improve the students' performance upon measuring the integration of Facebook and blogs in a student's life (Gachago & Ivala, 2012). It has been revealed upon measuring how the students perceive Twitter as an educational tool that students prefer information sharing concerning courses through social media platforms (Lin, Hoffman, & Borengasser, 2013). To increase students' motivation in learning, Twitter plays an important role as per the analysis of students' Twitter usage (Prestridge, 2014). Such an objective could be fulfilled even with mixed-ability students which is a common aspect in various educational environments (Al-Mohammadi, 2015). On the other hand, social media usage at different universities has been investigated (Palmer, 2013). Universities use social media for various reasons including marketing, student recruitment, learning and teaching, student services, alumni communication and in libraries. To develop, predict and understand the factors that could affect the innovation or adoption of technology by individuals, extensive research has been carried out on information systems. Theory of Reasoned Action (TRA) and Theory of Planned Behavior

(TPB) are samples of the vital and established models used by these studies (Ajzen, 1991; Fishbein, M. & Ajzen, 1975) for intention or utilized models like Technology Acceptance Model (F. D Davis, 1989), TAM 2 (Venkatesh & Davis, 2000) or Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh, Morris, Davis, & Davis, 2003) that are specialized in acceptance of technology.

The TAM developed by (F. D Davis, 1989) is among the highly influential research models for studying the intention to use information technology or its acceptance (Al-Emran, Mezhuyev, & Kamaludin, 2018c; Al-Qaysi, Mohamad-Nordin, & Al-Emran, 2018; Dutot, 2015; Mezhuyev, Al-Emran, Fatehah, & Hong, 2018; Tan, Ooi, Sim, & Phusavat, 2012) as it emerged from the TRA (Fishbein, M. & Ajzen, 1975), a model that focuses on the perception of an individual to describe adoption behavior (Morris & Dillion, 1997). The major goals of this project are to analyze the intentions of the university students in using social networks. It illustrates the less availability of the required material considering its universal approach towards the subject and the student behavior intention to adopt social network. The main framework of this current research is the TAM along with social influence variable. In this way, this study mainly aims to:

1.   Find out about the university students in the UAE considering their intentions of using social networks.

2.   Identify the factors that lead to social networks adoption influencing the intentions of the university students.

3.   Recognize the student intentions of adopting the use of social networks. To this end, a model with utilizing the structural equation modeling (SEM) was developed.

3.   Research model and hypotheses

The current study intends to create a framework focusing on the influence of social media use on E-learning and connection between students at the university level by the use of technology acceptance model (TAM) with regard to the United Arab Emirates higher education institutions. Figure 1 illustrates the research model. Additionally, the factors analyzed in this study are presented in Table 1 with their operational definitions and related studies. Eight hypotheses have been made and assessed in the current study relying on the research model.

Variables	Operational definition	References
Behavioral Intention to use Social Networks	An intention of an individual to perform in a specific way toward someone or something.	(Robbins, 2005)
Perceived Ease of use	When a person believes that the user of technology uses little effort	(F. D Davis, 1989)
Perceived Usefulness	The degree to which people believe that using particular technology improves their job performance.	(F. D Davis, 1989)
Social Influence	The degree to which an individual perceives that important others believe he or she should use the new system.	(Venkatesh et al., 2003)
Use behavior	The use behavior or actual use of social media is the amount of time employed by users.	(Fred D Davis, 1993)

Table 1. Operational definition of variables and resources.

3.1. Social Influence

The social influence as the degree where a person understands how others believe that a new information system should be implemented by him/her is described in (Venkatesh et al., 2003). A person's intentions for adopting new technologies are developed through social influence. The effect of perceived usefulness and behavioral intention to use social network technology (BI) is concluded in the hypotheses of (Acarli & Sağlam, 2015; Akar & Mardikyan, 2014; Chang & Yang, 2013; Dutot, 2015; Elkaseh, Wong, & Fung, 2016; Maleko Munguatosha, Birevu Muyinda, & Thaddeus Lubega, 2011) and many other alike researches like the TAM model (Venkatesh & Davis, 2000). Hence, the following two hypotheses will be tested:

H1. Social influence (SI) will have a positive effect on perceived usefulness (PU).

H4. Social influence (SI) will have a positive effect on behavioral intention to use social network technology (BI).

3.2. Effort Expectancy

(Venkatesh et al., 2003), explained effort expectancy to be "the degree of ease related to the information systems and their usage". The paradigms of effort expectancy will determine the factors of individual objectives in conformity with previous research studies (Hanson et al., 2011; Salim, 2012; S. A. Salloum & Shaalan, 2018b; Suksa-ngiam & Chaiyasoonthorn, 2015). Concerning the recent escalation of social media tools, assessing behavioral intention to use social media technology is incomplete without taking effort expectancy into consideration. The UTAUT explains that the convenience and ease of access that the social media technology dispenses, along with the impact that behavioral intention takes from effort expectancy will determine the extent of individual acceptance. We will, therefore, put the following hypothesis to test:

H2: Effort expectancy (EE) has a positive effect on behavioral intention to use social media.

3.3. Perceived usefulness/perceived ease of use

The perceived usefulness and perceived ease of use help in the adoption of new technology. As aforementioned in the TAM and other related researches, behavioral intention to use is greatly influenced by these factors. The point of view of the user on the ease of understanding greatly aids to determine the potency and the degree of the user's adaption to new technology (F. D Davis, 1989; Venkatesh & Bala, 2008). A previous research manifests the significant influence of perceived ease of use (PEOU) on perceived usefulness (PU) (Acarli & Sağlam, 2015; Akar & Mardikyan, 2014; Al-Rahmi & Zeki, 2017; Carlos Martins Rodrigues Pinho & Soares, 2011; Maleko Munguatosha et al., 2011; Rauniar, Rawski, Yang, & Johnson, 2014). Previously, several studies that have been conducted state that the perceived ease of use (PEOU) has a positive relationship with the behavioral intention to use social media (BI), both directly and indirectly (Al-rahmi, Othman, & Yusuf, 2015a, 2015b; Chang & Yang, 2013; Dhume, Pattanshetti, Kamble, & Prasad, 2012; Dumpit & Fernandez, 2017). According to (Y.-M. Cheng, 2012) users' intention to directly or indirectly agree to and adapt to social media technology will be impacted by the perceived usefulness (PU). A significant positive association between perceived usefulness (PU) and the intention to use the social media technology (BI) is pointed out by a number of studies (Al-rahmi et al., 2015a, 2015b; Chang & Yang, 2013; Dhume et al., 2012; Dumpit & Fernandez, 2017; Dutot, 2015; Kim, 2012; Paris, Lee, & Seery, 2010). The assumption of the following hypotheses as per the available literature is done in this research along with the illustration of a significant positive connection amongst BI, PU, and PEOU.

H2. Perceived ease of use (PEOU) will have a positive effect on perceived usefulness (PU).

H3. Perceived usefulness (PU) will have a positive effect on behavioral intention to use social network technology.

H5. Perceived ease of use (PEOU) will have a positive effect on behavioral intention to use social network technology.

3.4. Behavioral intention to use (BI)

The general perception of behavioral intention is that it's a part of an attitude. An intention of an individual to react in a particular way towards someone or something is termed a behavioral intention (Robbins, 2005). The behavioral intention to a direct and significant use affects the actual system use (AU) of social media technology as indicated by various studies (Acarli & Sağlam, 2015; Dumpit & Fernandez, 2017; Dutot, 2015; Ghosh, 2016; Hanson et al., 2011; Maleko Munguatosha et al., 2011; Rauniar et al., 2014; Salim, 2012; Suksa-ngiam & Chaiyasoonthorn, 2015). Thus, the following hypotheses are brought forward:

H6. The behavioral intention to use (BI) will have a positive effect on the actual use of social media technology (AU).

The following Figure illustrates the research model which has been developed based on the aforementioned hypotheses considering the extended TAM model for social media technology adoption or acceptance among students.
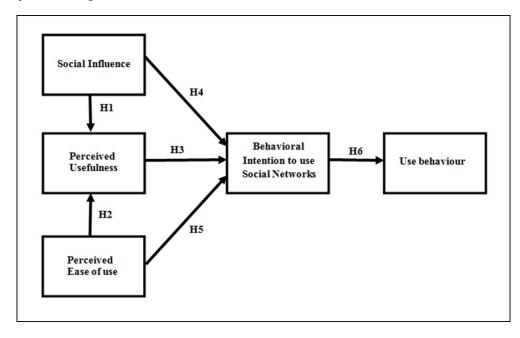

Figure 1. Research Model.

4.   Research Methodology

4.1. Procedure

Postgraduate and undergraduate students at the University of Al Fujairah in the United Arab Emirates were targeted for the process of data collection. To authenticate the different research hypotheses and to test the effect of the factors under research, questionnaires, is the basic tool for data collection, were circulated (Al-Emran, Mezhuyev, & Kamaludin, 2018a; Al-Emran, Mezhuyev, Kamaludin, & Shaalan, 2018b; Al-Emran & Shaalan, 2015a, 2017). They included 20 items under various factors including perceived ease of use, behavioral intention to use, perceived usefulness, social influence, and actual system use. The questionnaires were completed by 408 respondents who voluntarily agreed to take part in the study. Overall, there were 47 uncompleted surveys. Hence, complete questionnaires figured to 408 showing 89.7% of the response rate. The valid responses that were considered and altered into a sample size summed up to 408 responses as per (Krejcie & Morgan, 1970). 210 respondents are the approximate sampling size for a population of 460. These responses were then tested by the conceptual model. It is accepted as a sample size when an investigation is carried out using the structural equation modeling. Thus, 408 for sample size is quite a high figure as compared to the insignificant requirements that were used for analysis of hypotheses in this study (Chuan & Penyelidikan, 2006).

4.2. Participants

After the collection of the questionnaires, respondents were categorized according to different standards including age, gender and the use of social media. 408 students were the size of the sample for this purpose, among whom 188 were females, and 220 were males making a total percentage of 46% and 54%, respectively. 73% of the participants aged between 18 and 29. The remaining 27% of them were more than 30 years of age. 398 (97.5%) out of the 408 students were supposed to be highly tech-savvy. The candidates who said that they use social media daily represented 88.3%. Social media networks that were the most popular among the participants were Facebook, with 291 students, Twitter, with 201 students and Instagram, with 155 students. The general reasons for the use of social media were communication and online chat (225 students), sharing videos, photos and status and profile updates (191 students) and educational purposes (179 students).

5. Findings and Discussion

5.1. Questionnaire Pilot Study

To measure the reliability of the questionnaire items, a pilot study was conducted before the final survey was carried out. From the target population, 50 students were randomly chosen for this study. To measure the internal reliability of the constructs' items, the Cronbach's alpha was implemented. It is believed that a reliability coefficient of 0.70 is acceptable as per (Alrawashdeh, Firstauthor, & Secondcoauthor, n.d.). Table 2 shows the Cronbach's alpha values for every construct were above 0.7 in this study. Hence, all constructs can be implemented in the final study as they are reliable.

Construct	Cronbach's alpha
Behavioral Intention to use Social Networks	0.789
Perceived Ease of use	0.817
Perceived Usefulness	0.795
Social Influence	0.769
Use behavior	0.855

Table 2. Questionnaire relies on survey measurement scale Cronbach's alpha.

As indicated in the table above, the five measurement scales of the questionnaire are reliable and could thus be implemented in the current study.

5.2. Measurement Model Analysis

The most commonly used software by (Ringle, Wende, & Will, 2005) for the Partial Least Squares-Structural Equation Modelling (PLS-SEM) is SmartPLS. Accordingly, this study focuses on PLS-SEM for the examination of structural models and measurement (Chin, 1998). The measurement model (outer model) is described as the connection between indicators themselves, while the structural model refers to the relationship between latent constructs themselves. According to (Anderson & Gerbing, 1988), the highest probability approach was implemented to utilize SEM-PLS for the measurement of the proposed model. Reliability and convergent validity were ascertained by various measurements, such as Factor Loadings, Average Variance Extracted and Composite Reliability. Factor loadings were used to represent the weight and each questionnaire variable's correlation value like a perceived indicator. The factors' dimensionality is signified with the aid of larger load value.

The Composite Reliability (CR) measure is a useful method of measuring reliability. CR serves a similar function by presenting an accurate value through factor loadings in the constructed formula. The term Average Variance Extracted (AVE) is defined as the average quantity of variance present in a specific variable describing the latent construct. AVE can be used to evaluate each factor's convergence when the discriminate validity is larger than one factor. Table 3 shows that our experiment's result for the convergent validity and questionnaire reliability has gone beyond the requirement for convergent validity and reliability. Table 4 presents summarized reliability and validity of the questionnaire along with the evaluation results of each factor through variable acquired from the questionnaire.

5.2. 1 Assessment of the measurement model (Outer model)

5.2. 1.1 Convergent validity

The comparative amount of convergent validity is determined by the implementation of indicators that include factor loadings, variance extracted and reliability that consists of Cronbach's Alpha and composite reliability. According to (Hair, Black, Babin, Anderson, & Tatham, 1998), when all constructs' reliability coefficient and composite reliability (CR) exceeds 0.7, then it shows the internal consistency between numerous measurements of a construct (Hair et al., 1998). This is apparent in Table 3 where Cronbach's alpha scores are higher than 0.7 (Gefen, Straub, & Boudreau, 2000; Nunnally & Bernstein, 1978) and constructs' composite reliabilities range from 0.700 to 0.944. Moreover, all average variance extracted (AVE) values that are between 0.617 and 0.722 are fulfilling the standard of describing at least half of variance extracted from a group of items (Falk & Miller, 1992) that are fundamentals of the latent construct. Hence, the range used to assess the constructs is believed to attain convergent validity.

5.3.1.2 Discriminant validity

As illustrated in Table 4, all AVE values are higher than the squared correlation among constructs in the measurement model (Fornell & Larcker, 1981; Hair et al., 1998). Therefore, all conditions for the discriminate validity are fulfilled. With an AVE value larger than 0.5, the construct should be at least 50% of the measurement variance. Discriminant value was determined by Partial Least Squares (Smart PLS ver. 3.2.6). The loadings and cross-loadings are shown in Table 3, and a thorough examination of loadings and cross-loadings show that all the measurement items are broadly loaded on their own latent constructs, rather than loading on other constructs. AVE analysis is present in Table 3. The AVE scores' square root is represented by the bold diagonal elements in Table 4. On the contrary, the correlation between constructs is indicated by off-loading diagonal elements. The table clearly shows that the AVE values' square root is present between the ranges of 0.787 and 0.879, which is greater than the standard value of 0.5. In contrast to all other correlations for every construct, the AVE is apparently greater, which shows that there is a larger variance of all constructs with their own measures, as compared to model's other constructs that highlight the discriminate validity.

Constructs	Items	Factor Loading	Cronbach's Alpha	CR	AVE
Behavioral Intention to use Social Networks	BI_1	0.711	0.783	0.821	0.617
	BI_2	0.757			
	BI_3	0.778			
	BI_4	0.810			
Perceived Ease of use	PEOU_1	0.755	0.722	0.700	0.631
	PEOU_2	0.781			
	PEOU_3	0.754			
	PEOU_4	0.730			
Perceived Usefulness	PU_1	0.751	0.876	0.759	0.671
	PU_2	0.713			
	PU_3	0.764			
	PU_4	0.757			
Social Influence	SI_1	0.799	0.714	0.746	0.661
	SI_2	0.792			
	SI_3	0.797			
	SI_4	0.716			
Use behavior	UB_1	0.778	0.811	0.944	0.722
	UB_2	0.772			
	UB_3	0.794			
	UB_4	0.891			

Table 3. Convergent validity results which assures acceptable values (Factor loading, Cronbach's Alpha, composite reliability ≥ 0.70 & AVE > 0.5).

	Behavioral Intention to use Social Networks	Perceived Ease of use	Perceived Usefulness	Social Influence	Use behavior
Behavioral Intention to use Social Networks	**0.879**				
Perceived Ease of use	0.484	**0.856**			
Perceived Usefulness	0.566	0.581	**0.819**		
Social Influence	0.492	0.571	0.312	**0.787**	
Use behavior	0.244	0.479	0.391	0.612	**0.832**

Table 4. Fornell-Larcker Scale.

5.2. 2 Assessment of structural model (Inner model)

5.2. 2.1 Coefficient of determination -R²

The coefficient of determination (R^2 value) measure is basically used to examine the structural model. Additionally, this coefficient helps in determining the model's predictive accuracy. It is dealt with as the squared correlation between a certain endogenous construct's actual and predicted values. The coefficient signifies exogenous latent variables' combined influence on an endogenous latent variable. As the squared correlation between the actual and predicted values of the variables is presented by the coefficient, therefore, it entails that the extent of endogenous constructs' variance is protected by every exogenous construct recognized with it. According to (Chin, 1998), values more than 0.67 are indications of high value while the qualities in the range of 0.33 to 0.67 are direct and the qualities that range between 0.19 and 0.33 are weak values. Values lower than 0.19 are considered inadmissible. In Table 5 and Figure 2 it can be noticed that the model has high predictive power, which supports almost 69% and 42% of the variance in the Behavioral Intention to use Social Networks and Use behavior, respectively.

Constructs	R²	Results
Behavioral Intention to use Social Networks	0.687	High
Use behavior	0.423	Moderate

Table 5. R² of the endogenous latent variables.

5.2.2.2 Test of the hypotheses - Path coefficient

To test the proposed hypotheses, a structural equation model using PLS-SEM with the maximum likelihood estimation was used to assess the relationships among the theoretical constructs for the structural model. As shown in Table 6 and Figure 2, five out of the six hypotheses are significant. Based on the data analysis, hypotheses H1, H2, H3, H5, and H6 were supported by the empirical data, while H4 was rejected. The results showed that Perceived Usefulness (PU) significantly influenced Social Influence (SI) (β= 0.319, P<0.01) and Perceived Ease of Use (PEOU) (β= 0.127, P<0.01) supporting hypotheses H1and H2, respectively. Behavioral Intention to use Social Networks (BI) was determined to be significant in affecting Perceived Usefulness (PU) (β= 0.488, P<0.001) and Perceived Ease of Use (PEOU) (β= 0.386, P<0.05) supporting hypotheses H3and H5, respectively. Furthermore, use behavior (UB) was significantly influenced by Behavioral Intention to use Social Networks (BI) (β= 0.227, P < P<0.001) which supports hypothesis H6. The relationship between Social Influence (SI) and Behavioral Intention to use Social Networks (β= 0.110, P=0.129) is statistically not significant, and hypothesis H4 is, hence, generally not supported. A summary of the hypotheses testing results is presented in Table 6.

H	Relationship	Path	t-value	p-value	Direction	Decision
H1	Social Influence->Perceived Usefulness	0.319	5.821	0.003	Positive	Supported**
H2	Perceived Ease of Use ->Perceived Usefulness	0.127	8.327	0.001	Positive	Supported**
H3	Perceived Usefulness->Behavioral Intention to use Social Networks	0.488	11.211	0.000	Positive	Supported**
H4	Social Influence ->Behavioral Intention to use Social Networks	0.110	0.787	0.129	Positive	Not Supported
H5	Perceived Ease of Use->Behavioral Intention to use Social Networks	0.386	4.616	0.022	Positive	Supported*
H6	Behavioral Intention to use Social Networks ->Use behavior	0.227	15.122	0.000	Positive	Supported**

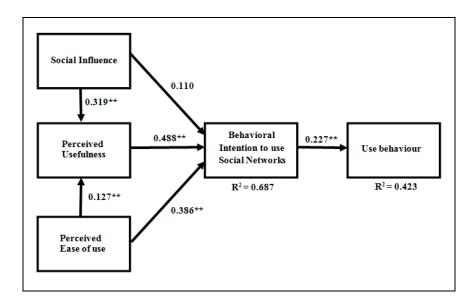**Table 6. Results of structural Model - Research Hypotheses Significant at p**=<0.01, p* <0.05).**

Figure 2. Path coefficient results (significant at p < = 0.01, p* < 0.05).**

6. Conclusion and future work

The current study aimed at analyzing students' perceptions of the use of social media networking systems while studying far away from the tertiary institution. The investigation was carried out to explore if students are comfortable while using social media networking systems, whether they are able to search information on these social media networking systems and whether they perceive social media as an efficient and comfortable way to study and learn various course contents. The Technology Acceptance Model (TAM) constructs were implemented to assess these factors; namely 'Use Behavior', 'Perceived ease of use', 'Behavioral Intention to use Social Networks', 'Perceived usefulness' and Social Influence'. The study revealed that the 'Perceived Ease of Use' and 'Perceived Usefulness' are important factors for predicting a student's behavioral intention to use social networking media for e-learning in the Emirati higher education context.

Additionally, this study was conducted to find out the factors that can influence the perception of the UAE students regarding social media technology. Structural equation modeling (PLS-SEM) was employed to test the research hypotheses. The structural model which was assessed by performing an analysis of structural paths, t-statistics and variance explained (R-squared value) was shown in figure 2. Table 6 showed the results of data analysis. The PLS method was implemented to test all hypotheses given above. The assessment of the path significance of each hypothesized relationship engaged in the research model and the variance explained (R^2) by every path was conducted. All the hypotheses presented were supported.

The current study also indicated the rise in the students' behavioral intention to use social media technology occurred owing to the perceived usefulness, social influence, and perceived ease of use. There is a positive effect of perceived usefulness, social influence, and perceived ease of use on students' behavioral intention to use social media technology which supports H1, H2, H3, H5, and H6. The importance of students' capability and confidence in using social media technology is indicated in the research. Previously, several studies presented that there was a positive effect of perceived usefulness, social influence, and perceived ease of use on students' behavioral intention to make use of social media technology (Acarli & Sağlam, 2015; Akar & Mardikyan, 2014; Al-rahmi et al., 2015b, 2015a; Al-Rahmi & Zeki, 2017; Carlos Martins Rodrigues Pinho & Soares, 2011; Chang & Yang, 2013; Dhume et al., 2012; Dumpit & Fernandez, 2017; Dutot, 2015; Kim, 2012; Maleko Munguatosha et al., 2011; Paris et al., 2010; Rauniar et al., 2014).

A high predictive power R-squared value overall is determined through perceived usefulness, social influence, perceived ease of use assumed by students' behavioral intention to use social media technology along with both these variables justifying 69% (R^2 = 0.687) of the variance in behavioral intention.

Students' behavioral intention predicted the user behavior and 42.3% (R^2 = 0.423) of the variance in User behavior was determined by the overall, showing a moderate overall R-squared value. The present study mainly concluded that social influence, perceived usefulness, and perceived ease of use positively influence students' behavioral intention to use social media technology. Thus, for the student to efficiently develop and implement successful social media applications, the legislators and managers of social media applications are encouraged to essentially put more focus on the factors that are crucial to motivate learning.

Eventually, though researchers tried to keep various social media like Twitter, Instagram, Google+ and Facebook under focus, the social media market in the UAE remains dominated by Facebook as the participants were more inclined towards using Facebook as compared to other alternatives. Obviously, as the respondents in this study do not cover all the higher education institutions in the UAE, their responses do not reflect the view of the whole higher education student population creating another limitation for this research. On the other hand, these results can probably represent the standpoint of other university students in the UAE. To learn more about higher education students and to figure out differences and similarities among students, especially those in public and private universities, regarding the effect of factors suggested by the TAM model further research is required.

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