Knowledge Sharing Behaviour and Its Predictors in United Arab Emirates Universities

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Abstract

The main objectives of this research are to (i) explore the relationship between types of knowledge and academics' knowledge sharing behaviour, (ii) examine the relationship between knowledge sharing behaviour and its predictors based on the Theory of Planned Behaviour, and (iii) examine the motivating and hindering factors that may influence academics' knowledge sharing behaviour. Adopting Ajzen's Amended Theory of Planned Behaviour, this research used the quantitative research approach employing an online survey using a questionnaire to collect data from academics in ten public universities in United Arab Emirates. Data were analyzed using SPSS and PLS-SEM. The analysis process involved (i) assessment of the measurement model to evaluate the items reliability and validity, (ii) assessment of the structural model to evaluate its validity, path coefficients, and test the hypotheses, as well as (iii) assessment of the mediating relationships. The results revealed that academics' knowledge sharing behaviour is significantly influenced by explicit knowledge, tacit knowledge, and intention to share knowledge. The results also showed that intention itself is significantly influenced by attitude, subjective norms, self-efficacy, but not influenced by controllability. Moreover, attitude is significantly and positively influenced by trust and reputation as motivators of knowledge sharing behaviour. Whereas, controllability is significantly and negatively influenced by lack of time and poor communication as barriers of knowledge sharing behaviour.

Keywords: Academics; knowledge sharing behavior; Theory of Planned Behavior; UAE; universities

Abstrak

Objektif utama kajian ini adalah untuk (i) mengkaji hubungan antara jenis ilmu pengetahuan dan tingkah laku perkongsian ahli akademik, (ii) mengenal pasti hubungan di antara tingkah laku perkongsian pengetahuan dan ramalan berdasarkan Teori Tingkah laku Dirancang (TPB), dan (iii) mengenal pasti faktor pendorong dan faktor penghalang yang mempengaruhi tingkah laku perkongsian pengetahuan ahli akademik. Dengan menggunakan Teori Ajzen (Theory of Planned Behaviour) yang telah dipinda, kajian ini menggunakan pendekatan penyelidikan kuantitatif dengan menggunakan soal selidik berasaskan atas talian (online) untuk mengumpulkan data daripada ahli akademik di sepuluh universiti awam di United Arab Emirates. Data dianalisis dengan menggunakan SPSS dan PLS- SEM. Proses analisis yang terlibat (i) Penilaian model pengukuran untuk menilai kebolehpercayaan item dan kesahihan, (ii) penilaian model struktur untuk menilai kesahihan, path coefficients, dan menguji hipotesis, dan juga (iii) penilaian terhadap pengantara hubungan. Hasil kajian menunjukkan bahawa tingkah laku perkongsian pengetahuan ahli akademik adalah dipengaruhi dengan pengetahuan yang jelas, pengetahuan tersirat, dan hasrat untuk berkongsi pengetahuan. Hasil kajian juga mendapati bahawa niat itu sendiri sigifikannya dipengaruhi oleh sikap, norma subjektif, efikasi kendiri, tetapi tidak dipengaruhi oleh kawalan (controllability). Selain itu, hasil dapatan kajian mendapati bahawa sikap, mempunyai hubungan positif yang signifikan dipengaruhi oleh kepercayaan dan reputasi sebagai pendorong tingkah laku perkongsianpengetahuan. Manakala, kawalan (controllability) didapati tidak mempunyai hubungan yang signifikan kerana dipengaruhi oleh kekurangan masa dan masalah komunikasi sebagai halangan tingkah laku perkongsianpengetahuan.

Kata kunci: Akademik; tingkah laku berkongsi pengetahuan; Teori Kelakuan yang Dirancang; UAE; universiti

■1.0 INTRODUCTION

Knowledge sharing is a process of exchanging and transferring existing knowledge and ideas among people in order to create new knowledge and ideas. It helps organizations in achieving their objectives, continuous growth, maintaining competitiveness and profitability, promoting individuals' learning and innovation, enhancing their performance, skills and competencies, and transferring knowledge among individuals which insures sustaining knowledge within an organization. Recognizing the importance of knowledge sharing is creating a demand for applying it in universities.

Universities are knowledge-based environments responsible for creating, managing, exchanging, and disseminating knowledge within societies. They grow and prosper from the knowledge of their human capital, particularly the academics (Singer and Hurley, 2005). In the knowledge-based age, universities seek to ensure success and permanence, achieve organizational goals (Sharma, 2010), and have constant performance improvements. Moreover, in the academic environment, the role of knowledge sharing is becoming quite significant to achieve maximum results for academic institutions (Babalhaveji and Kermani, 2011) due to the important role academics play in providing

education, conducting research, and publishing scholarly works. Therefore, universities should promote knowledge sharing among their academics.

The United Arab Emirates (UAE) has experienced significant local and foreign investments in various fields such as business, construction, infrastructure, financial services, telecommunications, media, information technology, hospitality and tourism as well as education (Ahmad and Daghfous, 2010). The government has been working consistently and strongly to establish a knowledge-based society with a knowledge-based economy (Al-Nahyan, 2012a). Therefore, the government strategy has recently been focusing on human capital (Al-Nahyan, 2012a, 2012b). As a step to achieve this, it has allocated more than 1/3 of its budget to education, research and innovation (Al-Nahyan, 2012a). Not only that, UAE is also seeking to become a regional hub for higher education (Al-Nahyan, 2012b). As a result, the government has launched partnerships with numerous international reputable academic institutions to establish campuses in UAE to work on raising the standards of higher education (Al-Nahyan, 2012a).

1.1 Knowledge Sharing in UAE

Few studies have been published about knowledge sharing in UAE, concentrating on business and management, construction, and police force service (Ahmad and Daghfous, 2010; Rowley, Seba and Delbridge, 2012; Seba, Rowley and Lambert, 2012; Skok and Tahir, 2010). The authors studied the practice of knowledge sharing and its activities, in addition to the influence of certain organizational, individual, and technological factors on it. However, no studies addressed knowledge sharing in the higher education sector.

If UAE is to play its aspired role in creating knowledge and establishing a knowledge-based society in the region, the government has to promote a culture of knowledge sharing (Alrawi and Jaber, 2007) particularly within academic institutions given their importance in knowledge creation and dissemination. In light of that, this research intends to study academics' knowledge sharing behaviour and examine the factors influencing it in UAE universities.

The significance of this research lies in the fact that it is the first to address knowledge sharing in higher education sector in UAE with particular emphasis on academics' knowledge sharing behaviour considering their important role in creating knowledge and the importance of knowledge sharing in achieving universities' goals.

■2.0 THEORETICAL FRAMEWORK

The theory of planned behaviour (Ajzen, 1985) states that human behaviour is guided by three kinds of salient beliefs: behavioural beliefs, normative beliefs, and control beliefs. Behavioural beliefs are about the likely consequences or attributes of the behaviour, normative beliefs are about the normative expectations of other people, and control beliefs are about the presence of factors that may facilitate or hinder performing the behaviour (Ajzen, 1985, 1991). In their respective aggregates, behavioural beliefs produce a favourable or unfavourable attitude toward the behaviour; normative beliefs result in perceived social pressure or subjective norms; and control beliefs give rise to perceived behavioural control, the perceived ease or difficulty of performing the behaviour (Ajzen, 1985, 1991). In combination, attitude, subjective norms, and perceived behavioural control lead to the formation of a behavioural intention. Intention is defined as the individual's willingness to engage in behaviour (Ajzen, 1985, 1991, 2002).

However, due to the conceptual and methodological ambiguities concerning the concept of perceived behavioural control, Ajzen (2002) stated that perceived behavioural control should be viewed as a "unitary, higher-order concept that consists of two interrelated components" (Kraft, Rise, Sutton and Roysamb, 2005: 480-481). In order to resolve these ambiguities, Ajzen (2002) deconstructed perceived behavioural control into two constructs: self-efficacy and controllability. According to Ajzen (2002), self-efficacy is referred to as the individual's confidence in the ease or difficulty to perform certain behaviour, whereas controllability is referred to as the individual's beliefs, based on the available resources, about the extent to which performing the behaviour is up to him/her.

According to Ajzen (1991, 2006), the more favourable the attitude and subjective norms, and the greater the self-efficacy and controllability, the stronger would be the intention to carry out the behaviour in concern. Thus, intention is considered the immediate antecedent of behaviour (Ajzen, 1991, 2002, 2006). Having a sufficient degree of actual control over the behaviour, people are expected to perform the behaviour when the opportunity arises. Each of the theory elements of intention, attitude, subjective norms, self-efficacy, and controllability is counted as an aspect of the actual behaviour (Ajzen, 1991).

In knowledge sharing context, studies have found that intention significantly affects knowledge sharing behaviour (Alajmi, 2011; Chen Chen and Kinshuk, 2009; Minbaeva and Pedersen, 2010; Tohidinia and Mosakhani, 2010). Moreover, studies have found that attitude, subjective norms, and self-efficacy significantly affect intention (Alajmi, 2011; Chennamaneni, 2006; Elogie and Asemota; 2013; Kuang, Davison and Yao, 2012; Lin and Lee, 2004; Minbaeva and Pedersen, 2010; Ryu, Ho and Han, 2003). Previous studies on knowledge sharing behaviour have always adopted the first or second models of the theory of planned behaviour (1985, 1991) where perceived behavioural control proved to affect intention (Elogie and Asemota; 2013; Kuang *et al*., 2012; Tohidinia and Mosakhani, 2010). However, only one study has adopted the latest model of the theory (2002) where controllability is measured as a separate variable. In that study, Alajmi (2011) found that controllability does not affect intention.

Based on the above, and in terms of the research context on knowledge sharing, it is hypothesized that academics' knowledge sharing is significantly influenced by their intention, which is in turn is positively influenced by their attitude, subjective norms, self-efficacy, and controllability.

■3.0 LITERATURE REVIEW

A thorough review of the literature has led the authors to a number of factors that influence knowledge sharing behaviour, either directly or indirectly. Among these factors are the two types of knowledge; explicit and tacit, which affect the individual's behaviour directly. In addition, the literature identifies a number of factors that influence the individual's knowledge sharing behaviour. Such factors are either

motivating or hindering, which influence the behaviour indirectly through its predictors. The motivators are trust and reputation, whereas the barriers are lack of time and poor communication.

3.1 Types of Knowledge

Literature on knowledge sharing reveals that organizations committed to promoting knowledge sharing culture often emphasize on the importance of the types of knowledge in the success of knowledge sharing (Davenport and Prusak, 2000; Sanchez, 2005). Moreover, many organizations insure having knowledge management systems in order to encourage individuals share their knowledge; both explicit and tacit.

However, researchers have not investigated the relationship between knowledge sharing and the types of knowledge. The only study that has tackled this issue has indeed examined the relationship between intention to share explicit and tacit knowledge and knowledge sharing behaviour among IT workers' (Reychav and Weisberg, 2010). The researchers found that intention to share explicit and tacit knowledge influences knowledge sharing behaviour.

3.2 Motivating Factors

The need to create a knowledge sharing culture in organizations is quite imperative (Tan, Lye, Ng and Lim, 2010), which calls for motivating factors to be employed in order to motivate individuals to share their knowledge. The literature identifies a number of motivators that influence the success of knowledge sharing. Among the major ones are trust and reputation.

According to the theory of planned behaviour, attitude is based on behavioural beliefs linked to attributes or outcomes (Ajzen, 1991). Some of the attributes include trust and confidence (Al-Adaileh and Al-Atawi, 2011), while some of the outcomes include rewards and reputation (Chennamaneni, 2006; Kankanhalli, Tan and Wei, 2005).

Trust is a mutual understanding in others' good intentions and desires (Hsu, Teresa, Yen and Chang, 2007) and it is a medium to share knowledge smoothly. Indeed, Tan *et al.* (2010) believe that trust determines the success of knowledge sharing. Seba *et al.* (2012) indicate that trust is an important individual motivator of knowledge sharing. In their study, the authors studied the influence of trust on employees' attitude toward knowledge sharing, where they found that trust is a significant motivator of attitude. Rad, Alizadeh, Miandashti and Fami (2011) examined the relationship between trust and employees' attitude and found a significant relationship between them.

Reputation refers to the potential of obtaining self-concept such as receiving praise and improving status (Kankanhalli *et al.*, 2005). It positively influences an individual to share knowledge with others. Hung, Lai and Chou (2010) emphasize that professional reputation enhances people to share their knowledge. In two different studies, Chennamaneni (2006) and Wu and Zhu (2012) explored the influence of reputation on employees' attitude toward knowledge sharing. Their findings showed that reputation significantly influences attitude.

3.3 Hindering Factors

On the other hand, knowledge sharing process is hindered by many barriers, and identifying those barriers may contribute in succeeding knowledge sharing strategies. Among the major factors that have been identified as barriers to the individuals' knowledge sharing are lack of time and poor communication (Tan *et al.*, 2010).

According to the theory of planned behaviour, controllability is based on control beliefs about the availability of certain opportunities and resources (Ajzen, 2002). Examples of such opportunities include time and space availability (Rowely *et al.*, 2012; Seba *et al.*, 2012), while examples of resources include ICT tools and communication skills (Chennamaneni, 2006; Minbaeva and Pedersen, 2010).

Lack of time is understood in terms of lack of available time to perform tasks (Riege, 2005). In this regard, Haas and Hansen (2007) state that individuals' willingness to share knowledge is largely affected by the amount of time allocated to perform their responsibilities for which knowledge sharing can be useful. In their studies on the factors affecting knowledge sharing, Rowely *et al.* (2012) and Seba *et al.* (2012) found that lack of time is one of the main barriers hindering knowledge sharing among employees.

Poor communication refers to weak interaction and interpersonal skills either orally, written, or in body language. Poor communication is seen as a major barrier in the process of knowledge sharing since individuals' ability to share knowledge depends largely on their communication skills (Riege, 2005). Jain, Manjit and Gurvinder (2007) explored different motivators and barriers to knowledge sharing among academic staff. They found that poor communication highly hinders knowledge sharing process. Likewise, Kim and Joh (2008) explored barriers to knowledge sharing among employees, and found that poor communication was one of the most significant barriers.

3.4 Research Model and Hypotheses

Based on the above theoretical framework and literature review, the research model (Figure 1) and hypotheses are proposed:
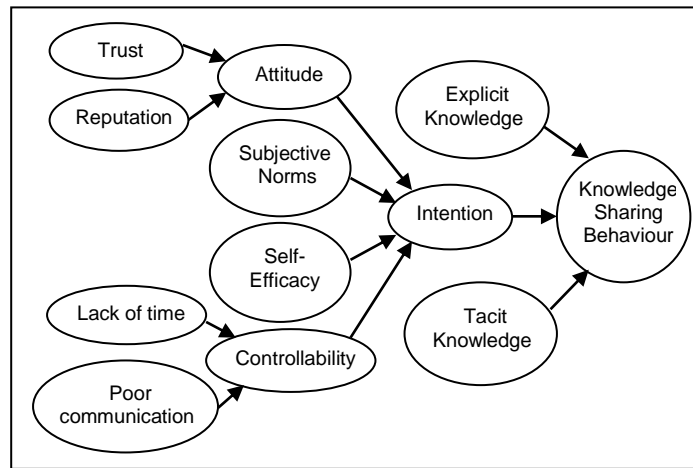
Figure 1 Research model

H1: Explicit knowledge has a significant positive effect on academics' knowledge sharing behaviour
H2: Tacit knowledge has a significant positive effect on academics' knowledge sharing behaviour
H3: Intention to share knowledge has a significant positive effect on academics' knowledge sharing behaviour
H4: Attitude has a significant positive effect on academics' intention to share knowledge
H5: Subjective norms has a significant positive effect on academics' intention to share knowledge
H6: Self-efficacy has a significant positive effect on academics' intention to share knowledge
H7: Controllability has a significant positive effect on academics' intention to share knowledge
H8: Trust to share knowledge has a significant positive effect on academics' attitude to share knowledge
H9: Reputation has a significant positive effect on academics' attitude to share knowledge
H10: Lack of time has a significant negative effect on academics' controllability
H11: Poor communication has a significant negative effect on academics' controllability

■4.0 METHODOLOGY

The setting of this research composed of 10 public universities in UAE, including federal, governmental, and semi-governmental universities. Meanwhile the targeted population comprised 2,585 academics holding different titles ranging from teacher to professor. Using the simple random sampling technique, the sample size consisted of 335 academics working in more than twelve faculties in these universities. Total of 321 academics answered the questionnaire.

A quantitative research approach was employed and a cross-sectional survey was used as a method for collecting data from the academics in the targeted universities. For this purpose, the survey was conducted online and the instrument employed was a questionnaire that was sent to the academics through universities internal circulation system and email inviting them to participate in the survey. The questionnaire was designed in a way to insure that academics answer all questions.

The measurement items used in the questionnaire were developed and validated based upon Ajzen's theory of planned behaviour, and other instruments validated in previous researches conducted on knowledge sharing behaviour (Bock, Zmud, Kim and Lee, 2005; Chen *et al*., 2009, Hsu *et al*., 2007, Jain *et al*., 2007; Kankanhalli *et al*., 2005; Lin and Lee, 2004; Reychav and Weisberg, 2010; Ryu *et al*., 2003; Seba *et al*., 2012; Tohidinia and Mosakhani 2010). All items were measured using five-point Likert-scale. The questionnaire was provided in both English and Arabic, which are the official languages used in the universities.

Using SPSS 19.0, the sample descriptive characteristics were assessed based on the demographic information. Data analysis was conducted using partial least square path modeling technique (PLS-SEM). By using SmartPLS 2.0 software (Hansmann and Ringle, 2004), PLS-SEM was applied to assess the measurement and structural models, the mediating relationships, and to test the research hypotheses.

The assessment of the measurement model involved assessment of indicator reliability, internal consistency reliability, convergent validity, and discriminant validity at indicator and construct levels (Chin, 2010). The assessment of the structural model involved assessment of the coefficient of determination, path coefficient, effect size, and predictive relevance (Chin, 2010). Assessment of the mediating relationships is applied using PLS algorithm test on the relationship between the dependent and independent variables with and without the presence of the mediating variable. In case both tests result in significant relationships, then the mediating variable is partial mediator, while if the tests show that after the inclusion of the mediating variable the direct relationship is no longer significant, then the mediating variable is full mediator (Ida, Roshayati, and Fazli, 2012).

■5.0 RESULTS

5.1 Assessment of the Measurement Model

The purpose of assessing the measurement model is to evaluate its validity and reliability. It is conducted through the following tests: (a) Indicator reliability by measuring the factor loading of each of the manifest variables, which should be above 0.4 (Hair, Black, Babin and Anderson, 2010), (b) internal consistency reliability by measuring composite reliability and Cronbach's alpha, which should be 0.7 and above (Hair *et al.*, 2010), (c) convergent validity by measuring the AVE, which should be more than 0.5 (Fornell and Larcker, 1981), and (d) discriminant validity by using Fornell-Larcker's (1981) criterion where the square root of the AVE for each construct exceeds the correlations between the construct and all other constructs (Henseler, Ringle and Sinkovics, 2009).

The results of analyzing the measurement model demonstrated reliable and valid measurement model as displayed in Tables 1 and 2 below. All factors loaded above the recommended value of 0.7 demonstrating satisfactory indicator reliability. The constructs composite reliability and Cronbach's alpha values exceeded the recommended value of 0.7 indicating satisfactory internal consistency reliability. The constructs AVE exceeded the recommended value of 0.5 demonstrating adequate convergent validity. The square root of the constructs AVE values exceeded the correlations between the constructs and all indicators loaded higher on their own constructs indicating satisfactory discriminant validity.

Table 1 Internal consistency

Construct	Composite Reliability	Cronbach's Alpha
Knowledge Sharing Behaviour	0.9056	0.8612
Explicit Knowledge	0.9159	0.8914
Tacit Knowledge	0.9034	0.8686
Intention	0.9461	0.9288
Attitude	0.9475	0.9307
Subjective Norms	0.9082	0.8658
Self-Efficacy	0.9548	0.9409
Controllability	0.9499	0.9311
Trust	0.9560	0.9462
Reputation	0.9598	0.9478
Lack of Time	0.9078	0.8660
Poor Communication	0.8369	0.7380

Table 2 Convergent and discriminant validity

Construct	AVE	√AVE
Knowledge Sharing Behaviour	0.7059	0.840
Explicit Knowledge	0.6459	0.804
Tacit Knowledge	0.6519	0.807
Intention	0.7785	0.882
Attitude	0.7832	0.885
Subjective Norms	0.7122	0.844
Self-Efficacy	0.8089	0.899
Controllability	0.8261	0.909
Trust	0.7568	0.870
Reputation	0.8270	0.909
Lack of Time	0.7113	0.843
Poor Communication	0.6371	0.798

5.2 Assessment of the Structural Model

The purpose of assessing the structural model is to evaluate its validity and test the hypotheses. This is achieved through the following tests: (a) the coefficient of determination (R^2) by measuring the amount of explained variance of each latent variable, which should be 0.01, 0.09, and 0.25 indicating small, medium and large exploratory power (Mitchell and Jolley, 2013); (b) path coefficient by measuring the path estimates and t-statistics, which should be 0.02, 0.15, and 0.35 indicating small, medium and large relationships (Henseler *et al.*, 2009); (c) effect size (f^2) by measuring the relative impact of a particular exogenous latent variable on an endogenous latent variable by means of changes in the R^2 of the latent variable, which should be 0.02, 0.15, and 0.35 indicating small, medium and large effect (Henseler *et al.*, 2009), and (d) predictive relevance (Q^2) by measuring how well observed values are reconstructed by the model and its parameter estimates, which should be higher than zero (Chin, 2010).

As seen in Tables 3 and 4 below, the results of analyzing the structural model demonstrated an adequate and valid model. The R^2 values for knowledge sharing behaviour and intention were large demonstrating strong explanatory power. Meanwhile the R^2 value for attitude was moderate demonstrating modest explanatory power, and the R^2 value for controllability was small. The predictive relevance (Q^2) values of the dependent variables were above the recommended value zero indicating an adequate predictive relevance of the model. The effect size (f^2) values were within the recommended values ranging from 0.002 to 0.219 demonstrating small and medium effect sizes of the independent variables.

Table 3 Coefficient of determination and predictive relevance

Construct	R^2	Q^2
Knowledge Sharing Behaviour	0.3691	0.2604
Intention	0.4705	0.3643
Attitude	0.2427	0.1830
Controllability	0.0625	0.0441

Table 4 Effect size

Path	f^2	Effect Size
Explicit knowledge → KSB	0.044	Small
Tacit knowledge → KSB	0.035	Small
Intention → KSB	0.063	Small
Attitude → Intention	0.219	Moderate
Subjective Norms → Intention	0.079	Small
Self-efficacy → Intention	0.049	Small
Controllability → Intention	0.002	Small
Trust → Attitude	0.120	Small
Reputation → Attitude	0.067	Small
Lack of Time → Controllability	0.015	Small
Poor Communication → Controllability	0.023	Small

5.3 Assessment of Mediating Relationships

Mediation assessment provides accurate information whether a mediating variable actually mediates the relation between two other variables (MacKinnon and Fairchild, 2009). In this research the model is characterized by its complexity for containing three mediators; intention, attitude, and controllability. Table 5 shows the results for the mediator intention indicating that while intention fully mediates between attitude, subjective norms, controllability and knowledge sharing behaviour, it partially mediates between self-efficacy and knowledge sharing behaviour.

Table 5 Results of the Mediator Intention (INT)

IV	DV	β & t-values wzout INT	β & t-values wz INT	Mediating Effect
Attitude	KSB	β: 0.147 t: 2.640	β: -0.002 t: 0.056	Full
Subjective norms	KSB	β: 0.187 t: 3.057	β: 0.099 t: 1.634	Full
Self-efficacy	KSB	β: 0.211 t: 2.860	β: 0.129 t: 1.851	Partial
Controllability	KSB	β: 0.088 t: 1.539	β: 0.095 t: 1.657	Full

Table 6 shows the results for the mediator attitude indicating that it fully mediates between trust, reputation and intention.

Table 6 Results of the Mediator Attitude (ATT)

IV	DV	β & t-values wzout ATT	β & t-values wz ATT	Mediating Effect
Trust	Intention	β: 0.214 t: 3.479	β: 0.021 t: 0.599	Full
Reputation	Intention	β: 0.226 t: 3.655	β: 0.086 t: 1.618	Full

Table 7 shows the results for the mediator controllability indicating that it partially mediates between lack of time and intention, while it has no mediation effect between poor communication and intention.

Table 7 Results of the Mediator Controllability (CON)

IV	DV	β & t-values wzout CON	β & t-values wz CON	Mediating Effect
Lack of time	Intention	β: -0.199 t: 3.231	β: -0.145 t: 2.254	Partial
Poor Com.	Intention	β: -0.043 t: 0.896	β: 0.001 t: 0.035	No mediation

5.4 Hypotheses Testing

Based on the results of the path coefficients assessment, the research hypotheses were tested. Both path estimates and t-statistics with p-values are used to support or refute the hypothesis. Ten hypotheses were supported providing empirical support for the conceptualized research model. Table 8 shows the results of the hypotheses testing with path coefficients and t-statistics. The path coefficients demonstrated significant levels that exceeded the recommended β value of 0.1 at t-statistics values of 1.96 and 2.59.

Table 8 Hypotheses testing

	Hypothesis	β	T-statistics	Result
H1	Explicit knowledge → Knowledge sharing behaviour	0.241	3.773**	Supported
H2	Tacit knowledge → Knowledge sharing behaviour	0.217	2.895**	Supported
H3	Intention → Knowledge sharing behaviour	0.253	4.221**	Supported
H4	Attitude → Intention	0.410	7.811**	Supported
H5	Subjective Norms → Intention	0.232	4.145**	Supported
H6	Self-efficacy → Intention	0.217	3.600**	Supported
H7	Controllability → Intention	-0.010	0.342	Not Supported
H8	Trust → Attitude	0.333	6.271**	Supported
H9	Reputation → Attitude	0.248	4.426**	Supported
H10	Lack of Time → Controllability	-0.128	2.130*	Supported
H11	Poor Communication → Controllability	-0.164	2.783**	Supported

* Significance at t value ≥1.96 with p ≤ 0.05, **Significance at t value ≥ 2.59 with p ≤ 0.01

Figure 2 shows the results of the assessment of the measurement and structural models displaying the path coefficients on top of the arrows, the t-statistic values below the arrows, the R^2 values inside the circles, and the factor loadings.
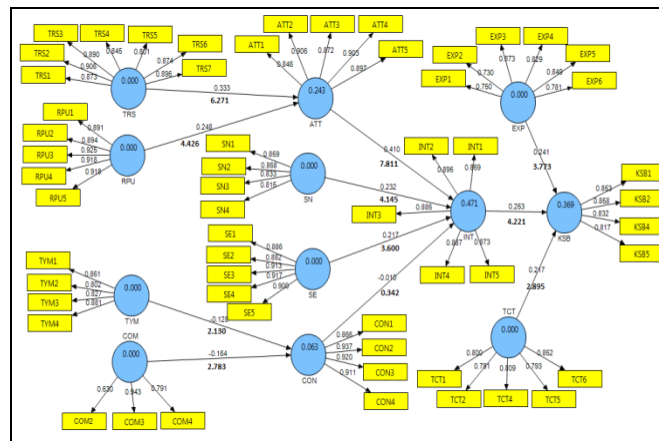

Figure 2 Measurement and structural models

◼6.0 DISCUSSION

The results revealed that academics' knowledge sharing behaviour is significantly influenced by explicit and tacit knowledge, which is similar to Reychav and Weisberg's study (2010). However, this research makes a contribution in that it is the first to explore the relationship between knowledge sharing behaviour itself and explicit and tacit knowledge. Also, the results revealed that academics' knowledge sharing behaviour is significantly influenced by intention to share knowledge, which is consistent with the theory of planned behaviour and of previous studies (Alajmi, 2011; Chen *et al*., 2009; Minbaeva and Pedersen, 2010; Tohidinia and Mosakhani, 2010). Collectively, explicit knowledge, tacit knowledge, and intention to share knowledge explained 37% of the variance in knowledge sharing behaviour.

Furthermore, the results showed that academics' intention is significantly influenced by attitude towards knowledge sharing, subjective norms, and self-efficacy. This result is in accordance with the theory of planned behaviour as well as with previous studies (Alajmi, 2011; Chennamaneni, 2006; Elogie and Asemota; 2013; Kuang *et al*., 2012; Lin and Lee, 2004; Minbaeva and Pedersen, 2010; Ryu *et al*., 2003). Collectively, attitude towards knowledge sharing, subjective norms, and self-efficacy explained 47% of the variance in intention. However, contrary to the theory, the results found that controllability does not have any influence on academics' intention. Yet, this result is consistent with that of Alajmi (2011).

In addition, and consistent with prior findings the results proved that attitude towards knowledge sharing is significantly and positively influenced by trust and reputation as motivators of knowledge sharing behaviour (Seba *et al*., 2012; Rad *et al*., 2011; Chennamaneni, 2006; Wu and Zhu, 2012). Trust and reputation explained about 24% of the variance in attitude towards knowledge sharing. Also, the results showed that controllability is significantly and negatively influenced by lack of time and poor communication as barriers of knowledge sharing behaviour. This result is consistent with previous studies (Rowely *et al*., 2012; Seba *et al*., 2012; Jain *et al*., 2007; Kim and Joh, 2008). Lack of time and poor communication explained 6% only of the variance in controllability.

In spite of the consistency of the research results with those of previous studies, the findings of the current research make a contribution to the literature of knowledge sharing as it addresses knowledge sharing behaviour in particular and among academics. Most of previous researches either studied intention to share knowledge or knowledge sharing, and the few that have studied knowledge sharing behaviour either targeted employees and managers or were conducted in different contexts.

In addition the current research extends prior researches on the theory of planned behaviour by providing empirical evidence of the determinants of knowledge sharing behaviour in new context and new setting, i.e. higher education in UAE, which also provides significant practical implications for academic institutions and for the decision makers in UAE.

◼7.0 CONCLUSION

This research successes in filling the gap in literature on knowledge sharing behaviour where the findings support previous researches that have explained the complicated nature of knowledge sharing behaviour; however, the findings contribute due to being conducted a new setting, i.e. UAE with particular emphasis on a newly explored context there, which is higher education, a matter that has not been tackled in previous researches about knowledge sharing in the Arab world.

Understanding the importance and various benefits of knowledge sharing for organizations and individuals is the key enabler of the success of knowledge sharing strategies as well as the survival and sustainability of organizations and individuals.

The necessity of exploring knowledge sharing in higher education particularly is reinforced by the significant role of universities in creating and distributing knowledge. As well as by the major role of academics as valuable resources of creating, exchanging, and disseminating knowledge, where knowledge sharing can help them in their scholarly and research works.

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