

The Upper Echelon Theory: A Mixed Method Study of Managing Knowledge Assets in Malaysian Hospitals

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ABSTRACT

Healthcare services have emerged as one of the most essential factors in a country's economic growth. The purpose of this study was to provide more insights into why some hospitals do better than others by investigating the influence of leadership styles and the role of knowledge assets handled by hospital top management teams. A mixed method was formed by combining a cross-case research approach with a questionnaire survey. The qualitative technique was used by five private hospitals, and the questionnaire survey was completed by the top management teams in 164 hospitals. The cross-case study research demonstrated that the hospital industry's knowledge assets are extremely unique, particularly in human capital and relational capital. Surprisingly, the survey discovered that physicians are not often direct employees of hospitals. This results in a one-of-a-kind partnership between the hospital and the physicians. Specifically, this study discovered that knowledge assets only mediate the relationship between transactional and transformational leadership styles and hospital performance, but not passive avoidant leadership styles. The study makes a contribution by being one of the first to investigate, from an Upper Echelon viewpoint, the mediating role of knowledge assets in hospital practice in Malaysia, with the findings useful for hospital administration and regulators.

Keywords: Leadership Styles, Knowledge Assets, Private Hospitals, Hospital Performance, Upper Echelon

ARTICLE INFO

Article History:

Received: 19 August 2022

Accepted: 08 January 2023

Available online: 01 April 2023

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INTRODUCTION

Increasing economic burden, scarce financial resources, rapid development of technology, old health facilities and equipment and unmet human resource needs are among important areas to be carefully addressed in managing resources in the healthcare industry (strategic framework Ministry of Health, 2021 - 2025). The specific challenges are :(1) rising healthcare cost and increasing resources towards a sustainable health system, (2) rising demands and aspirations from different stakeholders, (3) advancement of new technologies in medical services, (4) increasing capacity and redistributing of health workforce and (5) managing public and private dichotomy (Ministry of Health, 2020). As a research-intensive and highly innovative industry, hospitals should systematically and strategically manage its knowledge assets (KA) in order to meet the challenges above and to be more competitive. In the current economy, KA are essential elements for value creation in hospitals. The most valuable assets of healthcare organizations are the knowledge, skills and experiences of their doctors and nurses. These valuable assets are intangible and embedded in people. It is termed as Human Capital (HC) and it enables hospitals to function. HC is an important component in knowledge assets and its measurement is becoming more critical. This is congruent with the Malaysia Vision, which aimed to achieve a developed nation status by 2020. In light of this, the Malaysian government has designated the healthcare industry as one of the 12 National Key Economic Areas in its Economic Transformation Program (ETP). There were many activities need to be implemented through a training program to produce knowledgeable, competent, discipline and strong work ethics, value and commitment of staff (Ministry of Health, 2020). Another element of KA are structural capital (SC) and relational capital (RC). SC is the knowledge that stays with the hospital at the end of working day such as policies, systems and procedures. Meanwhile RC is the relationship with patients, public and third-party agencies.

Thus, to ensure effectiveness in managing these KA, focus should be given on the measurement and decision maker aspect. This study attempted to examine the relationship between leadership styles and KA elements in Malaysian private hospitals by taking into consideration its impact on hospital performance. Hospitals nowadays are facing growing competition due to high demand by various types of stakeholders that put them under

pressure to fulfil the quality. Different leadership styles might affect the success of managing KA as their strategy. It is expected that transformational leadership styles can become one of the factors that influence leaders to implement best practice of managing KA in hospitals. The current study also investigated which types of leadership styles increase the value of KA in the hospitals. Nevertheless, a better understanding about the role of leadership style towards the management of KA might avoid misallocation of resources and inappropriate management choices.

REVIEW OF LITERATURE AND HYPOTHESIS DEVELOPMENT

Knowledge Assets in Healthcare Industry

The historical understanding of IC is related to a new vision of the relevance of firms' talents and knowledge in the economy, resulting in a refreshed strategic management perspective (Pedro, et. al (2018). Healthcare industry faces many challenges in this new era. With the knowledge-based view (KBV) development, intangibles are recognized to be one of the most important resources (Oksana, 2016). Therefore, all people, materials, treatment and supporting facilities, utilities, physical conditions and standards for work processes need to be organised and managed effectively and systematically. These elements of intangible assets need to be properly identified and managed in order to sustain quality services provided by hospitals. The most significant intangible assets are determined as knowledgeable people, aptitude to learn, know-how, information technology, human skills, social relations and linkages, available journals and databases, intellectual property rights, registered designs, web content, copyrights, organizational procedures. In addition, Nonaka et al. (2000) defined intangible assets as "firm-specific resources that are indispensable to create values for the firm". Mendoza-Silva (2021) knowledge assets will increase their capacity for innovation and learning through the transformation of knowledge and ideas into new products and services that enhance the organization's performance and create stakeholder satisfaction. Abdulrahman (2009) also found that investment in intangible assets is a significant variable in organization growth. In addition, Mike et al. (2007) had identified that perception of managers on intellectual capital

is important to enhance management accounting practices and organization performance.

However, in the context of the healthcare industry, there are many types of intangible assets that have been introduced. Paoloni et. al., (2020) highlighted how the components of KA in the healthcare sector have not been discussed with the same frequency and intensity by researchers. KA approaches have become a prime importance in hospitals because knowledge is their main output and input. Edvinsson (1997) found that there are only three areas of KA which also known as intellectual capital (IC) in healthcare centres that are being identified, namely education and development of employees, the work environment and the patient's attitude towards the healthcare centres. Apart from that, Peng (2007) found that the most valuable KA in the hospitals are doctors, nurses, administration, service staff, hospitals director and patients with all their organizational relationships and routines. The knowledge asset can therefore be represented by its measurement that represents the ability to: (a) stimulate the internal spread of competencies and intangibles (Human Capital), (b) transfer the knowledge to become sets of structures and procedures within the organization (Structural Capital) and (c) collaborate and maintain good relationship with external stakeholders (Relational Capital). These components of 'capital' are part of knowledge assets and are ingredients to drive the healthcare organization's performance as well as to sustain the progress of hospitals. However, when there are many types of resources in the organization, managers will be able to know which activities to initiate and what strategic decisions to make in order to improve organizational performance (CIMA, 2001). This is supported by Hermansson (2003) who found that there is awareness of intangible assets in hospitals and the interviewees judged the measurement and management of intangible assets as highly relevant for their organizations. Another researcher, Peng (2007) identified the elements and relative importance of intangible assets and performance measurement in Taiwanese hospitals. Therefore, this present study further investigated the specific elements of knowledge assets as part of the hospital strategy in order to enhance its performance as well as competitive advantage.

Human Capital (HC) within hospitals is extremely important as it reflects the work of highly knowledgeable and skilled people caring for those in need of specialized healthcare (Peng & Roos, 2007). Doctors and nurses

are referred as the theoretical and practical knowledge registered expertise obtained from academic education, participation in continuing professional development activities and specialty training and work experience. HC is a critical resource and successful factor for the health sector in Malaysia to make a successful quantum shift to the future. In the past, the focus was on constraining growth in the cost of care, whereas emphasis is now being given to improving the quality and outcomes of care (Emidia, 2015). Ferlie and Shorttall (2001) reported that the essential factors required for quality improvement are: leadership at all levels, a culture supporting learning throughout the care process, effective teams' development and greater use of information technologies. Another researcher Al-Qershi et. al (2021) looked at the effect of human capital on the talent management systems in order to enhance hospitals' performance and sustainability. Thus, to meet the challenge of quality improvement, hospitals have to rely heavily on developing their ability to generate and manage HC.

Another component of KA is Structural Capital (SC). It includes the organisation's structures, strategies, procedures, and systems that altogether allow the organisation to produce and deliver products to its customers. Youndt (2004) described it as the processes and procedures that a firm's information technology (IT) system creates and stores to help it speed up the dissemination of knowledge throughout the organisation. SC was also defined by Cohen and Kaimenakis (2007) as the organisational culture, process efficiency, databases, structure, IT, and production systems and technology. Khatab et al. (2019) agreed with this definition and added management philosophy, network systems, and financial relationships. A sound SC would create the right environment for productive people to share knowledge quickly, reduce lead times, and grow collective knowledge (Stewart, 2000). The last component is Relational Capital (RC) which encompasses the firm's relationships with stakeholders, including suppliers, customers, community, and government (Bontis, 1998; Allee, 2000). Othman (2019) argued that RC is also known as customer capital that comprised customer loyalty, retention, involvement, collaboration, satisfaction, empowerment, and price sensitivity. According to Ferreira and Martinez (2011), customer capital is composed of knowledge about marketing, distribution channels, and customer appeal related to the external environment. Londono and Espinosa, (2021) stated that RC connects the organisation with foreign organisations and lead to the creation of added

value while also providing the organisation with a competitive advantage. Therefore, the interactions with the external world (RC) are relevant to innovation, and it is unusual for stakeholders to contribute substantially to the RC. However, an enterprise structured and focused only on internal interactions would not succeed. It has to look outwards and consider the broader market. For example, doctor-patient relationships, doctor-nurse relationships, and doctor-management relationships all affect the success of the hospital.

Leadership Styles (LS)

Leadership style (LS) is one of the key driving forces for improving firm performance (Alrowwad, A. et . al., 2020). Leadership styles have evolved and changed over the past century. In fact, leadership should be flexible and manifested with varying leadership behaviours in different scenarios. Whether successful leaders share similar experiences, attributes and leadership patterns has been a major academic issue. A sound and good strategic planning is aspired by a good leader. The performance of an organization often has a direct relationship with the ability and competence of its leader. Poor leadership not only affects things like low morale, absenteeism and attrition, but might also gives rise to complacency, failure to respond to markets and customers, poor strategic choices and major undesired effects (Muller, 2005). At present, transactional leadership is the dominant style operating in most healthcare organizations. Transactional leadership is a relationship of mutual dependence in which the contributions of each party are recognized often goals are met and rewards are delivered. However, due to the disadvantages of transactional leadership styles in terms of poor satisfaction among employees and customers has changed to the most effective leadership style, namely transformational.

Transformational leadership influences the fundamental attitudes and assumptions of an organization's members, creating a common mentality to attain the firm's goal. This style usually generates higher performance than transactional leadership (Bass & Avolio, 2000). Although evidence shows that transformational leaders exercise a substantial influence on performance, understanding the processes through which he or she exerts this influence is still limited and largely speculative. Therefore, it is believed that if transformational leaders can manage knowledge assets

properly, hospitals performance should be at the top or amongst first tier organizations. However, in the Malaysian hospital context, few studies have tested the causal path of the effects of leadership styles in managing intangible assets systematically. Can transformational style influence the hospital KA? From the Malaysian private hospital perspective, this study will further look at different types of leadership styles that will affect the management of knowledge assets and thus towards hospital performance.

Theoretical Background and Hypotheses

Organizations are continuously going through phases of transformation and looking for better leadership styles to achieve the ultimate objective of building and sustaining competitive advantage. This study contributes to the literature on IC and LS by integrating the Upper Echelon Theory (UET) and Resource Based View (RBV) literature. UET states that organizational outcomes, strategic choices and performance levels are partially predicted by managerial background characteristics (Hambrick & Mason, 1984). This Theory also holds that the firm top management team has a critical role in positioning the organization strategically. It shows that organizations strategies and performance are a reflection of their top manager's idiosyncrasies and biases. Evidence indicates that the quality of the top management team is crucial to the organization's position in the market (Hambrick & Mason, 1984) as demonstrated in the findings of Carmeli and Tishler (2006) that the managerial skills possessed by the top management team strongly affect firm performance, firm size and age as well as perceived environmental uncertainty. In particular, skills that are required to manage people (human resource skills) are found to be more important to firm performance than intellectual abilities. There are nine managerial skills of the top management team such as persuasiveness, fluency in speaking, knowledge about group task, diplomacy and tact, social skills, creativity, conceptual skills and intelligence. These are part of skills that are considered as intellectual capital. However, the strategic role of organizations top management team such as leadership style will also affect firms' performance.

The integration of this theory and RBV was applied in the framework of the study. RBV is regarded as an organisational theory that demonstrates the importance of organisational internal and external resources, and that

management pays attention to them. Leadership styles are seen as a valuable resource for an organisation and affect the organisational performance (Barney, 1991). The RBV theory aims to explain and anticipate how businesses might gain a competitive edge by acquiring and controlling resources that ultimately generate wealth to the hospitals. KA has all the characteristics of valuable, incomparable, and non-substitutable resources as value drivers towards organisational performance. Therefore, in line with the orientation of the constructs of this study, leadership styles (representing the UE characteristics), KA measurement, and organisational performance (hospital efficiency, utilisation, and financial performance) were applied in the framework for this study.

LS, KA and Hospital Performance

The preceding discussion has noted that there is strong relationship between LS and intangible assets. This relationship has been studied by many researchers all over the world such as US, Austria, Iran and other countries. However, the results found from prior studies are mixed since the leadership styles used for the studies were different. For example, there were positively significant relationship between LS and intangible assets found by Paktinat (2013) and Kumari (2014). However, these researchers used different types of leadership styles as their variables. As for Muller et al. (2005), their study aimed to show the relevance of leadership for the creation and retention of IC. The case study method was used when 16 persons with and without leadership responsibility were interviewed about the leadership behaviours in medium size enterprise in Austria. They found that HC refers to the combined intangible, skills innovativeness, individual employees to meet the task on hand, culture and value of an organization. Thus, a successful leader who has certain criteria such as protective, fun, participative in problem solving, diplomatic, harmony, acceptance and others will influence IC. It serves as a basis for the identification of strengths and weaknesses of leadership process in an organization.

It is supported by Paktinat (2013) who discussed the relationship between leadership style and the elements of IC in governmental organizations. The results showed that there is no significant correlation between task-oriented leadership style and IC in governmental organizations. In the case of relationship between task-oriented leadership style and the

elements of IC, they found that there is a significant inverse correlation between task-oriented leadership style and human resource (HR). Meanwhile, no relationship was found between task oriented, leadership style, structural capital (SC) and relational capital (RC). The results indicated that there is a direct and significant correlation between relational leadership style and IC in the governmental organization. In addition to that, other studies by Birasnav (2010) and Chao (2013), claimed that leadership factors have a strong and significant potential to influence components of IC in an organization. It can be major interests for every leader to know how they can contribute with their capability of leadership to retain and even create IC within the organization. A study by Farooq (2018) also found that LS positively influences relationship-based employee governance and open service innovation in hospitals. However, they used different measurements of LS categorized as paternalistic LS, authentic LS and democratic LS.

The phenomenon above describes the importance of LS towards KA and very few studies further investigated whether KA could mediate types of LS and hospital performance. The literatures were also run on this study with regard to the service industry like hospitals as well as on manufacturing industries. This study also contributed to the implementation of UET theories which are rarely used for IC research area. Therefore, the following research framework and hypotheses were formulated to test whether Transformational, Transactional and Passive Avoidant LS is positively related to one of the KA.

Transformational LS (TFL), Transactional LS (TSL), Passive Avoidant (PA) and Hospital Performance (HP)

Performance has been valued by the industry, government and academia for a long time. A good leadership is essential to attain organizational excellence and good performance in order to manage those empowered employees (Kumari, 2014). Excellent organizations can only be met and fulfilled through good leadership styles as it is essentially the core and spirit of successful organizations.

In the context of hospitals, there are few studies regarding the relationship between LS and HP. Charles (2005) found that chief executive officer transformational LS and behaviours are significantly related with hospital performance. Raza et al. (2018) and Saeed, H. et. al (2022)

investigated three criteria in order to evaluate hospital performance: staff motivation, innovation, and engagement in leadership. The results also revealed a statistically significant positive association between the factors.

Hospitals act in an environment which is characterized not only by limited financial resources, but also by actively involved in educating health care consumers. Hospitals also need to employ and coordinate specialized knowledge, skills and abilities embedded in their employees to deliver quality care to patients (Wiig, 2002). Therefore, Krystin (2008) explored the views of health care managers on the importance and impact of IC on hospital performance. They found that hospital managers realized the importance of intangible resources or IC and it was positively related to hospital performance. Similar to the above argument, this study applied the UET concept of upper echelon characteristics towards hospital performance (Raja Hisham et al., 2020). Furthermore, a study by Thanrnpas and Sakun (2018) also found that CEO transformational leadership indirectly affects product innovation performance through innovation culture, organizational learning and new product development process. An innovation culture and new product development process can become one of the criteria for performance. Thus, the following hypothesis was formulated to test whether TFL, TSL and PA are positively related to HP.

H_{1a}: Transformational Leadership Style is positively associated with HP

H_{1b}: Transactional Leadership Style is positively associated with HP

H_{1c}: Passive Avoidant Leadership Style is negatively associated with HP

Transformational LS (TFL), Transactional LS (TSL), Passive Avoidant (PA) and KA

TFL depends on high levels of communication from management to meet goals. Leaders motivate employees as well as enhance productivity and efficiency through communication and high visibility. This style of leadership requires the involvement of management to meet goals. In addition to that, TFL can make decisions about determining the business strategies, designing processes, increasing innovation and creativity, understanding social networks by assessment, evaluation of IC as well as

knowledge management functions of an organization (Sarlak et al. 2012). However, Krishnan (2005) argued that TFL style enhances employees towards achieving more rather than just what they had planned. Based on the upper echelon characteristics as mentioned above towards TFL leaders, have an appropriate managerial thinking that affects the management of KA. They create the flexibility of strategy especially developing HC to become an appropriate set of skills in order to answer a dynamic environment. Therefore, in the context of hospital top management teams who have an appropriate style of transformational leadership, it is expected that they can increase the merits of staff, skills and education, encourage staff to think about their own actions, encourage workers to work in groups and improve the performance of staff.

Thus, the following hypothesis was formulated to test whether TFL is positively related to KA.

H_{2a}: Transformational Leadership Style is positively associated with Knowledge Assets

Managers using the TSL style receive certain tasks to perform and provide rewards or punishments to team members based on performance results. Managers and team members set predetermined goals together, and employees agree to follow the direction and leadership of the manager to accomplish those goals. Employees receive rewards, such as bonuses, when they accomplish goals. The high potential in TSL and IC can be identified in this relationship. It is expected that TSL has a significant relationship towards IC as strategy in hospitals. Hence, IC indicators can become a part of strategic assets in private hospitals to gain sustainable competitive advantage. Thus, the following hypothesis was formulated to test whether Transactional LS is positively related to KA.

Based on the upper echelon characteristics as mentioned above towards TSL, they have the power to review results and correct the members of the team if they fail to meet the organizational goals. Similar with TFL they create the flexibility of strategy especially developing KA to become an appropriate set of skills in order to answer a dynamic environment. Therefore, it is expected that they can increase staff training, skills and education, but not encourage staff to think about their own actions because the plan is

given by the leader. Thus, the following hypothesis was formulated to test whether TSL is positively related to KA.

H_{2b}: Transactional Leadership Style is positively associated with Knowledge Assets

Roussel (2006) found that PAL or also known as *laisses faire* is not preferred by followers. The findings by Alharbi and Yusoff (2012) who researched on Saudi Public Hospitals found that PAL is negatively associated with quality management practices and this result was in line with Bass (1990), Sosik and Dionne (1997) as well as Vouzas and Gotzamani (2005). This type of leadership is not favourable due to lack of task concentration, work quality problems and poor productivity.

H_{2c}: Passive Avoidant Style is negatively associated with Knowledge Assets

This study also extended the research by Peng et.al. (2007) who ranked the importance of KA elements in Taiwanese hospitals into managers' personal relationships, staff capabilities in healthcare delivery, doctor reputation, manager's capabilities in making decision, professional competence and skills as well as managerial talent of administrative staff. However, they did not justify how hospitals measure this KA towards hospital performance. Therefore, by applying UET the following hypothesis was formulated to test whether the strategy set up by hospitals on KA elements is positively associated to Hospitals Performance.

H₃: Knowledge Assets is positively associated with Hospitals Performance

Finally, this study attempted to adapt the relationship by adding KA as a mediating factor that affects hospital performance. By applying UET, this mediating factor acts as a strategic choice that is supposed to be adopted by a manager towards attaining performance (Ismail et al., 2021) Thus, the following hypotheses were formulated:

H4(a): Knowledge Assets Elements mediate the relationship between Transformational Leadership Styles and Hospital Performance

H4(b): Knowledge Assets Elements mediate the relationship between Transactional Leadership Styles and Hospital Performance

H4(c): Knowledge Assets Elements mediate the relationship between Passive Avoidant Transformational Leadership Styles and Hospital Performance

RESEARCH FRAMEWORK

The diagram below shows the independent variables (transformational leadership, transactional leadership and passive avoidant styles) and the dependent variable hospital performance mediated by KA.

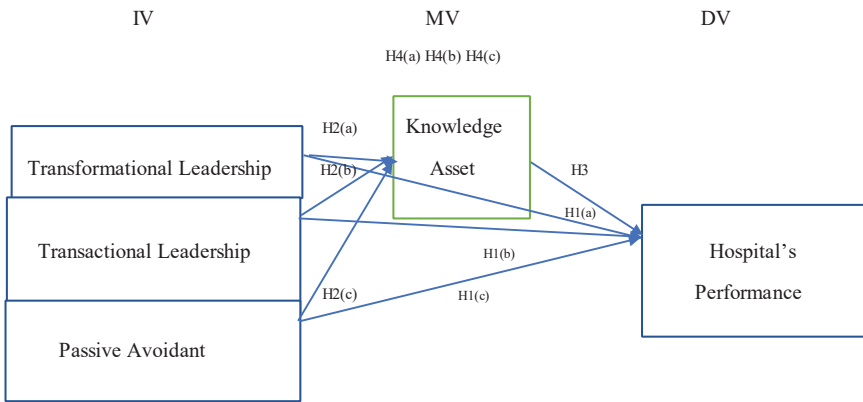


Figure 1: Transformational, Transactional, Passive Avoidant Leadership Styles, Knowledge Assets and Hospital's Performance

By referring to the above framework, the overall leadership styles will be represented and measured using the Multifactor Leadership Questionnaire (MLQ), KA and HP focusing on hospitals measured using the findings from the preliminary study and adoption from previous literature.

RESEARCH METHODOLOGY

This study was conducted in Malaysian private hospitals. Malaysia is among those countries striving for the development of the healthcare sector to cater to the needs of global patients and offer affordable and quality

healthcare services to international medical tourists. This study applied a mixed method approach to respond to the research questions. This study reviewed pertinent literature and sought feedback from the industry to start the qualitative research. The instrument used for this qualitative research was the cross-case study. Due to the dependability of the items used in the subsequent phase, conducting the interviews was the primary reason for doing so. According to the author's knowledge, there was no uniformity regarding KA elements utilised in the healthcare industry. The interview must be conducted in order to ascertain that the hospital management team in Malaysia relied on and understand the used items. Malaysian private hospitals are among the respondents who responded to the questions. The focus of this method was to find the best elements of KA, specifically in the healthcare industry, to develop a questionnaire for use in the quantitative part of the research. A series of in-depth interviews were conducted in five private hospitals. Content analysis and matrix techniques were employed to develop patterns found in the evidence. A standard interview format was used to ensure consistency and completeness of the response from all interviews. Each interview lasted approximately 60 minutes to two hours. The interviewees were among the TMT of the hospitals consisting of the CEO, Chief Operating Officer, Human Capital Manager, Finance Manager, and Marketing Manager. The interviews were recorded with the permission of the interviewees and transcribed for analysis. In this study, data collected from multiple cases were analysed singularly and using a cross-case procedure: within-case analysis and cross-case analysis (Stake, 2006). The thematic analysis consisted of examining, categorising, and tabulating evidence to determine whether or not the evidence supports a study's initial propositions. There were some new items found in this analysis to be used in KA elements in order to proceed with the next method. This study needed to proceed with the quantitative method because there was extensive literature, established variables, and existing theories to support this research work. The quantitative research design was adopted through self-administered questionnaire mailed directly to all top management teams of private hospitals in Malaysia. A cross-sectional survey method was used to conduct this study. Leadership styles questionnaire was adopted using the Multifactor Leadership Questionnaire (MLQ) developed by Bass and Avolio (2004). The questionnaire relating elements of KA was adopted from Shewchuk (2005), Peng (2007), Ramirez (2013), Evans et. al (2015) and findings from qualitative analysis conducted by the authors at the

early stage. Hospital Performance instruments have been developed by Abernethy (2001) of measuring hospitals efficiency and effectiveness. In addition to that, hospital performance was also measured by using Razak (2002) instruments which specifically focussed on critical success factor of the hospitals such as on-patient care experience, financial stability and capacity utilization.

The MLQ is supported by a solid theoretical and empirical basis and by its extensive application, both internationally and nationally in measuring leadership styles and behaviours. The reliability for all items and for each leadership factor scale was reported to range from .74 to .94. Twenty items were asked covering the range of transformational leadership. Each was rated on a five-point scale, ranging from '1' (not at all) to '5' (frequently, if not always). Meanwhile, there were 57 items on intangible assets asked to the respondents. The study was conducted among the 164 top management teams within 95 Malaysian private hospitals. Probability sampling was used to select the sample because the Malaysian private hospitals are spread across the country. The respondents eligible for the study were top management teams such as CEOs, directors, executive directors, managers, executives, and other professional staff. The selection was carried out by members of human resource units in each private hospital in Malaysia.

RESULTS AND DISCUSSION

Data analysis commenced with the inspection and review of the data in order to ascertain its suitability for analysis. The data were analysed using the Statistical Package for the Social Science (SPSS) version 23. Table 1 shows the tabulation of frequency and percentage derived from respondents' feedback.

Table 1: Respondents Profile with Frequency and Percentage

Educational Level	Percent
Diploma	14.7
Bachelor Degree	31.6
Master's Degree	35.8
Doctoral Degree	2.1
Professional	15.8

Job specification	Percent
Middle Management Level	28.4
Senior Management Level	42.7
Top Management Level	29.5
Respondents' Position	Percent
Chief Executive Officer	11.6
Executive Director	12.6
Director	2.1
Vice President	1.1
Manager	56.8
Others	6.3
Hospital Establishment	Percent
Less than 5 years	11.6
6-10 years	14.7
11-15 years	23.2
16-20 years	13.7
More than 20 years	36.8

Descriptive figures indicated that the majority of the respondents were from the senior manager level, with a percentage of 42.7%. Manager level consisted of respondents from various departments in hospitals including the nursing department, human resource department, finance department, pharmacy department and laboratory department. Even though the survey was directed to the CEO and directors of the hospitals, only 11.6% were answered by them. There is high probability that the directors and CEOs are busy with their tight schedule and have given the task to other staff. The figures indicated the appropriateness of the respondents' position involved in this study.

The majority of the respondents had six to ten years of experience working with the hospital, which is 37.5% of the total respondents. Years of experience help the respondents in providing more accurate and convincing responses to the questions being asked. 34.1% of the hospitals that the respondents represented have been operating for more than 20 years. This indicated that the hospitals had been well established and exposed with many management styles with different types of leaders, thus provided reliability in terms of feedback given to this research.

The following analysis was undertaken with the aim to understand how different leadership styles affect hospitals performance. This was followed by the analysis on whether KA mediates the types of leadership styles and

hospital performance. A multicollinearity diagnostic test was conducted to ensure that multicollinearity does not lead to spurious findings. The results showed that no multicollinearity existed between the three predictor variables (TFL, TSL and PA leadership styles), since tolerance values for all the variables were more than 0.5, while variance inflation factor (VIF) ranged between 1.197 and 1.724 (Table 2).

Table 2: Multicollinearity Diagnostics

Variables	Collinearity statistic	
	Tolerance	VIF
TFL	0.580	1.724
TSL	0.598	1.673
PAL	0.835	1.197
KA	0.754	1.326

Table 3: Mean, Standard Deviation and Reliability

Leadership Styles	Mean	Std. Deviation	Cronbach's Alpha
TFL	2.9230	0.47262	0.832
TSL	3.0122	0.47766	0.702
PAL	1.198	0.74775	0.811
KA	3.0458	0.63732	0.8245
HP	3.7810	0.49678	0.8492

Table 3 depicts the mean score, standard deviation and Cronbach alpha by items for the above variables. It indicates that the majority of the items scored between 1.198 to 3.05 for TFL. According to Bass and Avolio (2000), the key of frequency for the scores are; 4=frequently; 3=fairly often; 2=sometimes; 1=once in a while and 0=not at all. The results showed that, in general, the top management team in Malaysian private hospitals score themselves as significantly more transactional followed by transformational LS. These leaders are admired, respected and trusted. Among the things the leader does is to articulate in simple ways, shared goals and mutual understanding of what is right and important. These two types of leaders also promote positive expectations about what needs to be done (Bass, 1988). However, less score for passive avoidant as this leadership style seems not to be favoured among the leaders.

Table 4: Regression Analysis

Relationship	Unstandardized β	Standardized β	SE	P
TFL - HP	0.303	0.277	0.118	0.01
TSL - HP	0.212	0.278	0.082	0.001
PAL - HP	-0.36	-0.054	0.074	0.632
TFL – KA	0.461	0.241	0.208	0.01
TSL - KA	0.524	0.392	0.138	0.000
PAL - KA	0.125	0.113	0.115	0.281>0.01

Table 5: Mediation Analysis

Relationship	Direct without mediator	Direct with mediator	Findings
TFL – KA – HP	0.277(0.01)	0.200(0.1)	Full Mediation
TSL – KA – HP	0.278(0.001)	0.096(0.2)	Full Mediation
PAL – KA – HP	-0.054(0.632)	Not applicable	Not significant

Table 4 shows the regression results which point to the positive effects of only TFL and TSL on hospital performance and no significant relationship between passive avoidant leadership styles and hospital performance. TFL ($\beta=0.277, p<0.05$), TSL ($\beta=0.278, p<0.001$) and PA ($\beta=-0.054, p>0.1$). Results summarized in Table 4 also indicate support for H2(a) and H2(b) but not for H2(c). Statistical analyses were also conducted to test the three hypotheses of this study which proposed the mediating roles of KA in the relationship between TFL and TSL and HP.

There are mixed results between the leadership styles and KA. The above results are favourable for TFL and TSL factors when they have a positively significant relationship to the value of KA. The finding confirmed the positive role of TFL and TSL on managing KA as well as enhancing hospital performance. The results implied that KA is a strong contributor to hospital performance. These results were consistent with other researchers. According to Omar (2018), only HC has a positive and significant effect on the learning capability (performance) in hospitals. Therefore, the characteristics of transformational and transactional leaders can help the employees to strategies KA efficiently in a hospital setting. TFL and TSL requires the involvement of management to meet goals. Leaders focus on the big picture and delegate smaller tasks to the team to accomplish goals. TFL leaders are more concerned on creating strategic goals and communicate the visions through framing, acting and building commitment consistently (Avolio, 1999). On the other hand, TSL leaders go beyond the more basic styles which involve contingent reinforcement and management

by exception, and they are more inspirational and charismatic. Therefore, the findings showed that the leaders in Malaysian hospitals practically applied these two dominant leadership styles and a minority of them used passive avoidant leadership styles. The findings, in general are consistent with the findings of studies which reported that TFL and TSL have positive relationship towards the performance of organization and the development of KA components. The study further analysed the mediating role of KA's component individually such as human capital, structural and relational capital in order to strengthen the strategic choice of upper echelon (Shafie et. al., 2018).

In general, a mediating variable represents the mechanism through which the independent variable can influence the dependent variable (Baron and Kenny, 1986). The current research framework may examine KA as a mediator of the relationship between leadership styles and hospital performance. Hospital performance can be elaborated on efficiency, capacity utilization, quality of care, and financial stability. In a clan culture, people have a lot in common, and the leader acts as a facilitator, mentor, and team builder. UET portrays the characteristics of leaders that may affect the strategic choice of the leader to enhance organizational performance. The KA as a mediating variable with the independent and dependent variables has been a new injection in this model as part of the leader strategy. The results indicated that consistency between transformation and transactional leadership among leaders and KA could improve the performance of hospitals. Furthermore, disproportionate impacts were discovered when the KA was stronger with the two leadership styles. Similarly, Para-González et al., (2018) studied the KA component-human resource leadership and corporate performance relationship and determined the role of the human resource management. Results showed the existence of relations between innovative leadership and corporate performance mediated by human resource management. The results of the mediating variable is summarized in Table 5. It is observed that after introducing KA as a mediator in the model, the direct relationship of HP and TFL ($\beta=0.2, p>0.05$), and TSL ($\beta=0.096, p>0.05$) is no longer significant. However, there is no mediation effect of KA between PA and HP since the relationship is not significant from earlier analysis. Hence, H4(a) and H4(b) are fully supported and H4(c) is not supported. In this study, the mediating role of KA was found to be fully supported. Similarly, a study in the banking industry, Al-Rowward

et al (2020) found that TFL and TSL related positively to organizational performance. The results also supported the argument that intellectual capital and innovation played mediating roles in this relationship.

According to West et al (2014), leaders are the makers and breakers of their authority, rewarding and punishing followers, providing opportunities for knowledge acquisition and resource development. If TMT follow TFL and TSL styles they can improve KA strategies to enhance organisational efficiency, capacity utilisation, financial stability and quality of care Thus, this study suggested that healthcare systems should assist professionals and leaders in developing and promoting KA to enhance organizational performance. Integrating with the resource-based perspective which describes the characteristics of managerial resources especially KA embedded in management may rely more and more on the efficient use of existing resources. Good characteristics of leadership styles invisibly compel businesses to retain and utilise existing resources and long-term strategies while adopting new resources and strategies that are compatible with the current environment and improve the performance of the organisation. TFL is where leaders are greatly loved, well regarded, and have dominant feelings among supporters; individualized organization supports, encourages, and coaches followers, as well as encourages fresh learning possibilities and a supportive follow up development climate; inspirational motivation promotes strong vision and leadership actions provide motivation to supporters by making the job of followers meaningful and challenging. Meanwhile TSL can keep their supporters motivated for the short term by using a rewards and punishment model. Leaders who use transactional leadership as their model keep track of followers' performance and take corrective actions wherever necessary. Such leadership is efficient both in crises and emergencies and for projects that need to be implemented in a particular manner.

From the managerial aspect, the findings of this study would assist policymakers and hospital management teams in making better judgements and taking uniform actions throughout the entire organisation. The KA indicators development results would provide a common vision of policy and objectives, advantages of preparing KA disclosure, quality improvement, efficiency increase, cost savings, greater competitiveness, and better patient empowerment. The findings of this study may also give hospitals the right

choice of leadership styles that should be embedded in the characteristics of a good leader. Also, policymakers who are capable of influencing the direction and nature of the Malaysian healthcare industry's environment could fully utilise the findings to determine possible changes required in promoting KA development among hospitals in Malaysia. The findings are expected to motivate all healthcare companies to respond faster in implementing suitable leadership styles and KA strategies. The findings would also motivate the hospitals' personnel to be more ingenious and inventive when handling patients and emphasise the KA components because a good rapport between patients and physicians would indirectly increase the hospitals' income.

CONCLUSION

Private healthcare performance is critical in order to address the expanding population and need for better patient care. The sector demands leadership abilities to improve knowledge assets methods for improved delivery of healthcare services, treatment, and facilities, as well as to establish a culture that supports innovation to gain a competitive advantage. Because state hospitals cannot handle the inflow of patients, a major portion of the population relies on private healthcare services. There is an urgent need to improve private healthcare leadership governance and standardise knowledge assets at all levels. Healthcare leaders must be more creative and support a good strategic option of managing knowledge assets in order to improve present services and products to fulfil expanding demands and cope with technological advances. The framework is expected to address a gap in the literature by proposing a new paradigm within the context of the healthcare sector. The framework will add to the body of knowledge by investigating the relationship between leadership styles, knowledge assets, and organisational performance utilising UET and RBV theories. The framework is expected to contribute to theory by accounting for the effect of independent variables on the dependent variable in the healthcare setting. In practise, the framework would help policymakers improve or restructure existing policies, as well as create new ones, to promote knowledge asset management in tertiary care hospitals and healthcare facilities. The suggested paradigm, in particular, is expected to have significant managerial implications for healthcare systems looking to strengthen their competitive

advantage in patient care through improved leadership styles and strategic leadership selection. It is considered that, in today's dynamic environment, where populations are always changing, transformational and transactional leaders will play an important role in achieving goals and improving health outcomes. Future researchers are urged to add more constructs to this model in order to identify the various causes that drive organisational effectiveness. Furthermore, this study only focused on private hospitals, but the sample can be expanded to include all enterprises in the healthcare industry. Furthermore, it would be interesting to see whether future research can look into other crucial organisational elements that may act as a mediator between leadership styles and hospital performance.

ACKNOWLEDGEMENTS

The authors would like to express their gratitude to the Faculty of Accountancy, Universiti Teknologi MARA (UiTM) Shah Alam Malaysia for their assistance, as well as ReNeU UiTM for the publication incentive provided through Program MEE 2.0, which also facilitated the writing and publication through the Emerging Research Leaders Series (ERLS) at ILD UiTM.

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