A STUDY OF THE RELATIONSHIP BETWEEN LEADERSHIP STYLE AND KNOWLEDGE MANAGEMENT IN PAN-ASIA INTERNATIONAL SCHOOL

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Abstract: This study examined the relationship between leadership and knowledge management in Pan-Asia International School. The hypothesis of this study is that there is a significant relationship between leadership style and knowledge management. The study included a sample of 35 teachers from a population of 49 teachers in this International School. Questionnaires were used as the research instruments to collect the demographic profile and to measure leadership style and knowledge management. Therefore, the research design of this study is quantitative. Descriptive method was used to identify leadership style of administrators and knowledge management of school and Pearson's Product Correlation method was used to examine the relation of leadership style and knowledge management. According to the major research findings of this study, the teachers from PAIS perceived that their administrators have high transformational leadership style and they tend to agree that they perceive school knowledge managements.

Moreover, regarding the relationship between total average of two leadership styles and knowledge management, the research finding showed that transformational leadership style is positively and significantly related to the knowledge management ($p < 0.05$).

Keywords: Relationship, Leadership Style, Knowledge Management, Pan-Asia International School

Introduction

The nature of knowledge management is to expand the quality of the contributions people create to their societies by helping people to make sense of the framework within the society, to take accountability, to cooperate and share what they know and learn, and to effectively challenge, discuss and learn from others. Organizations have the prospective to learn and that new knowledge may be efficiently incorporated into particular practices, so that the knowledge is available when needed.

Leaders are expected to be the ones who set examples for the followers in every organization; consequently the whole organization and the way the companies approach knowledge management procedures including companies practices are influenced by the leaders as everybody believes. In case, knowledge management is not applicable to entire levels in the organization, starting from the top, it doesn't mean that knowledge management programs will ever catch on or be effective (DeTienne, Dyer, Hoopes & Harris, 2004). For these reasons, the role of leadership in terms of managing knowledge has been clearly emphasized in organizations.

We all understand that our society is changing more and more toward knowledge-based society, and as a result, only those particular organizations will get to the top in the global information society that can recognize, value, construct and develop their knowledge assets. Knowledge management is one of various modules of good management in our knowledge-based society. Knowledge management plays an important role in the successful operation of improvement activities in any organization. Effective organization creates an intensive effort to capture, organize, and share what their employees recognize; they create knowledge, which is wider, deeper, and better than data or information. Consequently, knowledge management has becoming gradually more important to the organization.

Schwandt and Marquardt (2000) defined that one of the structures for the organization is leadership. Several of researchers agreed that the role of leadership is very important in knowledge management. But they also understand that the leaders need to have ability to manage knowledge so that the organization can accomplish a competitive benefit (Mulligan, 2001). The process of knowledge management significantly contributes toward the improvement of teachers' and administrators' profession in their particular task. It helps organizations to change their capitals (including human resources) into respected resources. Furthermore, knowledge management can be played as an alternative role by schools to improve performance.

Research Objectives

1. To identify the leadership style of administrators of Pan-Asia International School as perceived by teachers of Pan-Asia International School.
2. To identify the school knowledge management as perceived by teachers of Pan-Asia International School.
3. To determine the relationship between the leadership style of administrators and the school knowledge management as perceived by teachers of Pan-Asia International School.

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Review of Literature

Concept and Definition of Knowledge
Knowledge is a complex concept to define precisely because varied ranges of characteristics are attributed to it. Alavi and Leidner (2001) observed that the dimensions of knowledge range from a mere recalling of facts, and hence can be stored, to action and expertise, to a potential and ability. Webster (1961) also defined knowledge as a clear and certain perception of something- the act, the fact, or the state of understanding. Knowledge contains both knowing how, which is normally more tacit knowledge, and knowing about, which is more explicit knowledge (Grant, 1996). To put it in other words, basically knowledge is an understanding of information and their associated patterns (Bierly, Kessler & Christensen, 2000).

The word of "Knowledge" is a complex concept with multilayer meanings. In the past, it has been linked with terms such as data, information, skill, intelligence, experience, expertise, ideas, and intuition, or insight which all depend on the context in which the words are used. The traditional epistemology adopts a definition of knowledge as "Justified True Belief" which was later modified by Nonaka and Takeuchi (1995), a dynamic human process of justifying personal beliefs as part of an aspiration for the truth. Machlup (1983) analyzed information as a flow of messages of meanings, which might add to, restructure change knowledge.

Defining Knowledge Management
According to uit Beijerse (1999) knowledge management is a way of accomplishing organizational objectives using strategy like motivating and facilitating workers for the development of their abilities and knowledge to be able to understand data and information by using accessible sources such as skills, experience, information, culture, personality, character, feeling, etc. through a process of giving meaning to these data and information. Todd (1999) also defined that knowledge management is the enlargement of organizational and individual preparation that help successfully tap into, organize and utilize people's competencies, proficiency, experiences, skills, opinions, abilities, intuitions, ideas, commitments, innovations, imaginations and practices and the assimilation of these into the creation of resources of an organization to accomplish goals. According to this definition, Todd believed knowledge management as a "complete managing practice" because the whole managing practice can deliver particular of an organization the chance of cooperating, sharing, using and adding more value to the knowledge, information and wisdom of an organization.

Transformational Leadership
Transformational leadership is a form of leadership which focused on the leader's higher level of personal commitment and trait to his or her followers and greater capacity of organization to accomplish the school's goals through high performance (Bass, Avolio, Jung & Berson, 2003). This kind of leadership style can help to progress the performance of employees and improve their ability to complete higher level of achievement (Bryant, 2003).

According to Avolio and Bass, transformational leadership is accomplished through four significant characteristics, these are idealized influence or charisma, inspirational motivation, intellectual stimulation, and individualized consideration described as follows (Avolio, 1999; Bass, 1998):

1. Idealized Influence (Charisma): It symbolizes the followers appreciating their leaders and building confidence with capability in the leaders, which forms the basis for accepting radical change in organization. In terms of being transformational leaders, they should be a role model for their followers and the leaders are respected, trusted and admired. The followers, namely, try to imitate the leaders with faultless influence. Therefore, when a leader had greatest success in high level of confidence and appreciation with his/her followers, they begin to imitate their leader. Accordingly, the power of leader can conduct fundamental change the organization encounters confirm and support with the employees. The leaders who have idealized influence can be appreciated, trusted, admired, honored by their followers and they recognize them and try to emulate them. This kind of leaders can exemplify the role models to their employees by doing "the right things", demonstrating high standards of ethical and moral conduct. They do not try to accomplish personal interests by using their abilities and position; however, they encourage their followers to use their potentials and to achieve the organizations' goals. They deliver followers with a vision and a sense of mission. They are deeply respected by their employees who usually place a great deal of trust in them.

2. Inspirational Motivation: It is the capability of transformational leadership, which qualifies a leader as a figure, which inspires and motivates the followers to appropriate behavior. In other words, the way transformational leaders act inspires and motivates subordinates around them by offering meaning and challenge to their followers' work. The leader has clear mission and endless stimulation with their followers to follow a new idea when the change of transformational leadership is being conducted in an organization. Therefore, transformational leader behaves in such a way which encourages and inspires followers. Such behavior contains implicitly showing enthusiasm and optimism of followers, pointing out positive results, stimulating team work, emphasizing aims, advantages, stimulating followers, etc. Moreover, they motivate followers to become part of the overall organizational environment and culture.

3. Intellectual Stimulation: Transformational leaders motivate the efforts of their followers to become innovative and creative by reframing problems, questioning assumptions, and approaching old situations

in new ways. Therefore, there is a possibility to acquire creative and new ideas for resolving problems from the followers. The leader always inspires his/her followers to try new methods, and their ideas are not criticized, the reason is their ideas can be different from their leader. Furthermore, creativity is stimulated in the organization and there is no public condemnation of individual members' mistakes. In fact, the followers need this form of leadership help while they are trying new approaches and developing innovative ways of dealing with organizational issues. It supports followers to progress their own thinking skills and to be engaged in careful problem solving.

4. Individualized Consideration: This style involves paying special attention to each individual follower's recognition and praise for their performance such as for personal growth and achievement. That is the reason why followers often believe transformational leaders as mentors and coaches. As advisers and coaches, the leaders always try to help individual followers with becoming fully actualized. This type of leaders supports followers to grow through personal challenges by using delegation. Transformational leaders are known to adapt to the needs of particular and to build one-on-one relationship with followers. Colleagues and followers are developed in order to reach successively higher levels of potential. The practice of individual consideration is when new learning opportunities are created with supportive climate. Additionally, the personal attention can support the followers to build confidence, motivation to meet the leader's high expectations, and increase their overall job satisfaction.

Transactional Leadership

Bass (1998) indicated his transactional leadership model together with four components: contingent reward, active management by exception, passive management by exception and laissez-faire leadership. In this study, the researcher concentrates on the first three components only. Therefore, only the first three components are described as follows:

1. Contingent Reward: This refers to leaders who did exchange process with followers in terms of setting goals, rewarding, and providing direction and support for a particular level of performance. With this kind of leadership, the leaders usually try to obtain from followers using as incentive and contingent rewards in exchange for their performance in meeting agreed-upon goals (i.e., task accomplishment). Followers obey the agreed-upon exchange agreements through contingent reinforcement processes. Hence, the leaders who use transactional contingent reward are predicted to have a positive influence on followers' job performance and attitudes and on team performance through effective exchange processes. Additionally, research has found the positive relationship between transactional contingent reward leadership and work outcomes, such as leader effectiveness and team performance at the team level, and

follower performance and work-related attitudes (i.e., job satisfaction and organizational commitment) at the individual level (cf. Judge & Piccolo, 2004; Lowe, Kroeck & Sivasubramaniam, 1996; Walumbwa, Wu & Orwa, 2008). An example of this type of transaction would be interaction between parent and child negotiating how much TV he or she can watch after practicing the guitar. Another example is that in the academic setting in university in which a dean negotiates with a professor about the number and quality of publications he or she needs in order to receive tenure and promotion.

2. Management-by-exception: refers to the intervention of leaders to be included in followers' work process below standards. The transactional leaders depend on negative feedback, punishment and other forms of negative reinforcement to persuade followers from engaging in insufficient performance (Bass & Avolio, 1997). This kind of leadership behavior can be either active or passive relying on the leaders' monitoring behavior (Howell & Avolio, 1993). Timing is the aspect that distinguishes active-management-by-exception and passive management-by-exception.

3. Active-Management-by-Exception: This refers to leadership which monitors the performance of employees and then takes corrective action as necessary when employees make errors or mistakes. In other words, active management by exception occurs, when the leader proactively searches for the followers' problems and informs them immediately (Bass & Avolio, 1997).

4. Passive-Management-by-Exception: This typical leadership is in contrast with active-management-by-exception. It happens when leaders provide command only after the end of tasks. In other words, the leaders wait and facilitate only after mistakes or errors occur (Howell & Avolio, 1993).

Conceptual Framework

(See Figure 1 on the next page)

Method

Population

The target population for the current research is teachers at Pan-Asia International School. All 49 teachers in the population will be used as the subjects for data collection. The reason is, in order to increase the accuracy of the study design and avoid coverage error; all current teachers are included in the population. The population of teachers consists of the teachers from Nursery, Kindergarten, Grade 1-6, and Grade 7-12.

Instrumentation

In this study, questionnaire will be used as an instrument to achieve the objectives of this research. Questionnaire consists of three main parts. The first part of questionnaire is about teachers' demographic profile and it consists of
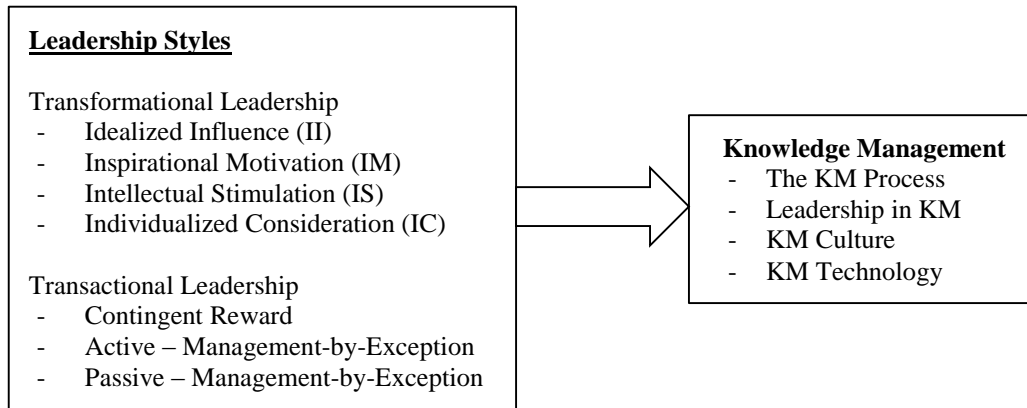
Leadership Styles

Transformational Leadership
- Idealized Influence (II)
- Inspirational Motivation (IM)
- Intellectual Stimulation (IS)
- Individualized Consideration (IC)

Transactional Leadership
- Contingent Reward
- Active – Management-by-Exception
- Passive – Management-by-Exception

Knowledge Management
- The KM Process
- Leadership in KM
- KM Culture
- KM Technology

Figure 1: Conceptual Framework of This Study

seven questions. In addition, it was created by this researcher. The selected eight teachers' demographic variables are (1) Gender, (2) Age, (3) Nationality, (4) Highest Educational Level, (5) Religion, (6) Position, and (7) Work Experience.

The second part of questionnaire is Multi-Factor Leadership Questionnaire/Leader Rater Form (MLQ 5X-Short) which is adopted from Bass and Avolio's (1997) questionnaire with slight adjustments to appropriate the present study. Since the time the questionnaire was first designed, the MLQ has gone through many modifications and has continuously been developed to strengthen its reliability and validity (Bass & Avolio, 2000). In fact, the origin of MLQ questionnaire consists of forty five items; however, the researcher excluded fifteen items since they are not related to this research. Therefore, the researcher only mentions thirty questions in this leadership questionnaire. Moreover, based on the recommendation of Bass and Avolio (1992), the items of questionnaire show independent characteristics which leaders should answer based on their own style so as not to have a negative influence on their questionnaire scores. Bass and Avolio themselves tried to take off some items about usefulness, satisfaction, extra effort and developed an abbreviated version of the MLQ, called the MLQ5S-Short to measure transformational and transactional leadership style (Venkat, 2005).

There are two different types of leadership styles under leadership style part of questionnaire; these are transformational leadership style "Four I's" comprising of: idealized influence (II); inspirational motivation (IM); intellectual stimulation (IS); and individualized consideration (IC) and transactional leadership style which comprises of contingent reward; Active – Management-by-Exception and Passive – Management-by-Exception. The scope of transformational leadership "Four I's" and transactional leadership (Contingent Reward, Active – Management-by-Exception, Passive – Management-by-Exception) questions will be as follows:
Transformational Leadership Questions
Questions 1-4: Idealized Influence (II)
Questions 5-12: Inspirational Motivation (IM)
Questions 13-16: Intellectual Stimulation (IS)

Questions 17-20: Individual Consideration (IC)
Transactional Leadership Questions
Questions 21-23: Contingent Reward
Questions 24-27: Active – Management-by-Exception
Questions 28-30: Passive – Management-by-Exception
The third part of questionnaire is knowledge management which is adopted from The Knowledge Management Assessment Tool (KMAT) developed by the American Productivity & Quality Center and Arthur Andersen (1995) to help organizations self-assess where their strengths and opportunities lie in managing knowledge. Therefore, this questionnaire already has reliability and validity. Actually, the origin of this questionnaire tool is divided into five sections: the KM process; Leadership; Culture; Technology and Measurement. Nevertheless, measurement is omitted since it is not related to this research. Therefore, the four different types of knowledge management tools are-
Knowledge Management Tools
Questions 31-35: The Knowledge Management Process
Questions 36-39: Leadership in Knowledge Management
Questions 40-44: Knowledge Management Culture
Questions 45-50: Knowledge Management Technology
There are 20 questions involved in the second part of knowledge management questionnaire. All the questions refer to four different kinds of knowledge management tools.

This questionnaire is based on a 5-point Likert-type scale ranging from 1= Strongly Disagree to 5= Strongly Agree to match with other parts of the questionnaire in this study. Interpreting the mean values of the leadership style and knowledge management of the school was based on the Likert scale concept of the boundary of numerals.
4.50 – 5.00 Strongly Agree
3.50 – 4.49 Agree
2.50 – 3.49 Neutral
1.50 – 2.49 Disagree
1.00 – 1.49 Strongly Disagree

Procedure
The current research utilized a quantitative research design using non-random sampling was employed to identify the relationship of knowledge management as

leadership style as perceived by teachers in Pan-Asia International School and the perception of the teachers on the knowledge management process in Pan-Asia International School. The questionnaire was distributed to all teachers from Nursery, Kindergarten, Grade 1-6, and Grade 7-12.

The data collection was done at the second week of February, 2013. Of a total of 49 questionnaires distributed, 35 useable questionnaires were returned, representing an overall return rate of 71.4%. The collected data were encoded and statistically analyzed by using the Statistical Package for the Social Science (SPSS) software. For the first and second research objective, mean and standard deviation are used as the descriptive statistics method.

leadership and the total mean of transformational leadership style is 4.13. Moreover, the three factors of transactional leadership style which represent Contingent Reward (CR) is 4.10, Active – Management-by-Exception (AME) is 3.70 and Passive – Management-by-Exception (PME) is 2.60 and the total mean of transactional leadership style is 3.46. Therefore, transformational leadership style received a higher mean score of 4.13 compared to the mean score of transactional leadership style at 3.46. Based on the research findings, the teachers of Pan-Asia International School perceived that their administrators have high transformational leadership style.

Table 1. Mean and Standard Deviations for the Computed Factors of Leadership Style

Leadership Style	Mean	Standard Deviation	Interpretation
Idealized Influence (II)	4.19	0.52	High
Inspirational Motivation (IM)	4.17	0.51	High
Intellectual Stimulation (IS)	4.03	0.74	High
Individualized Consideration (IC)	4.14	0.62	High
Transformational Leadership	4.13	0.52	High
Contingent Reward (CR)	4.10	0.57	High
Active - Management-by-Exception (AME)	3.70	0.83	Moderate
Passive - Management-by-Exception (PME)	2.60	1.18	Low
Transactional Leadership	3.46	0.48	Moderate

Lastly, for research object three, Pearson Products Moment Correlation of Correlation was used for determining the relationship between the leadership style of administrators and the school knowledge management as responsive to research hypothesis.

Finding

Personal Information
The result of descriptive statistic revealed that, with regard to gender, the majority of respondents were male teacher (n=19, 54.3%). With regard to age, majority of respondents were aged between 26 to 35 years (n=22, 62.9%). With regard to nationality, majority of respondents were foreigner (n=28, 80%). With regard to highest level of education, majority of respondents were Bachelor degree (n=21, 60%). With regard to religion, majority of respondents were Muslim (n=12, 34.3%). With regard to position, majority of respondents were primary school teachers (n=15, 42.8%) and with regard to work experience, majority of respondents have 6 to 10 years (n=14, 40%).

Leadership Style
According to the table 1, it answered the research objective one which identifies the leadership style of administrators of Pan-Asia International School. There are four factors included; Idealized Influence (II) is 4.19, Inspirational Motivation (IM) is 4.17, Intellectual Stimulation (IS) is 4.03 and Individualized Consideration (IC) is 4.14 which can make up transformational

Knowledge Management
The result of table 2 demonstrated the school knowledge management as perceived by teachers of Pan-Asia International School which answered the research objective two. According to the result of research findings, the mean scores of teachers from Pan-Asia International School tend to agree with perceived four knowledge managements which represent Knowledge Management Process, Leadership in Knowledge Management, Knowledge Management Culture and Knowledge Management Technology. Knowledge Management Culture (KMC) is slightly higher mean score of 3.84 but results indicate that the mean score of Knowledge Management Process (KMP) at 3.65, Leadership in Knowledge Management (KML) at 3.64 and Knowledge Management Technology (KMT) at 3.65 are quite close to the mean score of Knowledge Management Culture (KMC). After all, the mean score of total Knowledge Management is 3.71; this indicated that teachers of Pan-Asia International School perceived high knowledge management action as effective tool to improve the success of the school.

Relationship between Leadership Style and Knowledge Management
The result of table 3 demonstrated the relationship between total average of transformational leadership style, transactional leadership style and knowledge management.

Table 2. Means and Standard Deviations for the Computed Factors of Knowledge Management

Knowledge Management	Mean	Standard Deviation	Interpretation
Knowledge Management Process (KMP)	3.65	0.57	High
Leadership in Knowledge Management (KML)	3.67	0.77	High
Knowledge Management Culture (KMC)	3.84	0.72	High
Knowledge Management Technology (KMT)	3.68	0.93	High
Total Knowledge Management (KM)	3.71	0.55	High

According to the research findings in table 4.10, the correlation between transformational leadership style and knowledge management is .409 and significant value is .015, which is smaller than .05 significant levels. Therefore, there is a positive relationship between knowledge management and transformational leadership style in Pan-Asia International School.

The research findings from the correlation between transactional leadership style and knowledge management is .179 and significant value is .303, which is bigger than .05 significant levels. Therefore, there is no significant relationship between knowledge management and transactional leadership style in Pan-Asia International School.

Based on the data analysis of Hypothesis, it was found that knowledge management has the moderate relationship with transformational leadership. Therefore, according to the research findings, knowledge management has significant relationship with transformational leadership style except transactional leadership style. Testing of the research objective three and research hypothesis, the relationship of transformational leadership style is a significant relationship with knowledge management at Pan-Asia International School.

Table 3: Pearson's Product-Moment Correlation Coefficients between Transformational Leadership Style, Transactional Leadership Style and Knowledge Management

	Transformational Leadership Style	Transactional Leadership Style
Knowledge Management	.409*	.179
Pearson Correlation Sig. (2-tailed)	.015	.303

* $p < 0.05$

Discussion

Leadership Style
According to the data analysis of SPSS results, the teachers of Pan-Asia International School perceived that they strongly agree that administrative leaders from their school tend to adopt transformational leadership style (M = 4.13) compared to transactional leadership style which is least perceived leadership style (M = 3.46). Therefore, the detail of transformational leadership style (four main contents) was paid attention by administrators in PAIS.

It means that the administrators of PAIS have high personal commitment to his or her followers and use the capacity of organization to fulfill the school's goals. In terms of transformational leadership style, Bass (1985) defined that transformational leaders affect their followers through trust, admiration, and respect. The school leaders have to show confidence and the ability to influence followers to have mutual respect for each other's competencies and develop a strong sense of responsibility. They need to inspire and motivate subordinates around them to handle their responsibilities effectively and efficiently by offering challenge with high standard and opportunity to see meaning in their work. Moreover, effective school leaders have vision, passion, and confidence to inspire and guide subordinates to try to fulfill the aims of the school. Transformational leaders are people who can create significant changes in both followers and the organization with which they are associated.

Eight dimensions of the model conceptualized transformational leadership are building school vision, establishing school goals, offering individualized support, providing intellectual stimulation, modeling best practices and important educational values, demonstrating high performance expectations, creating a productive school culture, and developing structures to foster participation in school decisions (Bycio, Hackett & Allen, 1995). Moreover, Bass and Avolio (1990) found that transformational leadership comprises of four behavior process factors which are charisma, inspirational motivation, intellectual stimulation, and individualized consideration. They defined the first factor – charisma, with trust, admiration and respect to how followers observe and act toward the leaders such as subordinate are seen motivated to follow their charismatic leaders; they have a great trust in their leaders' judgment, as well as mission (Leithwood & Jantzi, 2005). The finding of this research result is similar to that.

Findings of this study imply that when transformational leadership style of school administrators operationalized charisma and apply inspiration, individualized consideration, and intellectual stimulation, they elicit positive reactions from teachers. Seemingly, such transformational leadership qualities do indeed stimulate higher level needs of teachers and result in higher feelings of satisfaction. This research finding is supported by the rationale of other leadership researchers (e.g., Bass & Avolio, 1990). In addition, the attention that school administrators contribute to teachers will be reflected in their general positive attitude toward work

and work conditions, which in turn ensure efficiency and effectiveness of work.

Knowledge Management
As for the knowledge management, the mean score of Knowledge Management is (M = 3.7); this indicates that teachers of Pan-Asia International School perceived that they tend to agree there is knowledge management in PAIS to improve the effectiveness of the school.

Therefore, the findings stated that knowledge management is identified as one of the most essential resources which can contribute to the competitive advantage of an organization. The findings of the current study on knowledge management, Nakra (2000) asserted that knowledge management has the ability to share, develop, extract, and provide knowledge such that it might be retrieved and used to support the processes or to make decision. Papows (1998) also showed that knowledge management is all about creating information reachable to other workers of the organization and recalling and getting employees' knowledge. In fact, it can be accomplished through the help of technologies such as databases, internet and includes translation of tacit knowledge to explicit knowledge. The result of this study also implies that the knowledge management of PAIS is a system that integrates organization, people, processes, and technology.

Moreover, every organizations; whether private or public, big or small, services, need and use knowledge which embedded in their employees and their processes and try to create value for themselves and their societies. Though degree of knowledge applied differs from organization to organization, the effective knowledge management, even for enterprises which use little knowledge has happen to be an important management instruction. Therefore, it would be advantageous to implement effective knowledge management system for organizations such as schools since it provides the means to support organization in the matter of creating, sharing and using knowledge.

The Relationship between Leadership Style and Knowledge Management
The data analysis of this study showed that there is no significant relationship between transactional leadership and knowledge management actions (p>0.05). However, there is a positive and significant relationship between transformational leadership style and knowledge management actions (p<0.05) in Pan-Asia International School. It was established and concluded that transformational leadership is correlated to knowledge management in organization (Barchan, 1999; Greengard, 1998 & Tynan, 1999). The research of Politis (2001) supported that an active collaboration between leadership and employees is needed for encouraging and energizing the perceptions and attitudes of employees toward knowledge management. The research of Mulligian (2001), and Bryant (2003) also concluded that both transformational and transactional leadership actions are central to the establishment and management of collective knowledge. Therefore, school leaders with these kinds of characteristics deliver the motivation, vision, systems, and structures at all levels of school organization that assist the translation of collective knowledge into competitive advantages (Bryant, 2003).

After looking through specifically the relationship between leadership and knowledge sharing, Mulligan (2001) mentioned that there is a significant relationship between leadership and knowledge sharing. The indication of results explained that the respondents who scored high on knowledge sharing also tended to score high in leadership. Additionally, she found out that leaders must encourage a shared vision and create a culture that motivates sharing of knowledge. Building trust and readiness to take risks were also deliberated significant for successful knowledge sharing. Crawford (2005) also found that the role of leaders plays the enormous impact on KM practices within their organizations because the leaders create the situation where all the followers (participants) are able to cultivate and exercise their knowledge use of skills, to provide their own individual knowledge resources to the organization's pool of knowledge, and to have free access to relevant knowledge. Moreover, the specific results of Crawford (2005) showed a strong relationship between transformational leadership and KM behaviors.

With regard to the current study, the researcher believed that, in order to develop knowledge management it is better to reduce the use of transactional leadership (contingent reward and management-by-exception) and increase more transformational leadership method such as idealized influence, inspirational motivation, intellectual stimulation and individual consideration in Pan-Asia International School. However, leaders can adjust their leadership style depending on a range of situational factors because there is not limited leadership style for a leader to use in a given situation. Leaders are able to adapt appropriate leadership styles to influence their followers' success and to complete their goals.

References
Avolio, B. J. (1999). *Full leadership development: Building the vital forces in organizations.* Thousand Oaks, CA: Saga.

Alavi, M., & Leidner, D. E. (2001). Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Quarterly, 25*(1), 107–136.

Bass, B. M., & Avolio, B. J. (1997). *Full range of leadership: Manual or the Multifactor leadership questionnaire.* Palo Alto, CA: Mind Garden.

Bass, B. M. (1998). *Transformational leadership: Industrial, military, and educational impact.* Mahwah, NJ: Lawrence Erlbaum.

Bass, B.M. & Avolio, B.J. (2000). MLQ Multifactor Leadership Questionnaire. Redwood City: Mind Garden.

Bass, B. M. & Avolio, B.J. (1992). *Manual for the Multifactor Leadership Questionnaire.* Palo Alto, CA: Consulting Psychologist Press.

Bass, B. M. (1985). *Leadership and performance beyond expectations.* NY: Free Press.

Bass, B.M., Avolio, B.J., Jung, D.I., & Berson, Y. (2003). Prediction unit Performance by assessing transformational and transactional leadership. *Journal of Applied Psychology, 88*(2), pp. 207-218.

Bierly, P.E. III, Kessler, E.H. and Christensen, E.W. (2000), ''Organizational learning, knowledge and wisdom'', *Journal of Organizational Change Management, 13* (6), 595-618.

Bycio, P., R. D. Hackett & Allen, J.S. (1995). Further assessments of Bass's (1985) conceptualization of transactional and transformational leadership. *Journal of Applied Psychology*, *80*(4), 468-478.

Bass, B. M. & Aviolo, B. J. (1990). The implications of transactional and transformational leadership for individual, team, and organizational development. *Research in Organizational Chang and Development*, *4*, 231-272.

Barchan, M. (1999). Capture knowledge. *Executive Excellence*, *16*(9), 11.

Bryant, S.E. (2003). The role of transformational and transactional leadership in creating, sharing and exploiting organizational knowledge. *Journal of Leadership and Organizational Studies, 9*(4), 32-44.

DeTienne, K. B. , Dyer, G. , Hoopes, C. and Harris, S. (2004). "Toward a model of effective knowledge management and directions for future research: culture, leadership, and CKOs", *Journal of leadership and Organizational Studies, 10* (4), 26-43.

Crawford, C.B. (2005),"Effects of transformational leadership and organizational position on knowledge management", *Journal of Knowledge Management, 9* (6), 6 – 16

Greengard, S. (1998). Storing, shaping, and sharing collective wisdom. *Workforce, 77*(10), 82-88.

Grant, R.P. (1996). ''Toward a knowledge based theory of the firm'', *Strategic Management Journal, 17*, Winter, Special Issue, 109-21.

Howell, J. M., & Avolio, B. J. (1993). Transformational leadership, transactional leadership, locus of control and support for innovation: Key predictors of consolidated-business-unit performance. *Journal of Applied Psychology*, *78*(6), 891-902.

Judge, T. A., & Piccolo, R. F. (2004). Transformational and Transactional Leadership: A Meta-Analytic Test of Their Relative Validity. *Journal of Applied Psychology, 89,*755-768.

Leithwood, K & Jantzi, D. (2005). A review of transformational school literature research 1996-2005. Paper presented at the annual meeting of the American Educational Research Association, Montreal, QC.

Lowe, K. B., Kroeck, K. G., & Sivasubramaniam, N. (1996). Effectiveness correlates of transformation and transactional leadership: A meta-analytic review of the MLQ literature. *Leadership Quarterly, 7,* 385–425.

Machlup (1983), *"Harvest Your Workers' Knowledge,"* Datamation, pp. 78-81.

Mulligan, D. (2001). *Knowledge sharing leadership: sharing of knowledge in relation to leadership.* Unpublished doctoral dissertation, Capella University.

Nakra, P. (2000). Knowledge Management: The magic is in the culture. *Competitive Intelligence Review, 4*(2), 53-60.

Nonaka, I. & Takeuchi, H. (1995), The Knowledge-Creating Companies: How Japanese Companies Create the Dynamics of Innovation, Oxford University Press, New York (Chinese ed., 2006, Li, M. and Gao, F. trans., Intellectual Property Press),

Papows, J., (1998), "The rapid evolution of collaborative tools: a paradigm shift", Telecommunications, (Americas edition), 32(1), January, 31-2.

Politis, J. (2001). The relationship of various leadership styles to knowledge management. *Leadership and Organization Development, 22* (8), 354-364.

Schwandt, D. & Marquardt, M. (2000). Organizational learning: From world-class theories to global best practices. Boca Raton, FL: CRC Press.

Tynan, S. (1999). Best behaviors. *Management Review, 88*(10), 58-61.

Todd, R. (1999). "Knowledge management 1: background and key concepts", *Scan, 18*(1), 42-6.

uit Beijerse, R.P. (1999). "Questions in knowledge management: defining and conceptualizing a phenomenon", *Journal of Knowledge Management, 3*(2), 94-110.

Venkat R. (2005). Leader-Member Exchange, Transformational Leadership, and Value System. *Electronic Journal of Business Ethics and Organization Studies, 10*(1).

Walumbwa, F. O., Wu, C., & Orwa, B. (2008). Contingent reward transactional leadership, work attitudes, and organizational citizenship behavior: The role of procedural justice climate perceptions and strength. *Leadership Quarterly, 19,* 251-265.

Webster (1961). *Webster's New Twentieth Century Dictionary of English Language*, Unabridged, The Publisher's Guild, NY.