Full Length Article

Open Access

Factors Affecting Knowledge Sharing Among Doctors of Public Hospitals

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ABSTRACT

The main objective of this investigation is to examine the relationship between transformational leadership, psychological capital, job satisfaction and knowledge sharing among doctors especially young doctors of public hospitals. The primary quantitative study is conducted. Convenience sampling used to select the respondents (n=161) who completed the self-administered questionnaire survey providing their responses to transformational leadership, psychological capital, job satisfaction and knowledge sharing. Statistical analysis is done using SPSS version 21. Multiple regression analysis indicated that job satisfaction is the strongest predictor of knowledge sharing while psychological capital is weak predictor of knowledge sharing. The result shows that transformational leadership has no direct impact on knowledge sharing which need to reconfirm in further studies. Findings are useful for policy making institutions to take initiatives to enhance doctors' job satisfaction.

KEYWORDS: Transformational Leadership, Psychological Capital, Job Satisfaction, Knowledge Sharing, Public Hospital Doctors

1. INTRODUCTION

Knowledge is widely regarded as a key source of sustainable competitive advantage (Oehmichen, 2017; Meihami & Meihami, 2014; Grant, 1996) and some studies such as (Bontis, 1999) have found knowledge management to be positively related to organizational performance. Furthermore, knowledge sharing occupies a central place in knowledge management and has been shown to be positively related to a number of desirable organizational variables, including organizational performance (Du et al., 2007; Chen, 2006).

The changing landscape of the healthcare industry necessitates a shift in

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Article info

Received Aug 11,2017
Accepted Dec 19,2017
Published Dec 30,2017

paradigms, as organizations now realize the value of human capital (knowledge, skills, and abilities) as significant assets to organizational performance and sustained competitive advantages. The complexity of healthcare requires a team of multidisciplinary providers to collaborate and share knowledge across professional disciplines to deliver quality, safe, and competent care. Lack of a coordinated multidisciplinary care strategy leads to medical errors and thus threatens safe care delivery (Inter-professional Care Steering Committee-Health Force Ontario, 2007).

The medical career is observed as one of the honourable professions in the world. It is only accepted that professional bodies, as well as the general public, suppose the medical practitioners to show the highest caliber of professionalism (Alam and Haque, 2010). They are also projected to comply with these high standards even in the time of such hardship as divergent job settings, poor environments, and little earning levels. In order to withstand the confidence of the people, the medical professionals must demonstrate their assurance of capability, integrity, goodness, and humanity. They should apply these qualities to their routine life in order to fortify their professionalism. However, the foremost variations in demographic arrangements, the structure of the employment sector, growing consumerism attached to deteriorating ethical standards are increasingly exercising pressure on professionalism (Alam, 2009).

The drive of this study is to explore the knowledge sharing behaviors of doctors in order to understand how they collaborated with other healthcare professionals in public hospital in the Faisalabad city. According to Greenwald et. al., (2014) inter-professional collaboration must be improved to achieve the goals of the healthcare industry; these goals included maximizing the patient safety and quality of patient care. They defined collaboration as the “process where individuals engage in joint decision making and shared responsibility for outcomes which is achieved through shared vision, open communication, teamwork, interdependence, and shared power” and “characterized by common goals and working together to complete the task” (p. 653).

At the national level, an increase in medical mistakes resulted from a lack of communication and coordinated care among healthcare professionals and has continued to negatively impact the quality of healthcare and overall cost of medicine to society

(Brown, 2013). There continues to be an urgent need to improve this fragmented healthcare system, investigated by (Rabin, 2013). The Institute of Medicine (2010) indicated that 15,000 Medicare patients suffer monthly from serious medical issues that have contributed to death only in the USA due to a lack of communication among healthcare providers (Rabin, 2013). Rabin reported that “Nobody is responsible for coordinating care” and “that’s the dirty little secret about healthcare”.

According to Waring (2005) and Waring and Bishop (2010) a traditional “blame culture” existed in the healthcare industry where a fear of potential medical liability results in a lack of incidental reporting among doctors and hospital leaders create barriers to effective knowledge sharing. Similarly, Gorini et al. (2012) argued that a series of different institutes worldwide has acknowledged a ‘culture of blame’ and a fear of being penalized are the major reasons for the lack of medical faults reporting which has subsequently led to the poor excellency of patient care (p. 671). Employment fulfillment is not able to be a multidimensional phenomenon that involves a person's emotions towards his/her occupation (Robins and Judge, 2008). To attain better execution, specialists' satisfaction is more critical, particularly in healing sciences that promptly deliver the satisfaction and adaptation among their patients.

As it was investigated by Ghazali et. al., (2007), he described in details in his investigation that an extensive no of specialists who are working in Public Hospitals of Karachi are not happy with their careers. This reaches percentage to 68%, and when talks about female doctors, they are more dissatisfied as compared to their male colleagues. Employee shortages are the sign of the job dissatisfaction, poor supervision, and lack of organizational tolerates (Zurn, Dolea, & Stillwell, 2005). The job satisfaction level among doctors, especially young doctors, seems to be falling, as they are frequently found grouchy about their unsuitable working environment, lack of career growth opportunities, poor compensation and extensive working hours etc.

2. LITERATURE REVIEW

2.1 Knowledge Sharing

The impetus for knowledge sharing is factors related to Bandura’s (1977, 1986) Social Learning Theory. When individuals share knowledge, they involve the precept of

the concepts of personal, behavioral, and environmental factors central to Bandura's (1977) Social Learning Theory. Knowledge sharing originates with the individual when the ability to perform task and interaction with others is combined with information existing in minds (Yahya & Goh, 2002). The need for managing knowledge and knowledge sharing is growing day by day in organizations around the globe because of increase in universal, native and competitive organizational challenges.

Carayannis and Campbell's (2011) influential research explained that governments, universities, and corporate partnerships are linked to their desire and practice of knowledge sharing and managing knowledge. Carayannis and Campbell (2011) stated that "the need to conceptualize—if not reinvent—the ways and means that knowledge production, utilization, and renewal take place in the context of the knowledge economy and society" (p. 329). Successful organizations value the importance of knowledge sharing and the ability of the organization to compete within the industry (Dalkir, 2005).

To embrace knowledge sharing involves having a transformation in organization thinking, beliefs, and behavior. Knowledge sharing is a learned behavioral skill (Cruz, 2011). Carayannis and Campbell (2011) agreed that the learned skill is sustainable because it "brings together innovation, entrepreneurship, and democracy" as the impetus for transformational knowledge sharing (p. 329). According to Senge (2006), employees who share information and work as a team are more effective.

Knowledge management consists of three important processes: sharing of knowledge, the creation of knowledge and application of knowledge. The knowledge sharing process involves conveying tacit or explicit knowledge to other individuals. Knowledge sharing is supported by the socialization and exchange processes. Socialization supports the sharing of tacit knowledge among individuals or groups through communication and interaction, whereas exchange supports the sharing of explicit knowledge (Grant, 1996) which may involve exchanging information through means such as documents, manuals, and procedures.

2.2 Transformational Leadership

Leadership is measured as the capability to motivate or affect others towards the leader's

aim. The leader is known as a person who influences others to do work with him/her and lead, observe and manipulate the means of achieving projected targets and results (Edy, 2010). As investigated by Lee and Chuang (2009), leadership has many styles, like as servant leadership, transformational leadership, transactional leadership and authentic leadership. Transformational leadership is known as one style of leadership that becomes a cause to modify in societies and social organization. In its perfect form, it builds appreciable and optimistic change in the juniors with the end objective of emerging juniors into leaders. Ratified in its authentic form, transformational leadership improves the inspiration, performance, and morale of the juniors through a variety of tools.

Knowledge sharing is the exchanging of actions and cognitions of mutual parties (von Krogh 2003). Carlile (2002) originate that people who invested heavily in a particular area of knowledge are unwilling to connect in the activity of knowledge sharing. Others have pointed out to such cause as frights of power loss (Darrah 1995). People with administrative positions should take action to reduce this conflict. They can implement a framework of support and organize the method of knowledge sharing (von Krogh, 2003).

Bryant (2003) demonstrates his expertise that the administration of organizational knowledge should be improved by learning how transformational leadership takes part indirectly and directly to knowledge sharing. Transformational leadership is significant to knowledge sharing due to by means of charisma and character attention it supports employees to share knowledge (Conger and Kanungo 1998).

Leaders have been documented as an initial factor affecting and increasing knowledge sharing (Pauleen & Mason, 2002). Bailey and Clarke (2000) have cleared the knowledge management as “how managers can generate, communicate and exploit knowledge (usable ideas) for personal and organizational benefits” (p. 237). On the other hand, executive culture plays a vital function in the probability that workers will be ready to work jointly and their knowledge sharing (Bollinger & Smith, 2001; Pauleen & Mason, 2002). So, leadership should focus on establishing a society that greetings knowledge, strengthen its sharing, keeps its nation, and make devotion to the agency (Bollinger & Smith, 2001).

H₁: Transformational Leadership has positively and significantly impact on knowledge sharing

2.3 Psychological Capital

In the 1990s a group of psychologists, led by Martin Seligman, began to redirect research in psychology from the study of dysfunctional behavior towards the understanding of how humans become happier, more productive, and objectify their human potential. This effort is now recognized as the field of positive psychology, which gave origin to positive organizational behavior and psychological capital (Luthans et al., 2015).

Youssef, et al. (2007) proposed the construct of psychological capital as a means for organizations and individuals to gain a competitive advantage in their respective industries. The construct of psychological capital is described as the psychological position of a person for development is categorized by (1) to get success in each challenging tasks, he must have confidence to accept and fulfill the task with great effort and devotion; (2) To get success in present as well as in future, a person should make positive ascription; (3) Determined toward goals and can alternate the paths to achieve goals in the time of need to get success; (4) if harassed by harms and difficulty, nourishing and coming back and even far away to get success. . (p. 3)

In their initial research, Luthans, Youssef, et al. (2007) showed that the combination of these four factors had a synergistic effect; the sum of the whole was greater than the individual parts. As a result, the development of the individual components of psychological capital can yield positive returns to the individual and the organization, both in terms of job performance and in job satisfaction. People who are extra open in their social communications and have extra attractive social performance that due to their natural openness behavior which relies on their awareness of their potential (Forouhar et al, 2013). As these people who observe the extra optimistic feelings and have the momentum to build up and appreciate their possible cease conservation and start to exchange their knowledge with others in their circle. Consequently, they prove their satisfaction to the variations and employ of new technology in the organization and they adapt rapidly and in a fine way, so, to enhance

the rapidity of organizational system and sharing of new thoughts and organism, they lead the organizations in the way to their values (Digman, 1997).

The study done by Zhu and Wang (2011) in the title “The Relationship between Entrepreneur Psychological Capital and Employee’s Innovative Behavior: the Strategic Role of Transformational Leadership and Knowledge Sharing”, they have approved that psychological capital has a vital and optimistic organization with knowledge sharing.

H₂ Psychological Capital has a positive and significant impact on Knowledge Sharing.

2.4 Job Satisfaction

Job satisfaction has been clarified as an employee’s assessment on the level around the work atmosphere which achieves a character’s constraint (Locke, 1976). There are various factors which effect job satisfaction such as the excellence of the place at which they work, advantage of one’s relationship with their superior, and wage training. Consequently, feelings, whether it might be negative or positive and the insolences that persons hold concerning their occupation are called job satisfaction (Schultz & Schultz, 1994). Low ranges of job satisfaction disturb employees in all diversities of businesses, together with not-for-profit organizations (Bolton, 2011). There are various adverse consequences related to a low range of job satisfaction among employees (Aazami, Shamsuddin, Akmal & Azami, 2015; Fiori Bollmann, & Rossier, 2015; Alsaraireh, Quinn Griffin, Ziehm, & Fitzpatrick, 2014).

According to Murray (1999), Researchers have attempted to correlate job satisfaction with performance, turnover, and absenteeism. The relationship between job satisfaction and knowledge sharing behavior were not heavily discussed in the literature. According to Oshagbemi (2000), the relationship between knowledge management and job satisfaction was not been clearly discussed in the management literature. One of the recent researches on the subject was by Koseoglu, Bektas, and Soyly (2013), the study has examined the relationship between knowledge management and Job satisfaction among employees of a five-star hotel in Turkey. The study has concluded that there was no significant relationship between Job satisfaction. To the best of the researcher knowledge, the subject of the relationship between Job satisfaction and knowledge

sharing was not addressed among the doctors of public hospitals.

H₃ Job Satisfaction has positively and significantly correlated with Knowledge Sharing.

3. RESEARCH METHODOLOGY

This area or section clarifies the understated elements of the technique utilized in this study. In the scenario of this research, the quantitative approach will be utilized as a part of this examination in order to study the hypothesis and it will be attempted to check the impact of transformational leadership and psychological capital and job satisfaction to knowledge sharing among specialists/doctors working in public hospitals. The study sample (n=161) were selected. Convenience sampling method used to get data from doctors of public hospitals as we know that doctors' community is so busy in their work, so, it becomes difficult to get data from them.

Looking more deeply, the basic/primary data is to be gathered by disseminating questionnaire which comprises of composed questions' statements of inquiries identified with factors/variables i.e. transformational leadership, psychological capital, job satisfaction and sharing of knowledge. A self-administrated questionnaire used to collect the data. The advantage of using the questionnaire is to minimize the cost and the details of ambiguity amongst respondents that will lead to honest responses (Schermerhorn, 2000). The questions are asked on Likert Scale based on five points. The scale is as follows.

1 = strongly disagree, 2 = disagree, 3 = Neutral, 4 = agree, 5 = strongly agree.

Measures:

The approved eight-items "Global Transformational Leadership scale" (Carless, et al., 2000) was incorporated to test the transformational leadership. The study utilized the Psychological Capital Questionnaire (PCQ), a 24-item and five-point Likert scale instrument (Luthans et al., 2007), which measures the concepts of self-efficacy, optimism, hope, resiliency, and provides an overall psychological capital (PsyCap) score.

The Job satisfaction survey purposes at evaluating the level to which the employees like their jobs (Spector, 1997). The Job Satisfaction Survey is a self-assessed

instrument which delivers an entire score of job satisfaction after evaluating nine aspects namely; pay, supervision, promotion, contingent rewards, fringe benefits, coworkers, operating conditions, communication and type of work. Each aspect has four questions subsequent to a total of 36 questions

Among the self-assessment sharing of knowledge scales, the one scale has been established by Van den Hoof and colleagues (de Vries et al., 2006) is particularly striking because of its capability to compute two dimensions of knowledge sharing, named, donating of knowledge and collection of knowledge. The scale has been utilized by several of researchers, all of whom have been satisfied with its psychometric properties.

Table 1: Reliability Statistics	
Cronbach's Alpha	N of Items
.921	87

The results of the present research show that all the data is well organized and sensibly analyzed keeping in view all values. The Cronbach's Alpha value .921 disclosed that data is meaningfully consistent. Total questioners are 161 involving 4 variables: 1 dependent and three independent variables.

Data Analysis Techniques

Both descriptive and inferential statistics are used as a method of data analysis. Descriptive analysis is employed to deliver an explanation of the facts of the study (Sekaran & Bougie, 2013), where descriptive facts and figures are analyzed statistically allowing to the frequency of events occurs, the central tendency (mean), and the degree of variability (SD).

Correlation analysis will be used to investigate the strength or magnitude of the linear association direction among the variables, which can either be positive or negative (Pallant, 2013). Consequently, multiple regression techniques are used in the data analysis. Regression analysis is employed to measure the simultaneous effects of various independent factors (variables) on a dependent factor (variable) (Sekaran & Bougie, 2016; Cavana et al., 2001). Moreover, the analysis is done using the SPSS version 21.0 and the results of the analysis are explained.

4. RESULTS AND DISCUSSION

Demographic Profile

Out of 161 respondents, 108 (67.1%) respondents fall into the age category of 21-30 years and 36 (22.4%) respondents fall into the age category of 31-40 years. Similarly, 8 (5%) and 9 (5.6) respondents fall in the age category of 41-50 years and 51 Or above respectively. When talking about the gender, 80 (49.7%) respondents are the male and remaining strength of respondents is female. The statistical data regarding the respondents' qualifications indicated that 98 (60.9%) respondents have MBBS degree while 42 (26.1%) respondents have FCPS degree while 21 (13%) of remaining respondents have other types of qualifications. Regarding experience, 122 (75.8%) respondents have experience between 1-8 years while 23 (14.3%) have experience between 9-16 years and remaining have experience between 17-24 years. Statistical data regarding working hours of respondents indicates that 49 (30.4%) respondents work for 48 hours and 39 (24.2%), 26(16.1%) & 47 (29.2%) work for 54 hours, 60 hours and more than 60 hours respectively.

Table 2: Correlation of Main Variables				
	TL	PC	JSA	KS
TL	1	-.202*	.252**	.145
PC	-.202*	1	.390**	.427**
JSA	.252**	.390**	1	.761**
KS	.145	.427**	.761**	1

*Correlation is significant at the 0.05 level (2-tailed).

**Correlation is significant at the 0.01 level (2-tailed).

TL: Transformational Leadership PC: Psychological Capital

JSA: Knowledge Sharing KS Knowledge Sharing

Correlation Study: Table 2 shows the correlation study of variables incorporated in this study. The magnitude of correlation vary from $r = -.202$ to $r = .761$ but the relationships among the variables are significant except the relationship of transformational leadership with knowledge sharing is insignificant as the magnitude of the correlation is $r = .145$. While there is a strong correlation between job satisfaction and knowledge sharing as $r = .761$

Descriptive Statistics

Table 3 shows the descriptive statistics as a minimum, maximum, mean and standard deviation. Every variable was consist of many items, so every variable is firstly computed then statistics is applied to variables as shown in the table.

Table 3: Descriptive Statistics for Variables					
Variables	N	Minimum	Maximum	Mean	Std. Dev.
TL	161	1	5	3.43	1.09
PC	161	1	4.33	2.26	.51
JSA	161	1.28	3.86	2.63	.50
KS	161	1	3.42	2.54	.46
Valid N	161				

Multiple Regression Analysis

The results calculated regarding multiple regression are shown in table 4 and table 5. In table 4 the value of “R” and “R²” is presented. The value of “R” indicated the overall correlation between variables as $R=.774$ while the value of “R²” indicated that how much variance is explained by the predictors in the prediction of KS (Knowledge Sharing). The table shows the value of $R^2=.599$, it means that 59.9% variance is explained in the prediction of knowledge sharing due to predictors.

Table 5 is about coefficients table of predictors. The beta values with positive sign indicate that the value or magnitude of dependent variable i.e. knowledge sharing is increased due to increase in the values of predictors. Table 5 shows that transformational leadership has an insignificant impact on knowledge sharing because only .1% change is occurred in knowledge sharing due to transformational leadership. The coefficient value for psychological capital is .141 which indicates that 14.1% increase would be occurred in knowledge sharing due to one unit increase in psychological capital. Similarly, 65.7% change would be occurred due to one unit increased in job satisfaction, so, it can be concluded that job satisfaction is the highest and strongest predictor of knowledge sharing. Therefore, the regression equation to predict the knowledge sharing can be presented as;

$$Y (\text{Knowledge Sharing}) = .494 - .001(\text{Transformational Leadership}) + .141(\text{Psychological}$$

Capital) +.657(Job Satisfaction)

Table 4: Model Summary				
Model	R	R²	Adjusted R²	Std. Error of Estimates
1	.774 ^a	.599	.592	.29688

a. Predictors: (Constant), Job Satisfaction, Transformational leadership, Psychological Capital

Model	<u>Unstandardized Coefficients</u>		<u>Standardized Coefficients</u>	T	Sig.
	B	Std. Error	Beta		
(Constant)	.494	.156		3.163	.002
TL	-.001	.024	-.001	-.022	.983
PC	.141	.053	.154	2.643	.009
JSA	.657	.055	.701	11.894	.000

Dependent Variable: Knowledge Sharing

Discussions

The aim of the research is to test the relationship between transformational leadership, psychological capital and job satisfaction with knowledge sharing. The results showed a positive and significant correlation between independent variables and dependent variable except for transformational leadership which has an insignificant relationship with knowledge sharing.

According to the results shown in the table, transformational leadership has no direct impact on knowledge sharing. Our result is contradicted by previous research findings for example (Analoui, Sambrook, & Doloriert, 2014; Nguyen and Mohamed, 2011). So, H1 is rejected. Similarly, the result of psychological capital established the previous findings, additionally, this investigation supports the other previous studies of researchers to confirm and verify the significant impact of psychological capital on knowledge sharing (Zhu and Wang, 2011; LePine and VanDyne, 2001; Digman, 1997). Hence, the H2 is accepted. The results indicated that job satisfaction is the strongest predictor of knowledge sharing as it accounts for 65.7% variance explained in knowledge sharing due to one unit change in job satisfaction. The researcher's study is matched with the previous researches conducted by (Bonitis et al., 2011; Singh & Sharma, 2011) and contradicted with the study conducted by (Koseoglu, Bektas, & Soylu, 2013). Hence, H3 is accepted.

Practical Implications

The implications for practice arising from this research are several. First, practitioners must recognize the interplay of several factors facilitating or inhibiting knowledge sharing behavior in their organizations. Second, Job Satisfaction is a strong predictor of knowledge sharing behavior, therefore, in order to increase higher levels of knowledge sharing, organizations must develop and implement strategies to increase the level of job satisfaction among doctors. Third, as recommended in prior literature (Kankanhalli et al, 2005) organizations must promote knowledge sharing behavior as an enjoyable activity and recognize individuals who share their knowledge by creating rewards and recognition programs.

Limitations of This Study

This study was limited to doctors of public hospitals located in Faisalabad city and size of the sample is limited to n=161 which cannot represent the whole population. The other limitation is time constraint; only three variables were identified to study knowledge sharing. However, many other factors are there to test the knowledge sharing among doctors. Thus, selecting only three factors is the limitation of the study. This is a cross sectional study and therefore, it shows the results of the study at only one point in time. Therefore, future research could use a longitudinal study approach by repeating at regular intervals for more understanding and assessment of transformational leadership, psychological capital and job satisfaction towards knowledge sharing. Although several limitations were addressed, these limitations provide direction for the recommended future research.

Recommendations for Future research: This study is only conducted taking the respondents to public hospitals. Respondents of private hospitals should also be taken for considerations of future research. In addition, comparing and contrasting of multiple hospitals will also provide significant examination and exploration of many factors. The future researcher must also take the effort to collect data from both public and private hospitals to see the comparison between these hospitals and identify factors that exactly impact the knowledge sharing. Further research is required to inspect the differences among various best practices that are practiced as a subject of human resource

management in the public and private hospitals. In our study, transformational leadership has an insignificant impact on knowledge sharing, this result is contradicted by previous studies which need to reconfirm in further studies in the context of public hospitals.

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