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Academics' Knowledge Sharing Attitudes, Intentions, and Behaviors: The Influence of Individual Characteristics

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Abstract

Purpose: In a higher education institute (HEI), knowledge sharing (KS) practices and the factors that could influence them are imperative to KS enhancement efforts. This study aimed to answer two main questions: (1) To what extent do academics at a major Middle Eastern HEI hold favorable KS attitudes, practice KS, and intend to continue sharing knowledge in the future? (2) What influence do the individual characteristics of gender, age, academic field, academic rank, experience in the HEI, and education level have on academics' KS attitudes, intentions, and behaviors?

Study design/methodology/approach: The present study is a single case study where Kuwait University (KU), a comprehensive public Middle Eastern university, is the research setting. A single item (question) was used to measure each of the individual characteristics, and multi-item measures were used to measure KS attitude, intention, and behavior. An English-Arabic data collection survey was developed for data collection from full-time academics at KU.

Sample and data: A convenience sample, including 207 complete responses (14.5% of the total population of academics), was collected. The data set was then analyzed using descriptive statistics, factor analysis, and multivariate analysis of variance (MANOVA) procedures to answer the two research questions.

Results: Academics in the sample were found to hold favorable KS attitudes, intend to share knowledge in the future, and practice significant KS via organizational and personal channels. Furthermore, gender, age, academic field, academic rank, experience, and education level were found to have varying main and interaction effects on KS attitudes, intentions, and behaviors.

Originality/value: This study provides novel evidence on academics' KS attitudes, intentions, and behaviors along with the effect of individual characteristics on these KS-related factors in a HEI operating in the Middle East. It also reveals that the influence of an individual characteristic is often contingent on its interactions with the other characteristics, and therefore, the main effect of that characteristic

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should be carefully interpreted.
Research limitations/implications: The results of this study must be carefully construed since they are based on a single case study and were derived from a one-time, cross-sectional data set. Yet, these results add to the developing body of knowledge on global KS practices and the effect of individual characteristics on KS attitude, intention, and behavior. They also provide a proper foundation for policy formulation aiming at fostering KS effectiveness in the investigated HEI and similar HEIs.

Keywords: Knowledge sharing (KS), attitude, intention, behavior, individual characteristics, academia.

JEL classification: D83

Introduction

Because of the rapidly growing challenges and competition, higher education institutions (HEIs) must be as thorough in their strategies to innovation as they are to their research and teaching (Blass and Hayward, 2014; Herbst and Conradie, 2011; Mathew, 2010; Rogers, 2010). Knowledge sharing (KS) is the central means through which the members of an organization can contribute to knowledge application, innovation, and ultimately the competitive advantage of that organization (Elrehail *et al.*, 2018; Yesil, and Dereli, 2013; Lilleoere and Hansen, 2011; Cyr and Choo, 2010; Wang and Noe, 2010; Grant, 1996). KS can positively influence organizational performance through the sharing of both tacit and explicit knowledge, which enters a knowledge creation spiral (Lilleoere and Hansen, 2011; Nonaka and Takeuchi, 1995). The scholarly productivity, teaching effectiveness, and community service performance of a HEI can be effectively enriched when academics effectually communicate, share, utilize their best practice and experience, and create new knowledge (Hormiga *et al.*, 2017; Wang and Noe, 2010; Lin, 2007b; Bock *et al.*, 2005; Ryu *et al.*, 2003; Bock and Kim, 2002; Von Krogh, 2002; Constant *et al.*, 1994).

Nevertheless, KS does not come about easily (Shaari *et al.*, 2014; Bock *et al.*, 2005; Desouza, 2003), and hoarding knowledge could be prevalent in HEIs (Al-Kurdi *et al.*, 2018; Ramayah *et al.*, 2013; Cheng *et al.*, 2009; Seonghee and Boryung, 2008). KS is profoundly dependent on the setting and various personal beliefs, actions, and practices among the individuals involved (Marouf and Khalil, 2015; Lilleoere and Hansen, 2011). In particular, attitude is a potentially influential factor for academics' KS intentions and practices (Chedid *et al.*, 2019; Fauzi *et al.*, 2018; Shaari *et al.*, 2014; Seonghee and Boryung, 2008; Haldin-Herrgard, 2000). Exploring the KS practices of academics and the influential

factors of KS in a specific HEI is therefore imperative to KS enhancement efforts in the given institution.

In a review of the KS literature, Wang and Noe (2010) have identified five research areas, including organizational context, interpersonal and team characteristics, cultural characteristics, individual characteristics, and motivational factors. Also, other researchers (e.g., Voelpel *et al.*, 2005; Ipe, 2003; Carter and Scarbrough, 2001) attribute the failure of knowledge management systems (KMS) to the lack of understanding of how the organizational context, interpersonal context, individual characteristics, and information technology influence KS. As such, individual characteristics may influence whether individuals, such as academics, will choose to share their knowledge (Marouf and Khalil, 2015; Connelly and Kelloway, 2003; Ipe, 2003; Disterer, 2001), and they therefore still warrant further research attention (Wang and Noe, 2010).

However, earlier studies empirically investigating the influence of individual characteristics on KS (e.g., Ergün and Avci, 2018; Kuruppuge *et al.*, 2018; Agyemang, 2016; Tan, 2016; Marouf and Khalil, 2015; Shaari *et al.*, 2014; Mogotsi, *et al.*, 2011; Teh and Yong, 2011; Thomas *et al.*, 2011; Xue *et al.*, 2011; Huang *et al.*, 2009; Lin, 2008; Pangil and Nasrudin, 2008; Behery, 2008; Gratton *et al.*, 2007; Lou *et al.*, 2007; Hsu *et al.*, 2007; Watson and Hewett, 2006; Miller and Karakowsky, 2005; Ojha, 2005; Ye *et al.*, 2005; Wah *et al.*, 2005; Bock *et al.* 2005; Wasko and Faraj 2005; Collins, 2004; Riege, 2005; Taylor, 2004; Connelly and Kelloway, 2003; Zhang and Hiltz, 2003; Sveiby and Simons, 2002; Organ and Ryan, 1995) have produced inconclusive results. To better understand the influence of these characteristics' researchers (e.g., Marouf and Khalil, 2015; Al-Zu'bi, 2011; Wang and Noe, 2010; Tohidinia and Mosakhani, 2010; Hwang, 2008; Matsuo and Easterby-Smith, 2008; Lin, 2007a; Ardichvili *et al.*, 2006) have emphasized the importance of including them in future KS research. Furthermore, KS literature is particularly lacking in evidence on the influence of individual characteristics on KS in HEIs operating in the Middle East.

This study focuses on KS at the individual level, since the extent to which knowledge is shared between individuals influences group and organizational level knowledge (Cabrera and Cabrera, 2005). It is designed to answer two main questions: (1) To what extent do academics at a major Middle Eastern HEI hold favorable KS attitudes, practice KS, and intend to continue sharing knowledge in the future? (2) What influence do the individual characteristics of gender, age, academic field, academic rank, experience in HE, and education level have on

academics' KS attitudes, intentions, and behaviors? The aim of this research is to augment the external/international validity of the findings of earlier relevant KS studies by providing empirical evidence on KS attitude, intention, and behavior from a Middle Eastern HEI. Moreover, this study departs from most of the previous KS studies in that it investigates both the main and interaction effects of individual characteristics on the KS-related variables. As such, this study contributes new empirical evidence that should add to the growing body of knowledge on global KS practices and serve as a foundation for formulating policies and strategies aimed to foster KS in the investigated HEI and similar HEIs.

Background

KS Attitude, Intention, and Behavior

KS is a social behavior, and behavioral theories - for example, Theory of Reasoned Actions (TRA) (Ajzen and Fishbein, 1980; Fishbein and Ajzen, 1975) and Theory of Planned Behavior (TPB) (Ajzen, 1991) - can be used as lenses to explain causal relationships between beliefs, attitudes, intentions, and behaviors. Intention (INT) is stipulated as a function of Attitude (ATT), and Behavior is a function of INT. As such, ATT and INT are potential predictors of an individual's KS behavior (Jolaee *et al.*, 2014; Bock *et al.*, 2005; Ryu *et al.*, 2003).

ATT is comprised of positive or negative appraisals of performing a particular behavior and the consequences of doing so (Ajzen, 1985; Fishbein and Ajzen, 1975). It is linked to behavior through its effect on INT, and it is therefore a potentially influential factor for academics' KS intentions and behaviors (Chedid *et al.*, 2019; Seonghee and Boryung, 2008; Ryu *et al.*, 2007; Lin, 2007b; Bock *et al.*, 2005; Constant *et al.*, 2005; Kwok and Gao, 2005; Bock and Kim. 2002). Academics are expected to form favorable or unfavorable ATTs toward KS when they associate KS behaviors with desirable or undesirable consequences. In addition, INT is a motivational factor and an indication of an individuals inclination to exhibit a given behavior, such as KS (Ajzen, 1980). Nevertheless, having strong KS intentions is not sufficient, as these intentions must be manifested in actual KS practices.

The results of a number of prior KS studies confirm a positive relationship between ATT and the INT to share knowledge (Chedid *et al.*, 2019; Fauzi *et al.*, 2018; Jolaee *et al.*, 2014; Fullwood *et al.*, 2013; Wu and Zhu, 2012; Seonghee and Boryung, 2008; Bock *et al.*, 2005; Ryu *et al.*, 2003). In addition, a smaller number

of prior studies confirm a positive influence of INT on KS behavior (Wu and Zhu, 2012; Reychav and Weisberg, 2010).

Yet, academics may use communication channels (e.g., formal or informal) to exchange their professional knowledge, ideas, and opinions with colleagues. However, a KS channel must be compatible with the media richness of the adopted channel (Rice and Shook, 1990). Moreover, preferences for KS communication channels depend on the type of knowledge that will be shared (Marouf and Khalil, 2015; Cho *et al*., 2007; Zhang and Hiltz, 2003). Types of knowledge such as beliefs and insights, which are more tacit in nature, can be shared more easily through personal (or informal) communication channels with high-level media richness (e.g., in-person communication) than through organizational (or formal) low media richness (e.g., text-only documents) (S'wigon', 2017; Alvesson, 2004; Chua, 2001; Nonaka and Konno, 1998; Rice and Shook, 1990). Tan (2016) notes that academics' KS is positively related to open and face-to-face interactive communication. In this study and based on the types of communication channels used, academics' KS is defined and operationalized into two sections: KS via organizational (formal) channels and KS via personal (informal) communication channels.

The Influence of Individual Characteristics

Individual's characteristics such as age, gender, level of education, job type, and experience are believed to affect an individual's disposition for information and knowledge sharing (Riege, 2005; Connelly and Kelloway, 2003; Sveiby and Simons, 2002; Shoda and Mischel, 1993). These individuals characteristics may influence KS practice directly or indirectly through multiple motivational factors (e.g., beliefs of knowledge ownership, KS culture (norms), perceived benefits and costs, mindset of the organization's leadership, trust, KS attitudes, and KS intention) (Wang and Noe, 2010; Gagné, 2009; Ajzen, 1991). For instance, under controlled motivation, individuals will likely engage in KS practice to gain rewards, avoid punishment, reciprocate, improve one's reputation, or to do the right thing; while under autonomous motivation, individuals will likely engage in KS practice voluntarily because it is enjoyable, personally meaningful, and fits one's value system (Gagné, 2009; Deci and Ryan, 1985, 2000). KS research, however, has focused largely on controlled motivational factors, which probably lead to less positive KS results than autonomous motivational factors (Gagné, 2009; Gagné and Deci, 2005; Ipe, 2003; Cabrera and Cabrera, 2002).

Yet, individuals' motivation to share knowledge may vary depending on their temperaments. As such, the leadership in a particular organization (e.g., Kuwait University) needs to understand the individual characteristics of the potential knowledge sharers (e.g., academics) and the possible influence of these characteristics on KS motivation and behavior to effectively embrace certain motivational factors and develop effective incentives for KS. This is particularly important since the previous KS research has produced inconclusive results; and there exists only limited empirical evidence (e.g., Shaari *et al.*, 2014; Lou *et al.*, 2007) on the effect of the individual characteristics on KS by academics at HEIs in general and by academics at Middle Eastern HEIs in particular. This study bridges this gap by exploring the potential influence of the academics' gender, age, academic field, academic rank, experience at HE, and education level on their KS attitudes, intentions, and behaviors. Figure 1 depicts the theorized influence of the individual characteristics on KS attitude, Intention, and behavior.

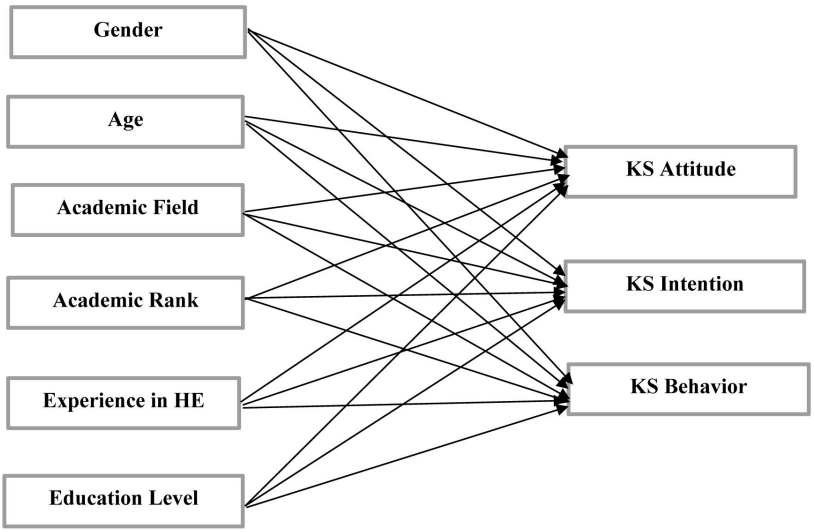

Figure 1: Individual Characteristics Influence on KS Attitude, Intention, and Behavior

1. Gender. Gender is a distinct feature of KS (Miller and Karakowsky, 2005), and is expected to affect KS through its influence on communication style and channel selection (Rehman and Marouf, 2008; Connelly and Kelloway, 2003). Yet, relevant research has produced varied results. Gender was found to influence tacit KS behavior (Pangil and Nasrudin, 2008) and impact feedback seeking

(Miller and Karakowsky, 2005). In addition, female employees were found to exhibit higher KS orientation (Wah *et al.*, 2005) and share less knowledge than their male counterparts (Marouf and Khalil, 2015). Besides, individuals who perceived themselves to be in a minority based on gender were not expected to participate in KS behavior (Ojha, 2005). The effect of altruism on KS was weaker for men than for women, but the effects of courtesy and sportsmanship on KS were weaker for women than for men (Lin, 2008). Male software developers made greater use of a knowledge management system for acquiring and sharing knowledge than their female counterparts (Shaari *et al.*, 2014; Mogotsi, *et al.*, 2011; Xue *et al.*, 2011; Taylor, 2004). Nevertheless, a few researchers (e.g., Behery, 2008;) reported an insignificant effect of gender on KS in different contexts.

2. Age. Age may influence individuals' KS activities via the scope and effectiveness of their social networks (Connelly and Kelloway, 2003). Nevertheless, the relevant research has produced only inconclusive results. For instance, age correlates positively with knowledge awareness (Sveiby and Simons, 2002), gaining experience and sharing knowledge (Collins, 2004), KS within departments (Marouf and Khalil, 2015), failures in cooperation and sharing knowledge at large corporations (Gratton *et al.*, 2007), KS barriers (Riege, 2005), and KS in family businesses (Shaari *et al.*, 2014). However, younger information management instructors were more willing to share knowledge than their older counterparts (Lou *et al.*, 2007), and young lecturers in Malaysia had higher awareness levels of KS than older professors (Shaari *et al.*, 2014). In addition, age had an insignificant effect on team members' KS behavior (Xue *et al.*, 2011), employees' KS (Watson and Hewett, 2006), KS in tertiary education (Wah *et al.*, 2005), and KS among secondary school teachers (Mogotsi, *et al.*, 2011).

3. Academic field. The characteristics of the body of knowledge and cohesiveness of social networks in an academic field may influence KS (Ghabban *et al.*, 2018). Academic fields vary in the rigor of their field knowledge (Storer, 1967). Whereas knowledge in the "hard sciences" fields (e.g., physics) is hierarchical, has a high level of abstraction, and includes closely linked concepts and ideas (De Jong and Ferguson-Hessler, 1996), knowledge in the "soft sciences" fields (e.g., sociology) is less abstracted and the rules governing the relationships among concepts are not so precise or widely held (Storer, 1967). As such, teaching and research activities in a given academic field may stimulate different degrees of social connectedness among the academics in the field. Informal, social networks and collaboration appear to be more important for research and teaching activities in hard sciences than in soft

sciences (Biglan, 1973a, 1973b; Hagstrom, 1964). Besides, an academic field that has a philosophy of sharing and helping others (e.g., medicine) may cultivate more KS awareness to share knowledge than academics in other fields (e.g., business) who are more self-centered and competitive (Shaari *et al.*, 2014).

4. Academic rank. The stage of an individuals profession may influence KS behavior through the scope and effectiveness of his/her social networks (Connelly and Kelloway, 2003). Knowledge self-efficacy - that is, one's beliefs about one's ability to share knowledge (Stone,1974)-may influence academics' KS (Ergün and Avci, 2018; Tan, 2016). Since both knowledge and experience grow with academic rank, senior academics (e.g., professors) are expected to have more self-efficacy and more faith in their ability to share knowledge than junior academics (e.g., assistant professors) (Tan, 2016; Hsu *et al.* 2007; Ye *et al.*, 2005; Bock *et al.*, 2005; Wasko and Faraj, 2005). Senior academics may also act as mentors and are required to share knowledge with their mentees. Junior academics may be more motivated to engage in KS to acquire the knowledge and experience required to advance their teaching and research performance. Lou *et al.* (2007) found positions and titles (i.e., ranks) in a sample of information management instructors to variably influence KS; Shaari *et al.* (2014) noted that professors tend to hoard knowledge, compared to young lecturers, as the professors believe that their own unique knowledge can be a source of power.

5. Experience in higher education. Academics' experience in higher education (HE) may influence their KS attitude, intention, and behavior. Although organizational tenure (i.e., experience) is viewed as a correlate of KS (e.g., Teh and Yong, 2011; Watson and Hewett, 2006; Zhang and Hiltz, 2003), previous research has produced mixed results. Long organizational tenure may negatively impact KS, as individuals with shorter organizational tenure are more likely to share information or knowledge (Mogotsi *et al.*, 2011; Ojha, 2005; Organ and Ryan, 1995). However, veterans could be more capable of engaging in KS practices because they are more self-efficient and have better networks of the right people in the organization than do their inexperienced counterparts (Lou *et al.*, 2007; Connelly and Kelloway, 2003; Sveiby and Simons, 2002). Yet, work experience has an insignificant moderating effect on KS (Wah *et al.*, 2005), an insignificant effect on KS in project management (Marouf and Khalil, 2015), and an insignificant effect on the relation between KS and time pressure coping mechanisms (Thomas *et al.*, 2011).

6. Education level. Since an individuals' education level determines, to a large extent, the scope and quality of their information and knowledge, it may also influence their KS behavior. Boateng and Agyemang (2016) posit that the educational level of

colleagues in an organization may either promote or impede KS. As such, individuals may engage in KS with associates who have the educational shrewdness to give back, or associates who have the requisite education to appreciate or comprehend the shared knowledge. However, the relevant research has produced mixed results. Information management instructors with PhD (Doctorate) degrees contributed more to KS than their counterparts with master's degrees (Lou *et al.*, 2007); individuals who perceived themselves to be marginal based on education were less inclined to engage in KS within software project teams (Ojha, 2005); employees with master's degrees in family businesses shared knowledge more than their counterparts who held lower degrees (Kuruppuge *et al.*, 2018); and educational attainments influenced perceived KS usefulness and ease of use (Huang *et al.*, 2009). Yet, education level had an insignificant effect on KS in a project management context (Marouf and Khalil, 2015).

Methodology

Research Setting and Sampling

The present study is a single case study. The research setting is Kuwait University (KU), which is a comprehensive public Middle Eastern university. It has approximately 1,600 full-time academics teaching approximately 36,000 graduate and undergraduate students in seventeen colleges. This study has adopted a convenience (nonrandom) sampling technique due to the researchers' limited resources, time, and workspace, as well as the unwillingness of a number of the targeted population members to participate (Etikan *et al.*, 2016; Dörnyei, 2007). Full-time academics in the different colleges were invited to participate in the study and fill out the paper survey. A convenience sample, including 207 complete responses (14.5% of the total population of academics) was collected, and analyzed.

Measurement

I. The independent variables in this study comprise the individual characteristics of gender, age, academic field, academic rank, experience in HE, and education level. A single item (question) was used to measure each variable.

II. The dependent variables comprise ATT, INT, KS via organizational channels (KSO), and KS via personal channels (KSP). Each of the dependent variables was operationalized and measured. KSO measures the sharing of knowledge that is mostly explicit and shared via organizational (or formal) channels; KSP measures the sharing of knowledge that is mostly tacit and shared via personal (or informal) channels (Chua, 2001). Based on the extant KS literature, seven items

were adapted to measure KSO and six items were adapted to measure KSP. This study also adapted global (or direct) measures of INT and ATT (Ajzen, 2002), and four items were used to measure each construct (Ajzen, 1985, 2002).

All the items were measured using a 5-point Likert scale, ranging from 1 (“strongly disagree”) to 5 (“strongly agree”). An English-Arabic data collection instrument was drafted and reviewed by three KU academics to corroborate readability. Then, thirty-nine academics from Kuwait University (KU) piloted the instrument, and few minor issues were identified and fixed.

Sample Profile:

As depicted in Table 1, 64% of the respondents are male, 58% are 41 years old or older, 78% are PhD holders, 75% are Kuwaiti nationals, and 54% have 10 or fewer years of experience in HE. In addition, 57% are assistant professors, 25% are associate professors, and 11% are full professors. Social science academics make up the largest number of the academics in the sample (19%), followed by health science academics (17%).

Table 1
Sample Profile (N = 207)

Characteristics	Frequency	Valid %	Cumulative %
	Gender		
Male	124	63.6	63.6
Female	71	36.4	100.0
Not specified	12		
	Age		
30 years or less	14	6.8	6.8
31-40 years	72	35.1	42.0
41-50 years	66	32.2	74.1
51-60 years	28	13.7	87.8
Above 60 years	25	12.2	100.0
Not specified	2		
	Education Level		
PhD	159	77.6	77.6
Masters	30	14.6	92.2
Others	16	7.8	100.0
Not specified	2		

Cont/ Table 1
Sample Profile (N = 207)

Characteristics	Frequency	Valid %	Cumulative %
	Nationality		
Kuwaiti	150	74.6	74.6
Non-Kuwaiti	51	25.4	100.0
Not specified	6		
	Experience in HE		
1-5 years	61	30.7	30.7
6-10 years	46	23.1	53.8
11-15 years	43	21.6	75.4
16-20 years	23	11.6	86.9
More than 20 years	26	13.1	100.0
Not specified	6		
	Academic Rank		
Assistant Professor	118	57.3	57.3
Associate Professor	53	25.7	83.0
Full professor	22	10.7	93.7
Others	13	6.3	100.0
Not specified	1		
	Academic Field		
Business	34	16.4	16.4
Engineering &Technology	19	9.2	25.6
Health Sciences	36	17.4	43,0
Humanities	14	6.8	49.8
Literatures	29	14.0	63.8
Sciences	29	14.0	77.8
Social Sciences	39	18.8	96.6
Not specified	7	3.4	100%

Analysis and Results

We applied factor analysis to decrease the number of variables (items) in the instrument to a lesser number of surrogated variables, to eliminate redundancy between variables, and to reveal any patterns that may exist between the variables that could bring about a new concept. Only the variables that satisfied the

following criteria were used for further analysis: reliability coefficients ($\geqslant 0.70$), factor loadings ($\geqslant 0.50$), extracted variances ($\geqslant 0.50$), and communalities of ($\geqslant 0.50$) (Hair *et al.*, 1998). Table 2 summarizes the results.

Table 2
Factor Analysis Results

Dimensions	Reliability Coefficient	Explained Variance	Factor Loading	Mean	St. Dev.
KS Via Organizational Channels (KSO)	**77.4%**	**69.10%**			
KSO1: I always express ideas and thoughts in the meetings at my university			0.801	4.03	.960
KSO2: I participate fully in the brainstorming sessions and seminars at my university			0.751	3.96	.956
KSO3: I regularly propose problem-solving ideas in the meetings at my university			0.775	4.04	.836
KS Via Personal Channels (KSP)	**72.3%**	**64.75%**			
KSP2: I normally keep my colleagues updated with important departmental and college information through personal conversation			0.713	4.00	.864
KSP5: I usually spend time in personal conversations (e.g., in the office, in cafes, and via telephone calls) to help colleagues with their work-related problems			0.718	3.74	1.01
KSP6: I normally share my experiences with my colleagues through personal conversations to help them avoid troubles			0.819	3.96	.855
KS Attitude (ATT)	**80.1%**	**71.62%**			
ATT2: Sharing knowledge with my colleagues is useful			0.813	4.37	.715
ATT3: Sharing knowledge with my colleagues is pleasant			0.826	4.23	.723
ATT4: Sharing knowledge with my colleagues is valuable to me			0.72	4.24	.730
KS Intention (INT)	**72.9%**	**65.08%**			
INT2: I will share my knowledge at the request of my colleagues in the future			0.739	4.22	.746
INT3: I will share my education and training expertise with my colleagues more effectively in the future			0.783	4.16	.766
INT4: I plan to frequently share my teaching and research experience with my colleagues in the future			0.667	4.21	.694
Overall	**68%**	**70.869%**			

The overall variance explained by the produced factors is 70.87%, and the overall reliability coefficient (Cronbacha) is 0.68. KSO comprises three of the original seven items, and collectively they explain 69% of the variance ($\alpha = 0.77$). KSP includes three of the original six items, which collectively explain 65% of the variance ($\alpha = 0.72$). ATT includes three of the original four items, which collectively explain 72% of the variance ($\alpha = 0.80$). And INT includes three of the original four items, and, collectively, they explain 65% of the variance ($\alpha = 0.73$).

Academics' KS Attitude, Intention, and Behavior

Table 3 illustrates descriptive statistics for the dependent variables. These results answer the first research question about the extent to which the academics hold favorable KS attitudes, practice KS, and intend to continue sharing knowledge in the future. The academics in the sample reportedly hold favorable ATT toward KS (mean = 4.2893, P = 0.000) and intend to share knowledge in the future (INT) (mean = 4.1954, P = 0.000). They also share significant knowledge with colleagues via both organizational (SKO) (mean = 4.0073, P = 0.000) and personal channels (KSP) (mean = 3.9010, P = 0.000).

Table 3
Descriptive Statistics for the Research Variables (N = 207)

The Dependent variables	N	Min	Max	Mean	St. Dev.	P-value*
KS Via Organizational Channels (KSO)	201	1.00	5.00	4.0073	.76594	0.000
KS Via Personal Channels (KSP)	204	1.00	5.00	3.9010	.72888	0.000
KS Attitude (ATT)	199	1.92	5.00	4.2893	.60367	0.000
KS Intention (INT)	202	1.00	5.00	4.1954	.59488	0.000

* The difference from 3 (the midpoint of the scale) is significant at α less than 5%.

Effects of Individual Characteristics

In order to answer the second research question regarding the influence of individual characteristics - gender, age, academic field, academic rank, experience in HE, and education level - on the academics' KS attitudes, intentions, and behaviors, we recoded the independent variables of age, experience in HE, and academic field to include two subgroups in each variable. Age was recoded into younger ($<=$ 40 years old)) and older ($>$ 40 years old) academics. Experience in HE was recoded into less experienced ($<=$ 10 years) and more experienced ($>$ 10 years) academics.

Regarding the academic field, although it can be classified using multidimensional criteria (Biglan, 1973a), the academic fields in the sample were recoded into two subgroups (fields) based on the hard-soft sciences distinction. The first subgroup is the "sciences" group, which includes academics in the hard science fields such as physics, chemistry, and computer sciences. The second subgroup is the "softer" group, which includes fields such as psychology, sociology, and political science.

To evaluate the appropriateness of parametric tests in exploring the influence of individual characteristics, we applied the Kolmogorov-Smirnov non-parametric test to see whether the responses followed the normal behavior. The test results (P-values for KSO, KSP, INT, and ATT are $< = 0.05$) indicate the non-normality of the dependent variable distribution. Nevertheless, we assumed the normality of distribution, since the estimate of the variance in large samples ($N > 50$) is considered unbiased and accurate (Maas and Hox, 2005).

We also used the Box's M test to check the assumption of homogeneity of the variances and covariances across the subgroups in the data set. It tests the null hypothesis that the observed covariance matrices for the dependent variables are equal across groups. The calculated Box's M value is 146.359, with an insignificant F Value of 1.196 ($P = .103$). This result indicates that the covariance matrices are in fact equal. In addition, we calculated the Pearson correlation coefficients to check the multicollinearities among the dependent variables. The calculated correlation coefficients are well below 0.80, the threshold for the existence of multicollinearity (Hair *et al.*, 1998). As such, parametric tests are appropriate for analyzing the data set to assess the influence of individual characteristics on KSO, KSP, INT, and ATT.

We applied MANOVA (multivariate analysis of variance) to explore the main and interaction effects of the individual characteristics. This created linear combinations of the dependent variables and tested whether there were any significant differences across the levels of the independent variables on these linear combinations. Table 4 presents a summary of the main effects of the individual characteristics, and Table 5 presents a summary of the two-way interaction effects of these variables.

The results displayed in Table 4 suggest that experience in HE does not have a significant main effect on any of the dependent variables. Nevertheless, gender has a significant main effect on KSP ($P = .003$) and INT ($P = .005$); age has a significant main effect on KSO ($P = .010$) and KSP ($P = .010$); academic field has a significant main effect on ATT ($P = .047$); academic rank has a significant main effect on KSP ($P = .019$); and education level has a significant main effect on KSP ($P = .004$).

Table 4
The Main Effects of the Individual Characteristics

Individual Characteristics	Measurements	KSO		KSP		INT		ATT	
		Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Gender	Male (N = 87)	3.993	.716	3.891	.752	4.155	.599	4.300	.620
	Female (N = 49)	4.010	.868	3.919	.687	4.274	.561	4.297	.594
Df		1		1		1		1	
F-value		2.453		9.455		8.174		3.290	
P-values		.121		003		.005		.073	
Age	< = 40 years (N = 61)	3.961	.801	3.787	.795	4.119	.664	4.297	.701
	> 40 years (N = 75)	4.049	.745	3.987	.671	4.245	.538	4.280	.528
Df		1		1		1		1	
F-value		6.838		6.825		.616		.959	
P-values		.010		.010		.435		.330	
Academic Field	Hard Science (N = 68)	3.903	.807	3.858	.629	4.210	.535	4.288	.647
	Soft Sciences (N = 68)	4.015	.764	3.943	.806	4.095	.661	4.292	.567
Df		1		1		1		1	
F-value		.005		.927		1.052		4.045	
P-values		.945		.338		.308		.047	
Academic Rank	Assistant Prof. (N = 76)	4.010	.805	3.983	.659	4.186	.641	4.276	.644
	Associate Prof. (N = 40)	4.090	.596	3.796	.861	4.260	.502	4.311	.565
	Professor (N = 17)	4.112	.702	3.998	.501	4.180	.472	4.331	.449
Df		2		2		2		2	
F-value		.851		4.157		.230		.427	
P-values		.430		.019		.795		.653	
Experience in HE	< = 10 years (N = 71)	4.090	.655	3.870	.639	4.168	.572	4.306	.633
	> 10 years (N = 65)	3.965	.821	3.966	.764	4.232	.602	4.266	.561
Df		1		1		1		1	
F-value		.791		1.358		1.439		.796	
P-values		.376		.247		.233		.375	
Education	PhD (N = 118)	4.106	.628	3.983	.663	4.205	.525	4.330	.526
	Masters or equivalent (N = 18)	3.714	1.051	3.645	.882	4.165	.796	4.181	.7893
Df		1		1		1		1	
F-value		8.796		.011		.012		2.819	
P-values		.004		.914		.914		.096	

As depicted in Table 5, the individual characteristics have a number of significant interaction effects on the dependent variables. Academic field and age have a significant interaction effect on KSO (P = .054); academic rank and age have a significant interaction effect on KSP (P = 036); gender and age have a significant interaction effect on KSP (P = .036); and age and education have a significant interaction effect on KSO (P = .018). In addition, experience in HE and education level have a significant interaction effect on KSP (P = .055) and INT (P = .040). These results are discussed next.

Table 5
The Interaction Effects of the Individual Characteristics

Source	Dependent Variable	Df	F	Sig.
Academic field/Age	KSO	1	3.804	.054
Academic rank/Age	KSP	1	4.516	.036
Gender/Age	KSP	1	4.461	.037
Age/Education	KSO	1	5.805	.018
Experience in HE/Education	KSP	1	3.761	.055
Experience in HE/Education	INT	1	4.345	.040

Discussion

This study aimed to explore (1) the extent to which academics at the investigated Middle Eastern HEI hold favorable KS attitudes, practice KS, and intend to continue sharing knowledge in the future and (2) the influence that the individual characteristics of gender, age, academic field, academic rank, experience in HE, and education level have on academics' KS attitudes, intentions, and behaviors.

As to the academics' KS attitudes, intentions, and behaviors, academics in the investigated HEI hold favorable attitudes (ATTs) toward knowledge sharing (KS) and believe that sharing knowledge with colleagues is pleasant, useful, and valuable. They also embrace strong intentions (INTs) to share knowledge, as they voiced willingness to share personal knowledge, expertise, and experience with colleagues in the future. Their positive ATTs toward KS are manifested through sharing significant knowledge with colleagues in the workplace. As such, and contrary to the widely held belief that individuals typically hoard knowledge (e.g., Al-Kurdi *et al.*, 2018; Ramayah *et al.*, 2013; Cheng *et al.*, 2009; Seonghee and

Boryung, 2008), academics in the investigated HEI largely engage in KS activities. They use organizational (formal) channels (e.g., meetings, seminars, brainstorming sessions, and the institutional e-mail system) to share mostly explicit knowledge by frequently asking and answering questions, as well as sharing work-related success and failure stories, departmental and college information, work-related problems, and problem-solving ideas and thoughts.

Academics also use personal (informal) communication channels (e.g., personal conversations, social meetings in cafes and restaurants, telephone conversations, and chats) to share mostly tacit knowledge by sharing personal experience, supporting less-experienced colleagues, establishing long-term coaching relationships with junior colleagues, and sharing passion and excitement about interesting subjects. Yet, they tend to prefer formal, organizational channels for KS over informal, personal channels. This result confirms Zhang and Hiltz's (2003) assertion that individuals generally prefer formal interactions for KS and calls into question Swigon's (2017) finding of Polish academics' preference of using personal channels (e.g., face-to-face) for KS.

Regarding the influence of the individuals' characteristics, KS behaviors, INTs, and ATTs of the academics vary depending on their individual characteristics. Experienced academics were expected to share more knowledge because they are more self-sufficient and have better networks of the right colleagues than do inexperienced academics. Yet, experience influences none of the KS related variables, a result that is inconsistent with the views on and findings of experience as a possible KS influencer (e.g., Marouf and Khalil, 2015; Teh and Yong, 2011; Thomas *et al.*, 2011; Riege, 2005; Ojha, 2005; Wah *et al.*, 2005; Connelly and Kelloway, 2003; Sveiby and Simons, 2002). This insignificant result may be attributed to the fact that the lines between the experienced and inexperienced respondents in this study, as well as in other similar studies, are arbitrarily drawn. As such, more experienced respondents in one study could be considered less experienced respondents in another study. Another plausible reason for this result is that the effect of experience could be confounded by other individual characteristics correlates, such as age, academic rank, and education level.

Nonetheless, the minority female academics appear to share more knowledge with colleagues via personal communication channels and have stronger INTs to share knowledge in the future than do their male colleagues. Although this finding agrees with the findings of a number of previous studies (e.g., Lin, 2008; Wah *et al.*, 2005), it is somewhat surprising. Female academics may be hesitant to share

knowledge with colleagues (e.g., Taylor, 2004; Connelly and Kelloway, 2003), and they are expected to be more reluctant to share knowledge with male colleagues using informal communication channels in a conservative Arab/Islamic culture (Marouf and Khalil, 2015). The female academics in our sample may be under pressure to acquire the knowledge and experience required to advance their scholarly productivity, which is likely to be lower than that of their male counterparts (Khalil, 2018; Angaiz 2015; Creswell 1985).

Connelly and Kelloway (2003) suggest that age influences KS practices through the scope and effectiveness of social networks, and older academics in this study share more knowledge via organizational and personal channels than do their counterparts. A further analysis revealed that age correlates positively with academic rank and experience in HE. Older academics tend to hold higher academic ranks (e.g., full professorship) and have higher levels of HE experience. Consequently, they tend to possess more information and knowledge, have more confidence of the value of their knowledge, have wider social networks, perceive lower risk in sharing their knowledge, and therefore comfortably share more knowledge than do younger academics. In addition, young academics may be very much occupied by a large amount of teaching work and try hard to improve the quality of their work (Shaari *et al*., 2014), concerns that could leave them with less time to share knowledge with colleagues. This positive relation between age and KS agrees with the results of a number of prior investigations (e.g., Kuruppuge *et al*., 2018; Marouf and Khalil, 2015; Gratton *et al*., 2007; Riege, 2005; Collins, 2004; Sveiby and Simons, 2002); and disagrees with the results of Shaari *et al*. (2014) and Lou *et al*. (2007).

Contrary to expectation, academics in the soft sciences hold more favorable attitudes toward KS than do academics in the hard sciences. In the soft sciences, knowledge is less abstracted (Storer, 1967) and multiple theories or models are likely to simultaneously exist. Academics in the soft sciences appear to have a strong drive to engage in KS (e.g., discussions, debates, and/or collaborative research with colleagues) to explore and analyze differing knowledge and artifacts. These activities may stimulate robust favorable attitudes toward KS, since KS assists them to reaffirm, or comfortably change, their personal knowledge and views regarding controversial matters in their field of study. In addition, some academics in the soft sciences could have a philosophy of sharing and helping others (e.g., medicine), a philosophy that may cultivate more favorable ATT toward KS (Shaari *et al*., 2014). This result agrees with Lilleoere and Hansen's

(2011) finding that scientists and laboratory technicians in a pharmaceutical company had diverse opinions and practices that help them to engage in KS, and supports Biglan's (1973b) argument that studies of academic institutions should not lump together data from different academic fields.

Moreover, assistant professors share more knowledge via informal, personal channels than do associate professors, and full professors share more knowledge via personal channels than do assistant and associate professors. In their early tenure, assistant professors appear to be motivated to engage in KS because they want to acquire knowledge and experience that could help them advance their teaching and research performance. Once they are promoted to the associate professor level, their research activities seem to decelerate and their drive to acquire and share knowledge could slow down. When they later become full professors, they tend to have more effective social networks and have more faith in their ability to share knowledge than their junior colleagues (Tan, 2016; Hsu *et al.* 2007). This result supports the view that the positions and titles (i.e., ranks) variably influence KS (Lou *et al.*, 2007), and does not support Shaari *et. al's.* (2014) conclusion that senior academics tend to hoard knowledge compared to junior academics.

As to the education level influence, the PhD holders share more knowledge than do the master's holders. The PhD holders in our sample are full-time faculty members, while the master's holders are mainly teaching assistants (TAs) whose main responsibilities include tutorials and assignments grading. As such, these tasks may not require the TAs to engage in as many KS practices, compared to the other academics' (including assistant, associate, and full professors) teaching, research, and community service tasks. In addition, academics may feel more comfortable sharing knowledge with colleagues who have the educational background that enables them to share in return or who have the requisite education to comprehend the shared knowledge (Boateng and Agyemang, 2016). This result agrees with a number of earlier investigations (Kuruppuge *et al.*, 2018; Huang *et al.*, 2009; Lou *et al.*, 2007; Ojha, 2005) which reported a positive correlation between education level and KS practices.

Along with the main effects, the individual characteristics of academics contribute a number of interesting interaction effects exhibited in Table (5) and the Figures in Appendix A. These interaction effects suggest that the directional influence of a particular individual characteristic depends on its interaction with the other characteristics. Obviously, age contributes the most interaction effects.

However, the directional effects of age are contingent on the other interacting characteristics. Although older academics generally share more knowledge via organizational channels than do their younger counterparts, the extent of that sharing varies across the academic fields. Older academics in the hard sciences share more knowledge than do older academics in the soft sciences; but younger academics in the soft sciences share more knowledge than do younger academics in the hard sciences. As such, the characteristics of the academic field (e.g., knowledge type, teaching and research methods, and socialization processes) affect the direction of age influence on KS via organizational channels.

Similarly, although full professors generally share more knowledge via personal channels than do associate professors, older associate professors share more knowledge via the same channels than do older full professors (Figure 2). When associate professors get older, promotion to full professorship may become more urgent, which could be a strong motivator to engage in more scholarly activities and further participate in KS practice. In addition, while female academics generally share more knowledge via personal channels than do male academics, older male academics share more knowledge via personal channels than do older female academics. As they get older, female academics seem to prefer using organizational channels over personal channels to share knowledge with colleagues. Moreover, age influences the effect of education level (PhD or master's) on KS via organizational channels. Although PhD holders generally share more knowledge with colleagues than do master's holders, older master's holders share more knowledge than do older PhD holders. As academics with master's degrees, who are mostly teaching assistants (TAs), get older, they tend to accumulate more teaching-related knowledge and experience that they can confidently share with other TAs and academics in the same academic field.

Although experience in HE has no main effects, experience in HE/education has interaction effects on knowledge sharing via personal channels (KSP) and intention (INT). The more experienced PhD holders share more knowledge via personal channels and have a higher intention to share knowledge in the future than do the less experienced PhD holders. However, the less experienced masters holders, who are mostly TAs, share more knowledge via personal channels and have a higher intention to share knowledge in the future than do the more experienced master's holders. This result suggests that experienced PhD holders, who are likely to be full professors, may believe that the personal (or informal) channels are more appropriate for sharing their tacit knowledge (i.e., personal

experience) with colleagues than organizational (or formal) channels. To the contrary, the experienced master's holders (or TAs) seem to believe that the organizational (or formal) channels are more appropriate for sharing their personal knowledge, which could be mostly explicit and documented knowledge, than are the personal (or informal) channels.

In sum, although variable depending on their individual characteristics, academics appear to believe that information and knowledge that is advantageous to them (i.e., contributors) would also likely be advantageous to their colleagues (i.e., receivers). This finding is therefore in disagreement with the general belief that the more value knowledge has, the more likely individuals are to hoard, or to only partially share, knowledge in order to exercise power and sustain their competitive advantage (Ford and Staples, 2010). One plausible reason for this finding is that competition among academics in the investigated HEI is insignificant, since job security is guaranteed for the majority of them (i.e., Kuwaiti nationals).

Implications

The findings of this study have relevant theoretical and managerial contributions.

Contributions to the Theory

Thus far, the KS research field lacks a rigorous, acceptable theory that explain KS between individuals and its determinants. Instead, KS researchers have adapted research models grounded in theories and models that exist in other research fields, such as theory of reasoned action (Ajzen and Fishbein, 1980), theory of planned behavior (Ajzen, 1991), and self-determination theory (Deci and Ryan, 1985). The probable influences of personality characteristics in these models have been hypothesized and tested individually, and their probable interaction effects on KS motivation and behavior have been mostly overlooked.

This study provides novel evidence that the influence of a particular individual characteristic (e.g., age) on KS variables - attitude (ATT), intention (INT), KS via personal channels (KSP), and KS via organizational channels (KSO) - could be misleading, since that influence is contingent on the way that the particular characteristics interact with other individual characteristics. Therefore, research models (e.g., Gagnés (2009) model of knowledge-sharing motivation) should incorporate constructs and hypotheses predicting the interaction effects of multiple individuals characteristics on KS motivation and behavior factors. The

accumulation of this line of research findings could contribute to developing contingency models that better explain the effect of individual's characteristics on KS motivation and practice.

In addition, the findings of this study add to the developing body of knowledge on global KS practices and the effect of individual characteristics on knowledge sharing ATTs, INTs, and behavior. They also support the general belief that KS ATTs, INTs, and behaviors are essentially contextual and should be recognized, evaluated, and managed as such. Further multicultural KS studies are needed to identify tenets or standards regarding KS behavior and the effects of individual characteristics that could be universally applicable (Marouf and Khalil, 2015).

Contributions to the Practice

The findings of this study furnish a proper groundwork for decisions and plans to foster knowledge sharing ATTs, ATTs, and behaviors at the investigated HEI, as well as at similar HEIs. Academics in the investigated HEI hold favorable knowledge sharing ATTs and INTs, and knowledge is, to a convincing extent, shared and will be shared among academics in the future. Yet, the policymakers' acknowledgement of the influence of individual characteristics, individually and collectively, on knowledge sharing ATTs, INTs, and behaviors is essential for actions aiming to boost KS among academics. Policymakers should be mindful of these diversities, which is a requirement for efforts aimed to enhance KS (Marouf and Khalil, 2015).

Besides, in HEIs such as the one investigated in this study, academics assume extra roles by participating in KS behaviors, which are not explicit parts of their job descriptions, but are rather a behavioral manifestation of collegiality (Desselle and Zgarrick, 2020; Pei-Lee and Sun, 2012). Policymakers must therefore recognize that the harder the KS task is, the more important is the quality of KS motivation. They should convey a clear message to academics that reacting to KS challenges and barriers with fear or avoidance (i.e., with a fixed mindset) will weaken the potential to grow through KS (Gagné, 2009; Dweck, 2007). Through polices and strategies, the message to academics should be that they are developing individuals and the administration is interested in developing their KS self-efficacy.

Also, policy makers should consider that KS is a practice that should go above and beyond volunteerism and become a team-oriented attitude toward helping colleagues (Desselle and Zgarrick, 2020), and policy makers should develop a common strategy for KS and establish an effective reward system to measure and

reward the sharing of personal knowledge and experience among academics within and across academic departments. The performance evaluation system should include KS as one performance criterion, emphasize performance development rather than performance evaluation, and apply autonomous (noncontrolling) rewards (Cabrera and Cabrera, 2005).

Moreover, academics will be willing to take part in more KS practices only if they continue to maintain favorable ATTs toward such a behavior. Positive and negative KS incentives should be established. Promotion and contract renewal requirements should be amended to require, assess, and evaluate the candidates' contributions to KS for purposes of personnel action. Administrator and faculty job descriptions should also be updated to emphasize the importance of their roles in developing and sustaining an organizational climate and culture that are favorable to KS. That culture (or norms) should encourage and reward the sharing of personal knowledge and promote beliefs that engaging in KS is interesting, enjoyable, meaningful, and fits one's value system (Gagné, 2009; Deci and Ryan, 1985, 2000).

Lastly, prudently planned and implemented meetings and workshops are needed in order to increase academics' awareness of the importance of KS, supplement their KS skills, and teach them, especially the junior academics, that their personal knowledge is valued (Marouf and Khalil, 2015; Khalil and Shea, 2012; Gagné, 2009). Academics act according to their attitudes toward what they can do and what the expected consequences are (Dweck, 2007), and actions aiming to enhance their sense of KS efficacy should ensure that the appropriate communication channels, especially socially-oriented ones, will be available and effectively utilized in KS.

Limitations and Future Research

The findings of this study must be carefully construed due to a number of limitations. First, the findings are derived from a convenience sample drawn from one Middle Eastern HEI, and they must be cautiously generalized (Etikan *et al.*, 2016) and used to explain comparable phenomena beyond the investigated organization. Future replications of this study using random samples from other HEIs operating in the Middle East and in other regions are needed to substantiate and validate our findings.

Second, the outcomes of KS via organizational and personal channels are variable in this study. However, individuals generally tend to overestimate their

readiness to perform socially desirable behaviors such as KS. It is therefore likely that the academics in this study over-reported their KS practice, which could confound the results of this study. In the future, similar studies should attempt to reduce the chances of this phenomenon by using appeals to honesty, promises of confidentiality, and demonstrable anonymity (Nancarrow *et al.* 2001). Third, the adapted measurements of KS via organizational and personal channels are self-reported surrogate measures (Browen and Wiersema, 1999). It is, however, unclear whether the items used in the data collection instrument properly captured KS behaviors in the investigated institution. Future studies should therefore adopt direct, objective measurements to measure KS practices and use the results to verify the reliability and validity of the perceptual measurements used in this study.

Fourth, the findings of this study were derived from a one-time, cross-sectional data set. Therefore, they may have place and time-specific components (Marouf and Khalil, 2015) that could vary across HEIs and over time. Future investigations should therefore adopt and analyze longitudinal data sets to better identify and explain KS practices and their individual and environmental determinants in the investigated institution and in other similar institutions.

Lastly, this study addressed KS only among academics in the investigated HEI. It, therefore, provides no information on KS behavior among staff, administrators, and students, and the effect of individual characteristics on that behavior. Future studies may consider examining the same research variables using different groups in the same institution and compare the findings with this study findings.

Conclusions

HEIs must constantly offer innovative products and service to prosper in unstable operating environments, and knowledge sharing (KS) is an antecedent of innovation (Elrehail *et al.*, 2018; Lilleoere and Hansen, 2011; Cyr and Choo, 2010). Yet, KS behaviors may well fluctuate across organizations and cultures. This study investigated KS at a Middle Eastern HEI, as well as the influence that the individual characteristics of the academics could have on their KS attitudes, intentions, and behaviors.

The analyses noticed a number of noteworthy findings. Contrary to the common belief that KS is not a natural act (e.g., Al-Kurdi *et al.*, 2018; Ramayah *et al.*, 2013; Cheng *et al.*, 2009; Seonghee and Boryung, 2008; Desouza, 2003), academics in the investigated institution embrace favorable attitudes toward KS, demonstrate strong intentions to share knowledge in the future, and practice

significant KS with colleagues via organizational and personal channels. Nevertheless, the academics' KS behaviors, intentions, and attitudes vary depending on the main and interaction effects of their gender, age, academic field, academic rank, experience in HE, and education level.

The findings of this study substantiate the growing recognition of the importance of individual characteristics on KS attitudes, intentions, and behavior. These findings, along with the findings of previous relevant research, suggest that KS practice is contextual and depends on time and place. Since the influence of a particular individual characteristic on KS motivation and behavior could be deceptive, future investigations should propose and test hypotheses predicting the interaction effects of multiple individual's characteristics on KS motivation and behavior. In addition, academics in the investigated HEI appear to be sufficiently motivated and do engage in significant KS practice. However, these academics can share knowledge more effectively if the leadership in the institution, through policies and strategies, inform them that they are intelligent individuals with a growth mindset (Dweck, 2007) and their personal knowledge is valuable and crucial to the institutions innovation and performance (Gagné, 2009).

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APPENDIX A

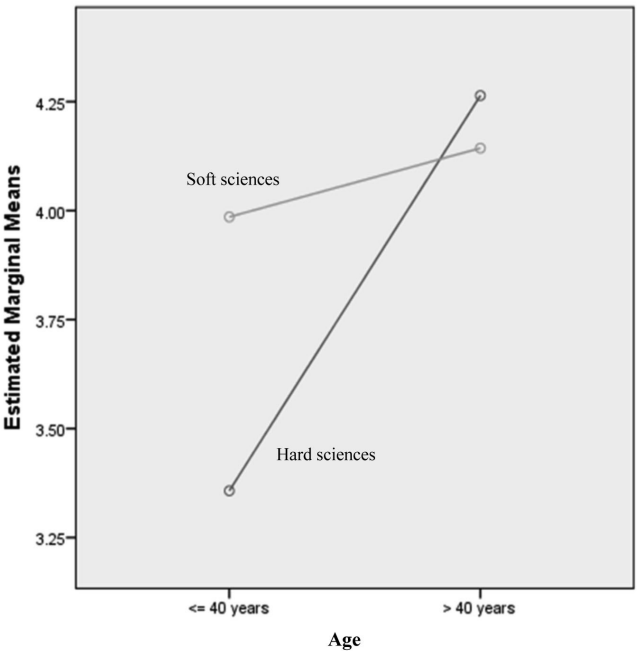

Figure 1: The Interaction Effect of Academic Field/Age on KSO

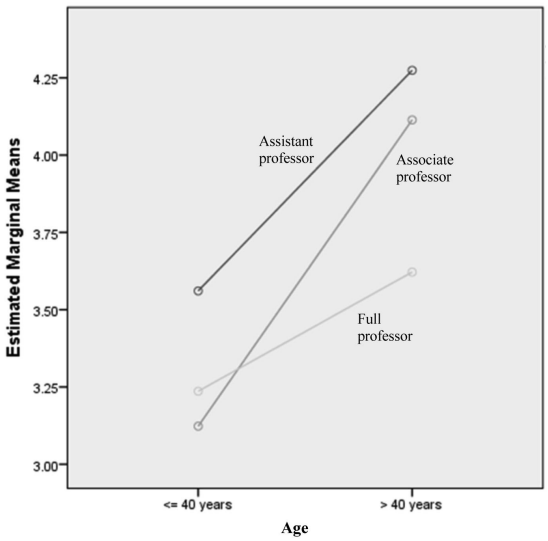

Figure 2: The Interaction Effect of Academic rank/Age on KSI

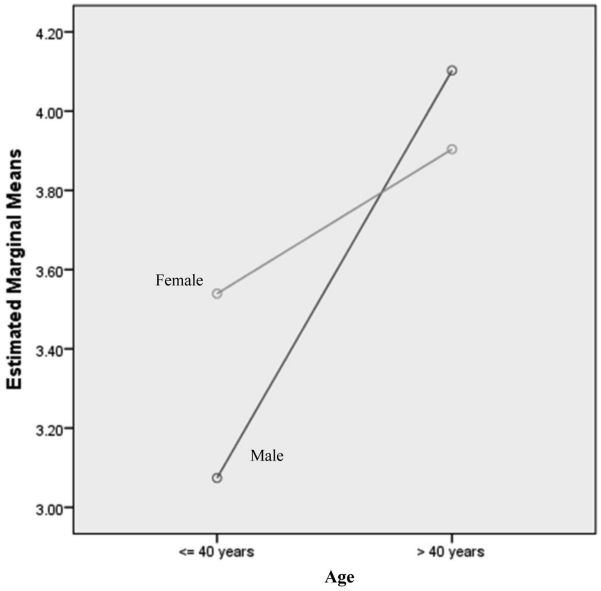

Figure 3: The Interaction Effect of Gender/Age on KSI

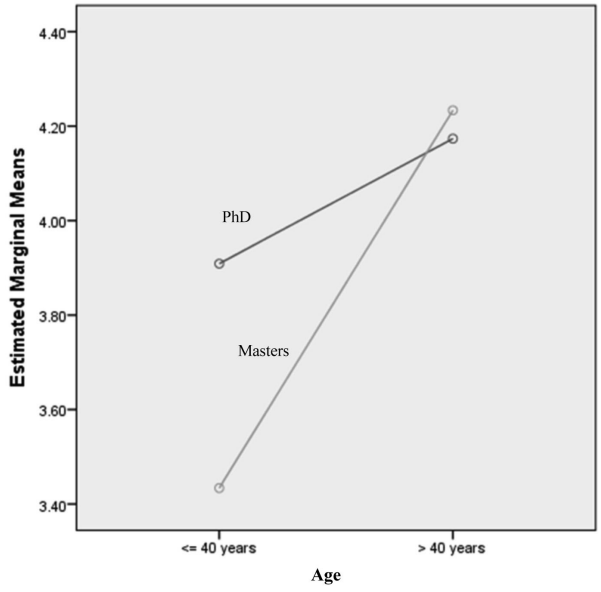

Figure 4: The Interaction Effect of Age/Education on KSO

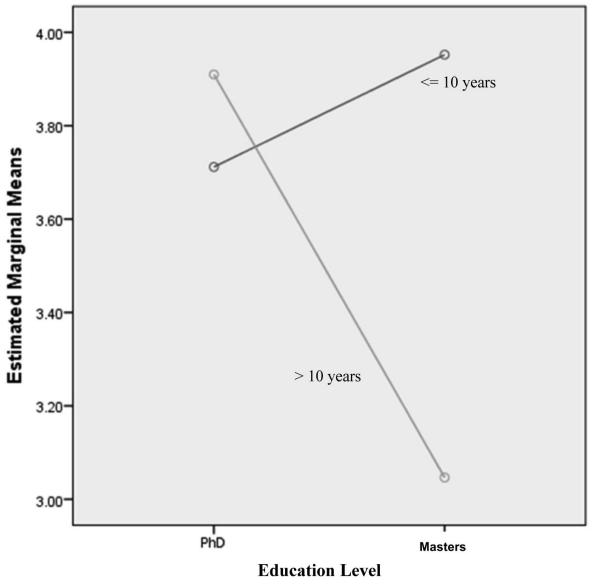

Figure 5: The Interaction Effect of Experience/Education on KSI

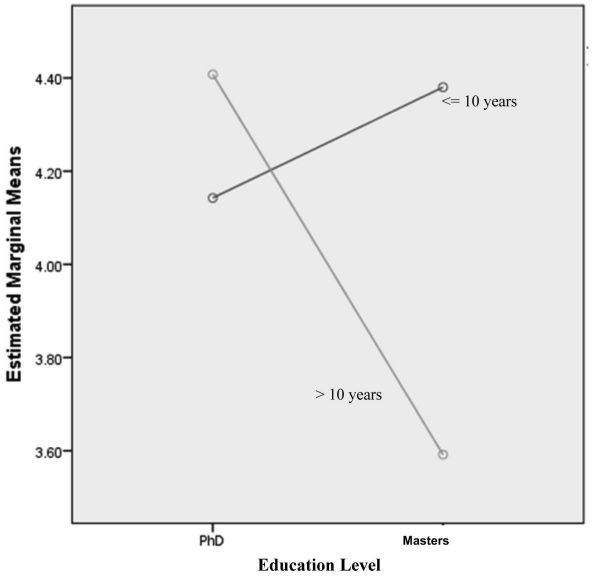

Figure 6: The Interaction Effect of Experience/Education on INT

تأثير الخصائص الفردية على توجهات تبادل المعرفة ونواياها وسلوكياتها لدى الأكاديميين

عمر خليل جامعة الكويت
ليلى معروف جامعة الكويت
نادية خليل جامعة ماساتشوستس في دارتموث

هدف الدراسة: تعد معرفة ممارسات مشاركة المعرفة (Knowledge Sharing) والعوامل التي يمكن أن تؤثر عليها أمراً حيوياً لجهود تعزيز مشاركة المعرفة في مؤسسات التعليم العالي. هدفت هذه الدراسة إلى الإجابة عن سؤالين رئيسين: (1) إلى أي مدى يحمل الأكاديميون في إحدى مؤسسات التعليم العالي الرائدة في الشرق الأوسط اتجاهات (Attitudes) مواتية تجاه مشاركة المعرفة، ويمارسون فعلاً هذه المشاركة، ويعتزمون مواصلة مشاركة المعرفة في المستقبل؟ (2) ما تأثير الخصائص الفردية، متمثلة في الجنس والعمر والمجال الأكاديمي والرتبة الأكاديمية والخبرة في التعليم العالي ومستوى التعليم، على اتجاهات الأكاديميين ونواياهم وسلوكياتهم المتعلقة بمشاركة المعرفة.

تصميم/منهجية/طريقة الدراسة: استخدمت الدراسة الحالية أسلوب دراسة الحالات بالتطبيق على جامعة الكويت؛ بوصفها إحدى مؤسسات التعليم العالي الرائدة في الشرق الأوسط. وصممت استبانة بكل من اللغتين العربية والإنجليزية، واستخدمت لجمع بيانات الدراسة من أعضاء الهيئة الأكاديمية بالجامعة. تحتوي الاستبانة على سؤال واحد لقياس كل من الخصائص الفردية، وأسئلة متعددة لقياس كل من التوجهات تجاه مشاركة المعرفة وممارسات المشاركة الفعلية ونوايا المشاركة في المستقبل.

عينة الدراسة وبياناتها: وزعت الاستبانة على أعضاء الهيئة الأكاديمية في مختلف الكليات، وجمعت 207 استجابات كاملة، وتبلغ نسبة هذه العينة 14.5% من إجمالي عدد الأكاديميين بالجامعة. وللإجابة عن سؤالي الدراسة، عولجت البيانات إحصائياً باستخدام الإحصاء الوصفي وتحليل العوامل (Factor analysis) وتحليل التباين متعدد المتغيرات (MANOVA).

نتائج الدراسة: أظهرت نتائج التحليل الإحصائي أن لدى الأكاديميين المشاركين في الدراسة توجهات مواتية تجاه مشاركة المعرفة مع زملائهم، ويشاركون المعرفة مع زملائهم عبر قنوات الاتصال التنظيمية والشخصية، ويعتزمون الاستمرار في مشاركة المعرفة في المستقبل. وبينت النتائج أيضاً أن الخصائص الفردية المتمثلة في الجنس والعمر والمجال الأكاديمي والمرتبة الأكاديمية والخبرة والمستوى التعليمي، لها تأثيرات فردية وتفاعلية متفاوتة على اتجاهات الأكاديميين تجاه مشاركة المعرفة، وممارسة المشاركة، ونوايا المشاركة في المستقبل.

أصالة الدراسة: تقدم هذه الدراسة معلومات جديدة عن توجهات الأكاديميين ونواياهم وسلوكياتهم، بخصوص مشاركة المعرفة مع زملائهم في إحدى مؤسسات التعليم العالي الشرق الأوسطية (جامعة الكويت)، بالإضافة إلى تأثير عدد من الخصائص الفردية على هذه التوجهات

والنوايا والسلوكيات. وخلافاً لنتائج الدراسات المماثلة السابقة، تؤكد نتائج هذه الدراسة أن تأثير كل من الخصائص الفردية غالباً ما يكون مرهوناً بتفاعلاتها مع الخصائص الأخرى؛ ومن ثم يجب تفسير التأثير الفردي لكل خصيصة على مشاركة المعرفة بشيء من الحذر.

حدود الدراسة وتطبيقاتها: يجب تفسير نتائج هذه الدراسة ومحاولة تعميمها على مؤسسات أخرى في ضوء محدداتها، التي ترجع إلى أن هذه النتائج اعتمدت على بيانات عن الأكاديميين العاملين في مؤسسة تعليم عالٍ واحدة، وتم جمعها في نقطة زمنية واحدة. ومع ذلك، تمثل هذه النتائج إضافة مهمة إلى البناء المعرفي المتنامي حول توجهات مشاركة المعرفة ونواياها وممارساتها، وتأثير الخصائص الفردية عليها. كما أنها توفر أساساً ملائماً لصياغة سياسات تهدف إلى تعزيز فعالية مشاركة المعرفة بين الأكاديميين في مؤسسة التعليم العالي المدروسة وغيرها من مؤسسات التعليم العالي المماثلة.

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