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Mediating Effects of Subjective Norms on the Relationship between Career Advancement and Job Characteristics and Knowledge Sharing Behavior among Tanzanian Healthcare Professionals

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Abstract: This paper intends to examine the mediating effects of subjective norms on the relationship between career advancement and job characteristics and knowledge sharing behavior. Based on the social exchange theory, we establish a research model which contains job and organizational factors. We distributed 650 questionnaires, but only 439 questionnaires were returned and usable. The hypotheses were tested using Partial Least Squares Structural Equation Modeling (PLS-SEM). The study examines knowledge sharing behavior and its determinants. The results reveal that career advancement, job characteristics and subjective norms are positively and significantly related to knowledge sharing behavior. The findings depict that subjective norms have a partial positive and significant mediating effect on knowledge sharing behavior. This paper intends to identify knowledge sharing behavior and its determinants in Tanzanian healthcare institutions and among healthcare professionals. This is because there are only a few such studies in the context of Tanzania; therefore, this study offers a theoretical foundation for future studies and practical implications for administrators and practitioners.

Keywords: knowledge sharing behavior; Tanzania

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Introduction

Globally, the tremendous movement of healthcare professionals from rural to urban areas is generally regarded as a local brain drain (Shemdoe et al. 2016). The problem can be found in every country in the world, irrespective of the state of the country's economy and the level of development, as well as its healthcare system. However, the problem is deemed to be extreme in less developed countries like Tanzania (Araújo and Maeda 2013). There are numerous factors that lead healthcare professionals to move from rural to urban areas. These include poor economic conditions and the preferences of the healthcare professionals (World Health Organization 2010).

In Tanzania, in the rural areas, this brain drain problem, which involves the movement of healthcare professionals, is very pronounced (Prytherch et al. 2012). Such a massive movement of healthcare professionals incurs extra costs for the government, including replacement and training costs. It also leads to the tremendous shortage of skilled and knowledgeable healthcare professionals who can help to treat diseases (Zurn et al. 2005). In addition, the rural areas face a dearth of medical skills (Rockers et al. 2012), which in turn, is detrimental to knowledge sharing behavior among healthcare professionals (Munga and Mæstad 2009).

It has been reported that there is an uneven distribution of healthcare professionals in the United Republic of Tanzania, whereby 69 percent of healthcare professionals work in urban areas; while only 39 percent work in rural areas (World Health Organization (WHO) 2013). It is noted that the low percentage of rural healthcare professionals is caused by the brain drain from the rural to the urban areas (Juma et al. 2012).

Moreover, it has been documented that the level of knowledge sharing behavior among healthcare workers is acutely low, compared to other sectors, due to the absence of interrelated medical practices and a lack of common medical training among doctors and nurses (Pizzi 2009; Zhou and Nunes 2012).

Furthermore, Tanzanian public healthcare institutions have been performing awfully, largely because of healthcare profession related performance problems. The problem of poor performance in the healthcare sector has been a topic of substantial discussions (Mboera et al. 2007). Despite massive investment in training healthcare professionals and infrastructure development, and related expensive expenditure, running healthcare institutions are facing challenges in achieving the quality delivery of healthcare services. The Tanzanian public healthcare institutions have experienced failures in their performance since late 1967, during the nationalization of the sector, when the government of Tanzania acquired complete control of all the social-economic sectors (Ngowi 2009). Previous studies have portrayed that the present managements' abilities to install a culture of sharing knowledge, skills, favorable medical job characteristics, and motivation among their healthcare professionals are totally inadequate to overcome the performance challenges of the various Tanzanian healthcare institutions, especially the public hospitals (Kwesigabo et al. 2012; Laki 2008; Leshabari et al. 2008; Norbert and Lwoga 2013). In fact, performing organizational knowledge sharing behavior by healthcare professionals could be an important remedy for improving performance and effectiveness in the Tanzanian public healthcare institutions. Literature has provided support for the role of knowledge sharing behavior in im-

proving the effective running of organizations (Chen et al. 2008; Huang et al. 2013; Kim andKo 2014; Su, Ahlstrom et al. 2013). Research has also shown that knowledge sharing behavior has no relationship to counterproductive work behavior (Kim, Newby-Bennet and Song 2012), which means that an individual with high levels of knowledge sharing behavior will not show any deviant behavior that brings a negative impact to either the service delivery or production. Thus, ineffective public healthcare institutions are expected to improve their knowledge sharing behavior and performance when these institutions install and practice the concepts of career advancement, and job characteristics, and emphasize the development of subjective norms among their healthcare professionals.

Despite the numerous problems and limited knowledge sharing behavior in healthcare institutions, there are inadequate studies on knowledge sharing behavior, particularly in the healthcare sector (Hansen and Avital 2005; Kimand Lee 2013a). Therefore, the present study intends to fill the research gap by examining the mediating effect of subjective norms on the relationship between career advancement and job characteristics and knowledge sharing behavior. This study contributes to the prevailing body of knowledge by providing empirical support to the role of career advancement and job characteristics by extending extenuating knowledge sharing behavior. By integrating subjective norms as the mediator of the relationship between career advancement, job characteristics and knowledge sharing behavior, this study assists researchers in identifying the factors that are more likely to be mediated towards knowledge sharing behavior. In the next section, the study reviews the related literature, and develops the hypotheses and research framework of the study, followed by the methodology, results and discussion. Finally, the implications, limitations and suggestions for future research are presented.

Literature Review and Hypotheses

Knowledge Sharing Behavior

Knowledge sharing behavior is the most important component of knowledge management, which enables the creation and utilization of knowledge (Chiang et al. 2011). Satisfactory knowledge sharing facilitates the members of an organization to gather knowledge more quickly and conveniently; it also enables members of the organization to create and utilize the available knowledge through the process of knowledge sharing, which in turn, enhances their performance and knowledge management. Knowledge sharing plays a significant role in facilitating organizational innovation, improving both individual and organizational capabilities, as well as gaining a competitive advantage (Gold et al. 2001; Teece 1998; Baskaran 2018).

Knowledge creation normally happens through an exchange, and incorporates elements of the knowledge (Nahapiet and Ghoshal 1998). Higher quality and quantity knowledge creation depends on the quality and speed of exchanging and incorporating the elements of the knowledge (Chiang et al. 2011). Thus, organizations must play a role in enabling knowledge and intelligence sharing; in return, this can facilitate the creation of a huge growth of knowledge. Knowledge, particularly tacit knowledge, which is the most significant organizational resource, is regarded as the basic source of a competitive advantage, since knowledge is not easily

imitated. Though tacit knowledge resides in an individual's mind, and not in an institution (Kim and Mauborgne 1998), knowledge sharing behavior can be carried out by utilizing the following viewpoints.

Since tacit knowledge generally resides in an individual's mind, conveying such knowledge through any form of formalization is not easy (Polanyi 1966). Knowledge in the form of intuition, for example as cognitive and experience skills, cannot be easily explained verbally. Thus, it leads to some difficulties when trying to control employees' knowledge sharing.

The increase in the amount of tacit knowledge facilitates an increase in the degree of knowledge asymmetry and indicates how knowledge is the most important asset in the age of the knowledge economy. Employees can code and keep significant knowledge in institutional databases or share knowledge with other organizational members, and such knowledge sharing may lead to conflict between the employees and the institution. The elucidating of individual knowledge decreases the rareness of the knowledge that an employee enjoys in an institution (Willman, Fenton-O'Creevy, and Soane 2001). On the contrary, knowledge itself, which does not decline in value, will not lose its value after being utilized or shared. Thus, institutions should recognize the factors that lead to knowledge sharing behavior among employees (Chiang et al. 2011).

Many studies have established the predictors of an employee's knowledge sharing behavior and have evidenced several factors, such as organizational commitment (Chiang et al. 2011); trust (Amayah 2013); post-alliance formation factors (Rezazadeh and Mahjoub 2016); organizational characteristics (Baskaran 2018) and group identification (Hassandoust et al. 2011). However, there are limited studies into knowledge sharing behavior in the healthcare context (Hansen and Avital 2005; Kim and Lee 2013b). Moreover, these previous studies have not investigated the mediating effect of subjective norms on the relationship between career advancement and job characteristics and knowledge sharing behavior. Therefore, it is important to close this gap.

Theoretical Background

Social Exchange Theory

The social exchange theory can be defined as, "an exchange of activity, tangible or intangible, and more or less rewarding or costly, between at least two persons" (Blau 1964). Several scholars have examined various issues in relation to the social exchange theory (Eisenbergerand Huntington 1986; Tekleab et al. 2005). For instance, Aselage and Eisenberger, (2003) suggested three perspectives that are related to the social exchange theory: (i) Exchanging valued social-emotional resources are the important things in the establishment of an exchange relationship between organizations and subordinates; (ii) it should be the contributions between the parts which are considered to be precious in the exchange relationship; and (iii) justice between the parts. Thus, these common perspectives may influence career advancement and job characteristics to have a positive relationship with knowledge sharing behavior.

In addition, the social exchange theory, apart from emphasizing the benefits of exchanges, also encourages norms of reciprocity which create unspecified obligations in developing human behavior, like knowledge

sharing behavior (Blau 1964). It is regarded that the norm of reciprocity is an important component of an individual who positively perceives subjective norms (Bamberg, Ajzen, and Schmidt 2003). Because subjective norms refer to an individual's perception of anticipated behavior within a particular group, in a specific situation, this develops into the norms of reciprocity (Fishbein and Ajzen 1975).

Thus, when subordinates positively perceive subjective norms, the relationship among the employees, as well as the employees and the institution will change directly towards the performance of the behavior. Therefore, subjective norms are expected to mediate the relationship between career advancement and job characteristics and knowledge sharing behavior.

Career Advancement and Knowledge Sharing Behavior

Career advancement is an employee's upward movement on the institutional ladder, which is associated with an increase in salary and status (Zhao and Zhou 2008). Thus, career advancement is considered to be an important tool for acquiring knowledge and skills (Wang-Cowham 2008). Empirically, career advancement is influenced by knowledge sharing behavior (Akhavan et al. 2013; Cabrera and Cabrera 2005). According to the social exchange theory, an employee who positively perceives exchange benefits, such as career advancement, is likely to engage in knowledge sharing behavior. Thus, the following hypothesis is proposed:

H_1: *Career advancement and knowledge sharing behavior are positively correlated.*

Job Characteristics and Knowledge Sharing Behavior

Job characteristics refer to the task significance, skills variety and task identity, which are undertaken by an employee (Rehman and Mahmood 2011). Empirically, job characteristics have a significant relationship with knowledge sharing behavior (Foss et al. 2009; Menguc et al. 2011). According to the social exchange theory, which emphasizes exchange benefits, if the job characteristics contain an exchange benefits package, it may lead employees to participate fully in knowledge sharing behavior. Therefore, the following hypothesis is proposed:

H_2: *Job characteristics and knowledge sharing behavior are positively correlated.*

Subjective Norms and Knowledge Sharing Behavior

Subjective norms refer to the beliefs and social pressure that influence a person to execute or not to execute a particular behavior (Ajzen 1991). It is indicated that subjective norms have a significant effect on knowledge sharing behavior (Aktharsha et al. 2012; Wu and Zhu 2012). According to the social exchange theory, exchange benefits and the norms of reciprocity are present in subjective norms and can lead these subjective norms to have a positive and significant influence on knowledge sharing behavior. Thus, the next hypothesis is proposed as follows:

H_3: *Subjective norms and knowledge sharing behavior are positively correlated.*

The Roles of the Mediator

According to the literature, the subjective norms construct plays a significant role in mediation. Altawallbeh, Soon, Thiam, and Alshourah (2015) found that the subjective

norms construct mediates the relationship between salient beliefs and behavioral intentions. Furthermore, it has been shown that the job characteristics construct is related to subjective norms (Sanders and Spencer 2004). However, they did not further discuss the outcomes of the mediating effects of subjective norms on the relationship between career advancement and job characteristics and knowledge sharing behavior.

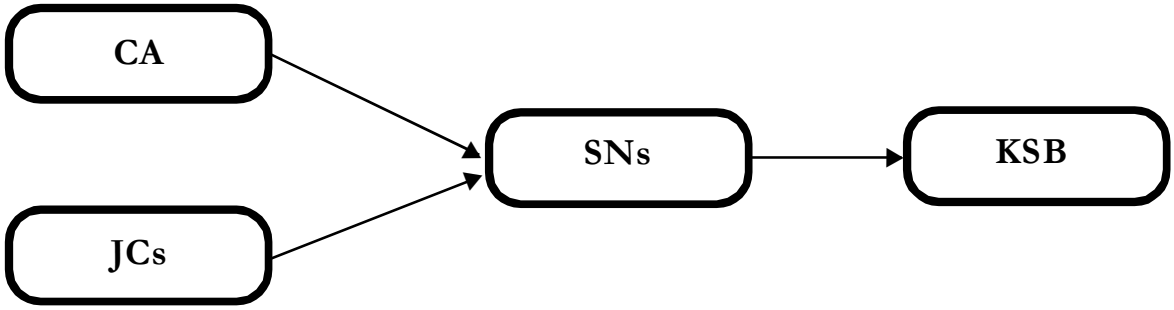
To justify the potential role of subjective norms as a mediator, Tohidinia and Mosakhani (2010) are invoked. They proposed that subjective norms would act as a critical social pressure that mediates the effect of the organizational climate upon the individual's intention to share knowledge. The organizational climate is basically intended to achieve both individual and organizational objectives (Tohidinia and Mosakhani 2010). Because career advancement and job characteristics play a role in both an individual's success and the prosperity of his/her institution (Rehman and Mahmood 2011; Zhao and Zhou 2008), it is right to imply that they will be evoked as subjective norms that can be used as a mediating variable between career advancement, job characteristics and knowledge sharing behavior.

Based on the prior study conducted by Nabi (2003), it is indicated that career advancement influences subjective norms, and subjective norms influence knowledge sharing behavior (Aktharsha and Anisa 2012). On the other hand, Sanders and Spencer (2004) determined that the job characteristics affect subjective norms and the subjective norms construct contributes to knowledge sharing (Tohidinia and Mosakhani 2010). Taking into consideration the social exchange theory, an employee who has a positive perception of exchange benefits, as well as the norms of reciprocity towards a social group (pressure), is likely to produce knowledge sharing behavior. Therefore, the relationship between career advancement and job characteristics and knowledge sharing behavior may be mediated by subjective norms. Thus, hypotheses 4 and 5 are proposed as follows:

H_4: *Career advancement is positively related to knowledge sharing behavior and is mediated by subjective norms.*

H_5: *The job characteristics construct is positively related to knowledge sharing behavior and is mediated by subjective norms.*

Figure 1. **Research Model**



CA=Career Advancement, JCs=Job Characteristics, SNs=Subjective Norms, KSB=Knowledge Sharing Behavior

Methods

Method and Procedures

The data in this study were collected through a survey of healthcare professionals from five public hospitals in Tanzania, namely Muhimbili National Hospital (MNH), Ligula Referral Hospital (LRH), Mnazi Mmoja Hospital (MMH), SekouToure Regional Hospital Mwanza (SRHM) and Mbeya Referral Hospital (MRH). The study was cross-sectional, where the data were collected at one point of time. The respondents from these healthcare institutions are healthcare professionals who engage in knowledge sharing behavior and deeply comprehend healthcare practices. The list of respondents was obtained from the management of the hospitals. A total of 650 questionnaires were distributed to the healthcare professionals in 2015 and 439 were returned and found to be usable, resulting in a response rate of 68 percent. Of the respondents, 295 (67.2%) are female and 144 (32.8%) are male; and 62.4 percent are married participants. The majority of the respondents are in the age range of 21 to 30 years. As for their ages, 42.6 percent are 21-30 years old; 33.0 percent are 31-40 years old; 16.6 percent are 41-50 years old; and 7.3 percent are 51-60 years old. Most respondents have an average work tenure of more than seven years. In terms of the occupation of the respondents, 327 (74.3%) are nurses and 112 (25.3%) are doctors.

Measure

Knowledge Sharing Behavior (KSB)- 28 items on the KSB scale were adopted from Yi (2009) and used to measure respondents' perceptions of knowledge sharing behavior, including practices related to written contributions, organizational communications, personal interactions and communities of practice. Examples of these items are as follows: "I share documents and reports," "I publish papers in institutional journals, magazines or newsletters," "I express ideas and thoughts in organizational meetings," and "I share experiences that may help others avoid risks and trouble through personal conversation."

Career Advancement (CA)- CA refers to an employee's upward movement on the organizational ladder, accompanied by an increase in salary and status (Bock, Kankanhalli, and Sharma 2006). This study adapted five items from Bock et al.'s (2006) sample of items, including: "It is important to get a higher salary when I share my knowledge," and "It is important to get a higher bonus when I share my knowledge," and "It is important to be promoted when I share my knowledge." The alpha coefficient ranges from 0.60 to 0.93. Job Characteristics (JCs)- JCs refer to the task-related attributes (Hackman and Oldham 1974). The current study measured job characteristics by using eight items adapted from Hackman and Oldham (1974). Examples of these items are as follows: "I have the freedom to carry out my job the way I want to," "I have the opportunity to complete work that I have started," and "My supervisor frequently discusses matters related to my job performance." The alpha coefficient here ranges from 0.67 to 0.90.

Subjective Norms (SNs)- SNs refer to an individual's perception of the social pressure to execute or not to execute a particular behavior (Fishbein and Ajzen 1975). The current study measured subjective norms by using six items adapted from Bock, Lee, Zmud, and Kim (2005). Examples of items are as follows: "My CEO thinks that I should share my knowledge with other members in the organization," and "My boss thinks that I should share my knowledge with other mem-

bers in the organization." The alpha coefficient ranges from. 0.82 to 0.94. All the items for each variable used in this study were measured on a Five-Point Likert scale, from 1 = strongly disagree to 5 = strongly agree.

Data Analysis

Data analysis for this study was conducted by utilizing Partial Least Squares-Structural Equation Modelling (PLS-SEM) (Hair, Ringle, and Sarstedt 2013), because it is capable of testing causal relationships between constructs with many items, unlike other methods (Hair, Hult, Ringle, and Sarstedt 2014). We used PLS-SEM to examine both the measurement model and the structural model (Henseler et al. 2009; Reinartz et al. 2009). In the measurement model, we assessed the individual item reliability; internal consistency reliability; convergent validity; and discriminant validity. In the structural model, we assessed the significant path coefficient. Table 1 and Table 2 display the measurement model while Table 3 shows the hypotheses testing.

Results

Measurement Model

The individual item reliability was examined by inspecting the individual items of each construct used in this study; we adopted the rule of thumb that items with loadings below 0.4 should be deleted (Hair et al. 2014). Thus, 41 out of the 62 items with outer loadings ranging from 0.621 to 0.905 were maintained since they achieved the minimum requirement. Internal consistency reliability is the extent to which all items are able to measure the same concept (Bijttebier et al. 2000; Sun et al. 2007). We determined this internal consistency reliability by using a composite reliability coefficient of each latent construct, which should range from 0.70 and above (Hair et al. 2011). This study has managed to achieve a sufficient internal consistency reliability since thecomposite reliability of each latent construct ranges from 0.847 to 0.907.

Convergent validity is the extent to which the measures used are correlated with the intended constructs (Hair et al. 2006).

Table 1. **Items Loadings, Composite Reliability, and Average Variance Extracted (AVE)**

Constructs	Items	Loadings	Composite Reliability	AVE
Career Advancement	CA1	0.845	**0.907**	**0.709**
	CA2	0.905		
	CA3	0.784		
	CA4	0.830		
	JCs3	0.703		
	JCs5	0.621		
Job Characteristics	JCs6	0.767	**0.847**	**0.527**
	JCs7	0.751		
	JCs8	0.777		
	KBS7	0.793		
	KSB10	0.794		

Table 1. ***Continued***

Constructs	Items	Loadings	Composite Reliability	AVE
KSBO	KSB6	0.791	**0.899**	**0.640**
	KSB8	0.826		
	KSB9	0.795		
	KSB16	0.785		
KSBP	KSB17	0.776	**0.832**	**0.622**
	KSB18	0.806		
	KSB22	0.833		
	KSB23	0.881		
KSBC	KSB24	0.849	**0.922**	**0.702**
	KSB25	0.839		
	KSB26	0.786		
	KSB2	0.725		
KSBW	KSB4	0.861	**0.852**	**0.659**
	KSB5	0.842		
	SNs1	0.816		
Subjective Norms	SNs2	0.845	**0.867**	**0.620**
	SNs3	0.744		
	SNs5	0.740		

CA= Career Advancement, JCs=Job Characteristics, KSBC=Knowledge Sharing Behavior Communities of Practice, KSBO=Knowledge Sharing Behavior Organizational Communication, KSBP=Knowledge Sharing Behavior Personal interactions, KSBW= Knowledge Sharing Behavior Written Contributions, and SNs= Subjective Norms.

Table 2. **Descriminant Validity**

Constructs	CA	JCs	KSBC	KSBO	KSBP	KSBW	SNs
CA	**0.842**						
JCs	0.248	**0.726**					
KSBC	0.251	0.452	**0.838**				
KSBO	0.085	0.446	0.304	**0.800**			
KSBP	0.163	0.418	0.393	0.330	**0.789**		
KSBW	0.160	0.293	0.486	0.473	0.286	**0.812**	
SNs	0.222	0.577	0.466	0.436	0.402	0.305	**0.788**

Convergent validity was assessed by determining the Average Variance Extracted (AVE) of each latent construct; we adopted the rule of thumb that the AVE should be from 0.5 and above (Fornell and Larcker 1981). This study achieved sufficient convergent validity with the AVE ranging from 0.527 to 0.70.

Discriminant validity is the extent to which a specific latent construct should not correlate with other latent constructs. We used the square roots of the AVE of each latent construct in order to determine the discriminant validity; we adopted the rule of thumb which states that the square roots of the AVE of each latent construct should be greater than its correlation and its correlation with other constructs (Fornell and Larcker 1981). This study has managed to achieve sufficient discriminant validity since the square root of the AVE of each latent construct is greater that its correlation and its correlation with other constructs.

Hypotheses Testing

Table 3 indicates the hypotheses testing results from the structural model. For H_1, H_2 and H_3, we investigated the influence of career advancement and knowledge sharing behavior, job characteristics and knowledge sharing behavior and subjective norms and knowledge sharing behavior. The results indicate that career advancement, job characteristics and subjective norms have a positive and significant relationship with knowledge sharing behavior. Thus, all the direct effect hypotheses are supported. For H_4 and H_5, both the mediating effects of subjective norms on the relationship between career advancement and job characteristics and knowledge sharing behavior are supported. This implies that career advancement and job characteristics affect the subjective norms, which in turn, influence the knowledge sharing behavior.

Discussion

Based on the social exchange theory, this study intends to examine the mediating effects of subjective norms on the relationship between career advancement and job characteristics and knowledge sharing behavior. To show the prospective influences on knowledge sharing behavior, the research framework is underpinned by the social exchange theory. The results of the data analy-

Table3. **Hypothesis Testing**

Hypotheses	Beta	SE	T Statistics	P-Value	Decision
CA -> KSB	0.062	0.045	1.371	0.086*	Supported
JCs -> KSB	0.346	0.054	6.463	0.000***	Supported
SNs -> KSB	0.349	0.048	7.228	0.000***	Supported
CA -> SNs->KSB	0.031	0.014	2.186	0.030**	Supported
JCs -> SNs->KSB	0.197	0.033	5.887	0.000***	Supported

Note: ***Significant at 0.01**significant at 0.05, *significant at 0.1.

sis indicate that the findings are consistent with the theory and literature (Akhavan et al. 2013; Blau 1964; Cabrera et al. 2006; Foss et al. 2010; Wickramasinghe and Widyaratne 2012). As hypothesized and supported by the literature (Akhavan et al. 2013; Bock et al. 2005; Cabrera et al. 2006), a maximum positive perception of career advancement and exchange benefits strengthen knowledge sharing behavior. In other words, in the present study, healthcare professionals believe that engaging in knowledge sharing behavior will lead to their career advancement; thus they are likely to participate in sharing their knowledge.

The findings of this study show that job characteristics have a positive effect on knowledge sharing behavior. This finding is supported by previous studies (Foss et al. 2010; Menguc et al. 2011). This entails that those employees who positively perceive job characteristics in their healthcare institutions develop a positive attitude towards knowledge sharing behavior.

The results of the research are that the evidence shows that subjective norms have a positive influence on knowledge sharing behavior. Thus, as has also been shown in previous studies, we can summarize that subjective norms reinforce knowledge sharing behavior among healthcare professionals (Aktharsha and Anisa 2012; Jeon et al. 2011; Lee et al. 2011; Tohidinia and Mosakhani 2010).

The results of the present study are consistent with the social exchange theory (Blau 1964). The subjective norms construct has positive and significant mediating effects on the relationship between career advancement and job characteristics and knowledge sharing behavior. The findings indicate that the higher the subjective norms are, the higher the knowledge sharing behavior is. There are a number of studies that have revealed a positive relationship between subjective norms and knowledge sharing behavior (Hassandoust et al. 2011; Tohidinia and Mosakhani 2010; Wu and Zhu 2012).

Therefore, in order to improve knowledge sharing behavior among organizational members, we propose that efforts should be carried out systematically, including the provision of a favorable environment that can encourage knowledge sharing behavior, while also improving career advancement as well as job characteristics in relation to the knowledge sharing behavior. As Saleh and Wang (1993) suggested, the role of the administration is to establish a suitable climate in which the employees will be motivated to share knowledge; consequently, this can reinforce the knowledge sharing behavior. Furthermore, the findings of this study reveal that organizational and job factors have a high influence on knowledge sharing behavior. Thus, the administration should examine what the setbacks to knowledge sharing behavior are, and endeavor to eliminate them.

Research Limitations and **Guidance for Future Research**

This study has several limitations: First, the study does not cover extensively the factors that may influence knowledge sharing behavior. These factors can be demographic factors, such as gender, age and tenure (Bock et al. 2005). The effects of these important factors on knowledge sharing behavior are not examined in this study. Thus, future researchers may consider these factors to uncover their potential effects. Second, the findings of this study cannot be generalized, since the current study was carried out in Tanzanian

healthcare institutions, focusing only on medical doctors and nurses, who are characterized by their collective culture. Thus, more studies need to be carried out in different contexts, geographical settings and cultures in order to generalize the findings.

Conclusion

The current study suggests a model for the mediating effects of subjective norms on the relationship between career advancement, job characteristics and knowledge sharing behavior in the public health care context. The findings indicate that career advancement, job characteristics and subjective norms have a positive and significant effect on knowledge sharing behavior. However, subjective norms portray a partial positive and significant mediating effect on the relationship between career advancement, job characteristics and knowledge sharing behavior. In fact, all the exogenous variables were identified as the most robust predictors of knowledge sharing behavior among the healthcare professionals. Thus, the management of healthcare institutions must pay attention to designing programs and activities to promote career advancement, job characteristics and subjective norms to propagate knowledge sharing behavior.

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