Relationship between Transformational Leadership, Organizational Structure and Knowledge Management

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ABSTRACT

The study examines the relationships between transformational leadership style, knowledge management and organizational structure among 255 administrators in a public university in Malaysia. The findings of this study reveal that transformational leadership style is a vital in promoting knowledge management practices in an organization.Specifically, the result of this study reveals that idealized influence, inspirational motivation, intellectual stimulation and individualized consideration of transformational leadership style significantly influence knowledge management practices. The organizational structurewas found to moderate the effect of transformational leadership on knowledge management indicating that organizational structure plays a crucial role in assisting the leaders to manage knowledge across the organization.

Keywords: Transformational leadership, knowledge management, administrator, organizational structure

I. INTRODUCTION

The concern of Malaysian government in developing the nation through knowledge-based economy with the aim to become a high income nation by the year 2020 seen as vital planto acceleratethe rapid rate of economic growth as well as to enhance international competitiveness. Organizations among the government sector are urged to develop a more knowledgeable organization, especially in managing resources and providing public services (Syed-Ikhsan and Rowland, 2004). In the higher education sector, knowledge management is considered as a process of knowledge sharing and knowledge distribution through utilizing several knowledge sharing and distribution tools and methods. Nejadhussein and Azadbakht(2004) advocated that higher education institutions have plenty of opportunities to apply knowledge management initiatives to achieve their mission and objective. In the similar vein, the role of leadership is essential to the creation of knowledge management where the use of teams, communities of people and other networksoften ensure that information and knowledge to reach the right people at the right time (Crawford, 2005). Moreover, Hick, Dattero and Galup (2006) highlighted that leaders play an important role in knowledge management adoption in which their leadership style influences the success rate of knowledge management implementation.

To date, plenty of research has been conducted to address the link between information management and leadership style, but limited research focuses on the effect of transformational leadership style on knowledge management (Crawford, 2004).In the Malaysian context, research on the effect of transformational leadership style on knowledge management in the higher education sector is not noticeable. Most of the existing research place a large emphasis on business oriented organization (Hitam, Mahat & Rajasegaran, 2008).Correspondingly, a review of past literature affirms that organizational structure is a crucial element in the organization that affects leadership style and knowledge management in a particular organization (Martinez-Leon & Martinez-Garcia, 2011; Chen, Huang & Hsiao, 2010; Adhikari, 2010; Inkpen& Tsang, 2005). However, there seems to be limited studies that address the effect of organizational structure on both leadership style and knowledge management simultaneously. Given that there isa evident gap in both existing literature and in the industry, this study intends to look into how transformational leadership style affects knowledge management in higher education institutions. The present study will also address the effect of organizational structure on the relationship between transformational leadership style and knowledge management.

II. TRANSFORMATIONAL LEADERSHIP

Burns (1998) defined leadership as leaders bringing the followers to act for certain goals that represent the values and the motivations – the wants and needs, the aspirations and expectations of both leaders and followers. This advocates that leadership does not

only create changes to help achieve organizational goals, but leadership also changes the people (leaders and followers).It is critical if the followers would have not pursued the demanding goals of the organization. A study by Birasnav, Rangnekar and Dalpati (2011) suggested that transformational leaders motivate followers to accept and accomplish difficult goals. Transformational leadership is made possible when the leader's end values (internal standards) are adopted by followers, thereby producing changes in attitudes, beliefs, and goals of followers.Bass (1985) and Yukl (1998) define transformational leadership in terms of leader's effect on followers that feel trust, admiration, loyalty and respect towards the leader; and those who are motivated to do more than they originally expected to do. Both Bass (1985) and Yukl (1998) identified three ways in which leaders transform their followers, that is:

(i)   Increasing their awareness and level of consciousness of task importance and value.
(ii)   Getting them focus on the team or organizational goals, rather than their own interests.
(iii)   Achieving higher order needs.

On the other hand, another group of researcher (Bass and Riggio, 2006; Skakon, Nielsen, Berg & Gazman, 2010) proposed that there are four dimensions of transformational leadership, that is:

(i)   *Idealized influence*: Leaders create trust and respect of their followers by doing the right thing rather than ensuring they do things right (Kelloway&Barling, 2000).
(ii)   *Inspirational motivation:*The leader provides meaning and challenge to subordinate's work by articulating a vision that is appealing and inspiring to followers. Leaders with inspirational motivation challenge followers with high standards, communicate optimism about future goals, and provide meaning for the task at hand (Kelloway&Barling, 2000).
(iii)   *Intellectual stimulation:* The leader encourages subordinates to be creative and approach problems in new ways. It is the degree to which the leader challenges assumptions, takes risks and encourages followers to use their imagination and to re-think the old ways of doing things (Kelloway&Barling, 2000).
(iv)   *Individualized considerations:* The leader pays attention to the individual subordinate's needs and provides coaching and mentoring resulting

in the followers is more willing to develop competence and take initiative because they feel trust and respect for their leaders (Coad & Berry, 1998).

III. KNOWLEDGE MANAGEMENT

A. Leadership styles in knowledge organization

Leaders play an important role in knowledge management practices within the organization. Leaders create the conditions that allow participants to exercise and cultivate their knowledge manipulation skills, to contribute their own individual knowledge resources to the organization's pool of knowledge, and to have easy access to relevant knowledge (Crawford, 2005). According to Politis (2001), leaders do not manage knowledge but they carry out their mission to effectively apply and use knowledge from a variety of traditional positions located throughout the organization. In his findings, leaders encourage communication, encourage negotiation, encourage knowledge sharing and promote interactive processes for knowledge acquisition. They also encourage team members to gather information and the knowledge required to monitor their performance.

Viitala (2004) on the other hand, defined knowledge, leadership as leadership that promotes learning where together with his/ her subordinates, clarifies the direction of development, creates the climate which promotes learning, and supports the learning process at both individual and group levels. The leader also inspires his/her subordinates towards continual personal development through his/her own example. Meaning that knowledge leadership is therefore neither new nor distinctly different from any other form of leadership. Her study also has pointed out some important elements and tasks of leadership, which are especially important if a leader wants to contribute to learning in her unit. In reality, the role "supporter of learning" in terms of knowledge management, the nature of leaders' tasks and becomes more closely associated with that of teacher and coach.

B. Idealized influence and knowledge management

The dimension "acting as a role model" expressions of the leaders' own attitude towards their work. They lead learning and knowledge through their own

example and to be credible, they have to learn and constantly develop their capabilities. Additionally, leaders' interest in their work seems to influence subordinates. Finally, it is important that leaders commit themselves to the changes and developments they agree upon with their subordinates (Viitala, 2004).

According to Jaussi and Dionne (2003), leaders who act creatively make themselves available for creative emulation, which in turn produces more creativity in followers. Acting as a model for creativity was expected to increase the chance that followers would practice idea generation themselves. Niu (2010) found out when the leaders create the trust and respect of their followers through provided creative work model, they are able to learn, ability facilitates organizations to accumulate and renew the existing knowledge and contribute to innovation.

Leaders who are perceived to possess the characteristic of idealized influence always have more willingness to involve in risk-taking job activity and thus, they are more influential, effective, and willing to trust their employees (Bass & Riggio, 2006; Birasnav, Rangnekar & Dalpati, 2011). A manager-leader with idealized influence underlines the ideological and moral implications of his/ her decisions, and by role-modelling shows his willingness to sacrifice private interests for the organization betterment. A sample behavioural item is: "The leader emphasizes the importance of having a collective sense of mission" (Amitay, Popper, &Lipshitz, 2005).

Drawing from the above discussion, the following hypothesis was proposed:

> *H₁: There is a relationship between idealized influence and knowledge management among university administrators*

C. Inspirational motivation and knowledge management

According to Amitay, Popper, and Lipshitz (2005), leaders who create motivation through inspiration formulate a clear and inspiring vision of the organization's future. In their behaviours toward people, they praise acts done for the common good, express optimism about the future of the organization, show enthusiasm for shared topics, and radiate confidence that the aims will be achieved. A sample item is: "The leader articulates a compelling vision of the future".

Leaders possessing the characteristic of inspirational motivation augment employees' goal accomplishing capabilities or job performance to achieve the set vision (Nemanich &Keller, 2007). On other hand, leaders create individual and team spirit among employees as they show enthusiasm and optimism at employees through coaching, encouraging, and supporting. As a result, they enhance employees' performance while performing job activities and produce high return on investment from employee and increased their knowledge (Birasnav, Rangnekar, & Dalpati, 2011).

According to Nguyen and Mohamed (2011) by motivating followers to question assumptions, be inquisitive, take intelligent risks and come up with creative observations, leaders encourage individuals to break through learning boundaries and to share their learning experiences both within and across departments. The active role of leaders as supporters of both group-level and individual-level will indicate the supporting learning process. Viitala (2004) noted that this aspect is associated with individuals' motivation for learning and their sense of ability to learn. It is the key task of leaders to increase their confidence in this area.

Given the aforementioned discussion, we proposed the following hypothesis:

> *H₂: There is a relationship between inspirational motivation and knowledge management among university administrators*

D. Intellectual stimulation and knowledge management

According to Jong and Den Hartog (2007), intellectual stimulation may create opportunities for employees to voice ideas that may otherwise be overlooked and is, therefore, believed to trigger idea generation in particular. He also suggested a link between knowledge dissemination and idea generating among employees depends on their awareness of the needs, trends, and problems within their professional and organizational environment. This sort of knowledge provides the individual with a source for new ideas.

A study by Amitay, Popper, and Lipshitz (2005) stated that leaders who are characterized by the ability to create intellectual stimulation will observe subordinates to look at old problems in new ways encourage them to "think differently," and legitimize creativity and innovation. In their conversations and discussions they often search for different angles to solve problems, and they regularly examine basic assumptions to see whether they are still viable. A sample item is: "The leader seeks different perspectives when solving problems."

Leaders must create forums for discussion to organize development and innovative new ways of receiving feedback. In other words, leaders must organize the time, places and frames for their people to communicate all messages that indicate the direction in which knowledge and capabilities should develop(Viitala, 2004). Therefore, leaders who intellectually stimulate employees encourage them to solve task-oriented problems in new and different ways and thereby leaders enforce their employees in challenging organization-held beliefs and values (Birasnav, Rangnekar & Dalpati, 2011). From this, these leaders promote the employees' ability to analyse and solve organizational problems (Rafferty &Griffin, 2004).

Bryant (2003) claimed that there is a strong relationship between transformational leadership and knowledge management in organizations. In addition, conditions of transformational leadership have been highlighted by certain studies in order to promote autonomy, commitment and trust for improving knowledge management processes such as empowerment (Donate & Guadamillas, 2011).For instance, the study by Gagne (2009), showed that empowerment (and transformational leadership) are related to the follower's needs for competence and autonomy, which are essential conditions for effective knowledge creation and innovation. In an empowering organizational structure, leaders are capable of increasing team member's self-efficacy and control over their work environment. As a result, they are more likely to share knowledge with one another before and during the decision process (Xue, Bradley & Liang, 2011).

Based upon aforementioned literature support, we proposed the following hypothesis:

> *H₃: There is a relationship between intellectual stimulation and knowledge management among university administrators.*

E. Individualized consideration and knowledge management

Amitay, Popper, and Lipshitz (2005) argued that leaders with high individualized consideration that related to the respective employeeindividually and not just as "one more"; they treat each employee as an individual with needs, abilities and aspirations different from those of others, they help their workers develop their strong points, and they spend much time guiding and training their people. The approach of such leaders is basically non-punitive. They are ready to learn equally from successes and failures. A sample item is: "The leader spends time teaching and coaching."

Leaders delegate projects to stimulate learning experiences, provide coaching and teaching, and treat each follower as an individual (Politis, 2001) and promote high interpersonal relationships among employees to avoid any conflict, and ensure enhanced employee development in the organizations (Nemanich and Keller, 2007). Leaders give followers discretion to satisfy their developmental needs and to act accordingly, followers are likely to turn to devote more time to their work due to enhanced feelings of discretion and provision of enriched opportunities to test work capabilities (Cheung and Wong, 2010).

Viitala (2004) stated that leaders support their subordinates by reflecting on their own knowledge and capabilities. They also plan together with their subordinates the ways in which to develop their proficiencies to ensure that all people in the organization develop effectively. Leaders are able to do that if they can sufficiently recognise the capabilities of subordinates. It is important that leaders instil the importance of continual learning, to monitor progress and give positive feedback.

Based upon past literature evidences, the following hypothesis is proposed:

> *H₄: There is a relationship between individualized consideration and knowledge management among university administrators.*

IV. ORGANIZATIONAL STRUCTURE

As highlighted earlier, there are limited research examining the moderating role of organizational structure in transformational leadership and knowledge management relationship with administrators in higher education. Researches done on other sector in the service industry were referred to, providean argumentto the moderating effect of organizational structure. For example, we referred one of the studies that examined the moderating role effect of organizational structure factors on social capital and social network perspectives, which involved knowledge management and firm innovativeness (Chen, Huang, and Hsiao, 2010).

According toMintzberg (1979), the organizational structure can be defined as the result of the combination of all the ways in which work can be divided into different tasks, the coordination of which must subsequently be ensured. Child (1972), defined this term as "the formal allocation of work roles and the administrative mechanisms to control and integrate work activities including those which cross formal organizational boundaries". According to Chen and Huang (2007), organizational structure also reflects the way in which information and knowledge are distributed within an organization, which affects the efficiency of their utilization. Consequently, it substantially influences the distribution and coordination of the company's resources, the communication processes and the social interaction between organizational members. Therefore, Martinez-Leon and Martinez-Gracia (2011) noted the configuration of organizational structure impedes or facilitates the capacity of the company to adapt to change, to learn, to innovate or to improve its ability to generate added value for its customers.

In summary, the type of organizational structure is decisive in the development of knowledge management. The design of the organization constitutes a process through which leaders model and characterizes their structure and organizational process, determining managerial procedure and operation (Martinez-Leon & Martinez-Gracia, 2011). That means, organizational structure may play the moderating role in the relationship between leadership and knowledge management. Ogawa and Scribner (2002) stated the structure of organizations

is crucial to conceptualizing leadership because the structure and leadership are related to three ways:

a) Structure can inhibit and even replace leadership. Organization's members grow committed to existing patterns of action and interaction, often blunting efforts to change arrangements with which they have grown comfortable. Structure can substitute for leadership (Kerr & Jermier, 1978) by producing reliable patterns of activity and social relations that do not require the insistence or oversight of a leader.

b) Organizational structure can affect leadership by determining the access to resources that leaders can play to exert influence over other.Explanations of leadership as a form of social influence have noted that leaders exchange resources for the compliance of followers. Some of the resources on which leaders rely tied to their positions, including rewards, punishments, and the authority of office (Yukl, 1998).

c) Leadership has been conceptualized as a quality of organizations, rather than the province of particular roles of offices. That is, leadership is a form of social influence that occurs when any actor affects an organization's structure. Leadership from this view, constructs, changes, interpolates and uses structure, which includes formal, bureaucratic elements and informal, cultural elements (Ogawa and Scribner, 2002).

Studies by Chen, Huang, and Hsiao(2010), Magnier-Watanabe and Senoo (2010), Martinez-Leon and Martinez-Gracia(2011) have reported that most organizations can be classified as either horizontally and vertically structured. In Malaysia, the application of whether horizontal or vertical structure will depends on many factors including the size of organization, task specialization, the degree of authority to make decision, spans of control, and functional departments.

According to Chen, Huang, and Hsiao (2010), some aspects of vertically structured organizations include specialized tasks, a strict hierarchy with many rules (formalization), vertical communication and reporting systems, few teams or task forces, and centralized decision-making. Meanwhile, horizontal structure involves shared tasks and empowerment, a more relaxed hierarchy with fewer rules, horizontal face-to-face communication, more teams or task

forces, and decentralized decision-making. Mohamed, Stankosky, and Murray (2004) mentioned since the traditional organizations are vertically structured around tasks and functions, they are not suitable for sharing knowledge at the organization level. A new forms of organization structure have emerged: the horizontal organization, the network organization and the virtual organization. The flattened organizations sturcture minimizes cross-boundaries and open necessary channels for exchanging ideas and sharing knowledge.

Specialization is a design parameter of the organizational structure. Horizontal job specialization refers to the numbers of tasks assigned to any given job, their variety and their proportion of the whole activity represented by each task (Mintzberg, 1979). Vertical job specialization separates the performance of the work from the administration of it (Martinez-Leon & Martinez-Gracia, 2011).

Formalization refers to the degree of codified rules and procedures existing in the organizations to guide the employee behaviors and work process (Andrews & Kacmar, 2001). Highly formalized organizations, derived from the strict adherence to formal rules and regulations. The obedience of the rules, procedures and regulations may constrain the employees in combining the various sources of knowledge for developing new products or sevices (Bidault & Cummings, 1994). Besides that, less formalized structure would stimulate employees to think creatively about their work, facilitate openness and encourage new ideas, seek out other sources information, ask different questions and thus, engage in more sense-making approaches to their work (Chen, Huang, and Hsiao, 2010). Therefore, leaders with a more formalized structure, employees are less willing to take the initiatives to enhance the creativity about their work through knowledge management.

According to Gao, Li, and Clarke (2008) and Andrews and Kacmar(2001), centralization refers to the locus of decision making lying in the higher levels of hierachical relationship. Top down directives would reinforce an environment of fear, distrust, and internal competition while decreasing collaborations and integrative actions. While Damanpour (1991) and Janz and Prasarnphanich (2003) stated that centralization creates a non-participatory environment that reduces

communication, commitment, involvement among participants and prevents employees from exerting discreating in their work and cause inefficiency in creation and sharing of knowledge. In addition, under a decentralized structure, employees would have more opportunities to provide inputs and more discretion to determine what actions are required. Thus, based on the study by Chen and Huang (2007), within a more decentralized structure they might be accelerated the knowledge management process by bringing new ideas, exchanging knowledge to the ongoing agenda and can facilitate employees' motivation to speed the transitions of knowledge into new product and services.

An integrated structure provides opportunities for employees to learn from their colleagues, build communication and coordination channels to share relevant expertise and knowledge (Germain, 1996; Janz & Prasarnphanich, 2003). Developing an efficient common network structure and organization-wide knowledge structure are essential for ensuring ease flow of communication and to achieve knowledge management system success (Jennex and Olfman, 2005). With regard to this, according to Birasnav, Rangnekar, and Dalpati, (2011), there are two types of communication that can be considered namely mass communication and face-to-face communication. Mass communication is generated between organization and employees through using an advanced technological infrastructure and publishing a newsletter weekly or monthly, whereas face-to-face communication is generated between an employee and manager through direct verbal communication.

Given the aforementioned literature support, we deliberately proposed the following hypothesis:

> H_5: Organizational structure moderates the relationship between transformational leadership style and knowledge management of university administrators.

From the above literature discussion and proposed hypothesis, we developed a conceptual framework for this study as shown in Figure 1.

Figure 1:Research model of transformational leadership style and knowledge management among university administrators in Malaysia: The moderating effect of organizational structure.
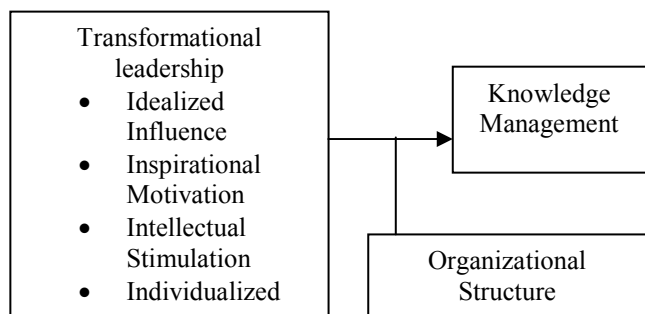
V. METHODOLOGY

Data were obtained through a survey method using structured questionnaires. The participants in the study were administrators who worked with the universities in Malaysia. The respondents among administrative staffs were considered as having much knowledge about the issues understudy. A total of 596 questionnaires were distributed to the respondents using cluster sampling method.A total of 225 questionnaires were returned which make up the response rate of 42.79%.

A.Transformational Leadership Style

The transformational leadership style was measured with Bass (1985) Multifactor Leadership Questionnaire 5-S (MLQ) which consists of 20 items. This 20 items instrument is divided into four dimensions which cover the measurement of transformational leadership style. Respondents were asked to use a 5 point Likert-type scale to indicate the extent to which they agree with the given statement. Response choice alternatives ranges from 1 (strongly disagree) to 5 (strongly agree). The reliability value and number of items in each dimension are presented in Table 1. The reliability value above the accepted mark of 0.70 suggests that the assessment instrument can be used with confidence.

B. Knowledge Management

Knowledge management was measured by Natarajan and Shekhar's (2001) measurement of knowledge management. This measurement consists of 24 items and is divided into five dimensions. A 5 point Likert-type scale ranges from 1 (strongly disagree) to 5 (strongly agree) was used to measure the level of agreement towards the given statement.

C.Organizational Structure

Organizational structure was measured using instrument developed by Martinez-Leon and Martinez Garcia (2011). The measurement consists of two questions. A 5 point Likert-type scale ranges from 1 (strongly disagree) to 5 (strongly agree) was used to measure the level of agreement towards the given statement.

D. Assessment of Normality

Normality test was carried out in this study to make sure the data collected was normally distributed. In the present study, histogram and normal Q-Q plot were used to test the normality of the distribution. Based on the testing, it was found that independent variables and its four dimensions, dependent variable, as well as moderating variable were approximately normally distributed. The results of the test showed significant value 0.000 which $p < 0.05$. The actual shape of the distribution for each group can be seen in histogram and also supported by an inspection of normal probability plots by normal Q-Q plot.

Table 1: Assessment of Reliability of Constructs

Elements	Cronbach's Alpha	No. of items
Transformational Leadership	0.825	16
Idealized influence	0.737	4
Inspirational motivation	0.706	4
Intellectual stimulation	0.892	4
Individualized consideration	0.751	4
Knowledge Management	0.838	24
Knowledge Acquisition	0.762	5
Knowledge Creation	0.828	5
Knowledge Storage	0.821	5
Knowledge Sharing	0.785	4
Knowledge Transfer	0.822	5
Organizational structure	0.647	2
TOTAL		42

VI. FINDINGS

A. Demographic statistics

The sample involved administrators ranging from the age of 25 years old to above 59 years old. Based on the analysis of 255 respondents, the highest frequency were among respondents at the age group of 35–44(33.3%; 85 respondents), 41–54 (31.4%; 80 respondents)and 25–34 (24.3%; 62 respondents). The age 55–58 was 9.4% and 59 above was 1.6%, which represented 24 respondents and four respondents. The majority of the respondents were having position at Grade 41 with 47.1%, Grade 44 with 20.4% and Grade 48 with 18.0%, Grade 52 with 9.4% and Grade 54 represented 5.1%.

The analysis showed that only six schemes were involved in this study which were scheme N (administration), W (bursary), S (librarian), J (engineering), F (information technology) and KP (security). The greatest numbers of the respondents were from scheme N (40.4%), S (24.3%) and W (15.7%) which carried 103, 62 and 40 respondents. Meanwhile, there were 21 respondents (8.2%) from scheme J, 20 respondents (7.8%) from scheme F and only nine respondents (3.5%) from scheme KP. In regards to the respondents' highest academics education, most of the respondents were holders of bachelor's and master's degree. There were 158 respondents (62%) with bachelor's degree and 36.9% (94 respondents) were master's degree holders. Only one respondent was a PhD holder and another two respondents (0.8) were with diploma.

In terms of the respondents' length of service in their working experience, the highest frequency were respondents who had been in their service for a period of 6–10 and 1-5 years. They represent 22.7% and 21.2% with a total of 58 and 54 respondents. These were followed by respondents who have been in service for 11–15 years (15.3%), 21–25 years (14.1%), 26–30 years (11.4%) and 16–20 years (9.4%). The least frequency were respondents who have been in service for more than 31 years (5.9%) which represented 15 respondents.

Table 2: Demographic statistics of respondent (N = 255)

No	Item	Category	Frequency	Percentage
1.	Age	25 – 34	62	24.3
		35 – 44	85	33.3
		45 – 54	80	31.4
		55 – 58	24	9.4
		59 above	4	1.6
2.	Grade	41	120	47.1
		44	52	20.4
		48	46	18.0
		52	24	9.4
		54	13	5.1
3.	Scheme of service	N	103	40.4
		W	40	15.7
		S	62	24.3
		J	21	8.2
		F	20	7.8
		KP	9	3.5
4.	Level of education	Diploma	2	0.8
		Degree	158	62
		Master	94	36.9
		PhD	1	0.4
5.	Length of service	1 – 5	54	21.2
		6 – 10	58	22.7
		11 – 15	39	15.3
		16 – 20	24	9.4
		21 – 25	36	14.1
		26 – 30	29	11.4
		31 more	15	5.9

B. Descriptive statistics, reliability coefficient and correlations

The descriptive statistics for all the variables in the present study are presented in Table 2, alongside with the correlation matrix. All the dimensions of transformational leadership are correlated positively with knowledge management (idealized influence r=.393, inspirational motivation r=.223, intellectual stimulation r=.293, individualized consideration r=2.69). The result from the correlation test preliminary supports the proposed hypothesis that all the four dimension of transformational leadership styles have a significant impact on knowledge management.

C. Hypothesis testing

The first hypothesis: there is a relationship between idealized influence and knowledge management. A simple linear regression was conducted to test the hypothesis. Result of the regression analysis indicates that the hypothesis is statistically significant, R^2=.155, Adjusted R^2=.151, $F(1,254)$=46.233, $p<.05$. Idealized influence is statistically significant (β=0.393, p=0.001), indicating that 15.5% of the variance in knowledge management is accounted by idealized influence.

The second hypothesis: there is a relationship between inspirational motivation and knowledge management. A simple linear regression was conducted to test the hypothesis. Result of the regression analysis indicates that the hypothesis were statistically significant, R^2=.050, Adjusted R^2=.046, $F(1,254)$=13.210, $p<.05$. Idealized influence is statistically significant (β=0.223, p=0.001), indicating that 5% of the variance in knowledge management is accounted by inspirational motivation.

The third hypothesis: there is a relationship between intellectual stimulation and knowledge management. A simple linear regression was conducted to test the hypothesis. Result of the regression analysis indicates that the hypothesis is statistically significant, R^2=.086, adjusted R^2=.082, $F(1,254)$=23.769, $p<.05$. Idealized influence is statistically significant (β=0.293, p=0.001), indicating that 8.6% of the variance in knowledge management is accounted by intellectual stimulation.

Table 3: Construct correlation and scale reliability values a complete standardised solution

Variables	TL	Influence	Motivation	Stimulation	Consideration	KM
TL	(.825)					
Influence	.806**	(.737)				
Motivation	.868**	.582**	(.706)			
Stimulation	.898**	.692**	.791**	(.892)		
Consideration	.682**	.401**	.445**	.390**	(.751)	
KM	.357**	.393**	.223**	.293**	.269**	(.838)

The fourth hypothesis: there is a relationship between individualized consideration and knowledge management. A simple linear regression was conducted to test the hypothesis. Result of the regression analysis indicates that the hypothesis is statistically significant, R^2=.072, adjusted R^2= .068, $F(1,254)$=19.660, $p<.05$. Idealized influence is statistically significant (β=0.269, p=0.001), indicating that 7.2% of the variance in knowledge management is accounted by inspirational motivation.

Table 4: Simple linear regression analysis

Variable	β	t	p
[a] Idealized influence	.393	6.799	.000
[b] Inspirational motivation	.223	3.635	.000
[c] Intellectual Stimulation	.293	4.875	.000
[d] Individualized Consideration	.269	4.434	.000

[a]R^2 = .155, Adjusted R^2 = .151, F (1, 77) = 46.233, p = .001
[b]R^2 = .050 Adjusted R^2 = .046, F (1, 77) = 13.210, p = .001
[a]R^2 = .086, Adjusted R^2 = .082, F (1, 77) = 23.769, p = .001
[b]R^2 = .072 Adjusted R^2 = .068, F (1, 77) = 19.660, p = .001

The fifth hypothesis: organizational structure moderates the relationship between transformational leadership style and knowledge management of university administrators. A hierarchical multiple-regression was used to assess this hypothesis.

Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity. The overall of four dimensions of transformational leadership were entered at Step 1, explaining 37.8% of the variance in knowledge management. After entry of the transformational leadership and organizational structure (Zscore TL x Zscore OS) at Step 2, the total variance explain by the model as a whole was 38.9 percent, $F(3,251)$=53.37, $p<.05$. The unstandardized regression coefficient for the interaction term is 0.045 as (β=0.108 with value of p=0.032<0.05). The interaction between transformational leadership and organizational structure only explained an additional 1.1 percent of the variance in knowledge management, adjusted R^2=0.011, $F(1,251)$=4.63, $p<0.05$. In the final model, it shows that there is significant positive relation between transformational leadership and organizational structure towards knowledge management process. This indicates that organizational structure does moderate the relationship between transformational leadership and knowledge management. Therefore, H_5 is accepted.

Table 5: Hierarchical regression to examine moderating effect of organizational structure

Model and Variable	Unstandardized Coefficients		Standardized Coefficients	
	B	Std. error	Beta	R^2
Model 1				
Transformational leadership (TL)	0.121	0.20	0.296	
Organizational structure (OS)	0.206	0.20	0.505	
				0.378
Model 2				
TL x OS	0.045	0.21	0.108	0.389*

Dependent variable: Knowledge management, Confidence Interval: *$p < 0.05$

VII. DISCUSSION

This study explored how transformational leadership is related to knowledge management in the higher education industry. The result indicates that the four dimension of transformational leadership style are related to knowledge management. The result also illustrates that organizational structure does moderate the relationship between transformational leadership and knowledge management.

In this study, the result of correlation and simple linear regression in assessing the variables or the empirical relationship between dimensions of transformational leadership style and knowledge management are statistically significant. The positive association between the dimension of transformational leadership style and knowledge management suggest that there is a high correlation between transformational leadership style and knowledge management. The assessment of moderating effect of organizational structure on the relationship between transformational leadership style and knowledge management also suggest that organizational structure plays a crucial role in assisting a good leader to manage information and knowledge across the organization.

VIII. LIMITATION AND FUTURE RESEARCH DIRECTIONS

The present study has several limitations which provide opportunity for future research. First and foremost, the findings of the study are limited to the selected sample, that is, management administrators in the university. Findings from the present study are only applicable for administrators of the education industry.

Second, data were gathered using only one type of instrument that is the questionnaires and it does not involve the use of qualitative measures. This postulate a weakness as the respondenst might keep some judgment or do not admit their agreement or disagreement in detail towards a given statement. A series of interview to the administrators and their leaders may provide other crucial information that is not gathered in the present study.

IX. CONCLUSION

The present research investigated the relationship between the dimensions of transformational leadership styles towards knowledge management and organizational structure as a moderator of the study. The results show that dimensions of transformational leadership are significantly related to knowledge management. The results also indicate that organizational structure does moderate the relationship between transformational leadership and knowledge management. We hope that this research would stimulate more research attention on how transformational leadership style could help enhances knowledge management and at the same time, expand the research framework by examining and identifying other possible variables (both moderating and mediating variables) that could possibly enhance the present framework.

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