Innovative Behavior in Educational Institutions : The Role of Transformational Leadership and Teamwork Attitude

Nik Ramli Nik Abdul Rashid[1] and Norhajawati Abdul Halim[2]

Abstract

In the ever challenging and globally competitive environment, innovative mind - set and behavior among teachers and instructors is crucial in ensuring the success of educational institutions. The purpose of this study is to investigate the influence of transformational leadership styles on teachers' innovative work behavior. To further comprehend this relationship, attitude towards teamwork was introduced as a mediating variable. The result shows that administrators need to focus on generating enthusiasm and clearly communicate expectations for shared visions and goals (*inspirational motivation*). They also need to stimulate the employees to be innovative and creative by questioning assumptions, reframing problems and diagnosing old problems in new ways (*intellectual stimulation*). The projection of a leader as a person with charisma (*idealized influence*) and *individualized consideration* are not found to have significant influence on both innovative behavior and attitude toward teamwork. It is hope this study has shed some light on the crucial roles of education administrators in determining positive outcome from teacher, not only as individual but also as team member.

[1] Nik Ramli Nik Abdul Rashid Faculty of Business Management University Teknology Mara, Malaysia.

[2] Norhajawati Abdul Halim Academy of Language Studies University Teknology Mara, Malaysia.

Keyword : Innovative Behavior, Transformational Leadership, Teamwork
Attitude

Introduction

Education is crucial to building a superior nation and determining its citizens' ability to compete globally. It is a major contributor to social capital development and the economy of the country. As such, education sector require continuous monitoring to identify areas for improvement. In Malaysia this focus on strengthening education and training is reflected in the sizeable allocation of RM 38.7 billion allocated to the Ministry of Education (that is equivalent to 21 per cent of the 2013 Budget). Another RM 500 million has been set aside to boost teaching skills in core subjects, while an amount of RM 3.7 billion to develop training programs for technical and vocational students that is used to develop knowledgeable, creative and innovative human capital capability in Malaysia Budget, 2013. The Malaysian Education Development Plan (2012) provides a comprehensive development framework to realize a rapid transformation of the education system until 2025 where intended changes include aspects of student learning approaches, the selection of teachers, teacher training and provision of rewards for teachers and school leaders.

Government agencies around the globe have also recognize the important role of encouraging educators to rethink existing processes and get involved in the development of innovation in the education sector. Educators around the globe are also expected to continuously seek new and innovative teaching strategies, procedures, and structures intended to increase students' achievements. Innovativeness in teaching is important to meet the ever changing demands in education sectors either in urban or

rural area. Innovativeness can help educators to learn new things and adapt changes as well as to increase their knowledge in order to improve students' academic achievement in school and enhances the skills needed to compete in the job market and become players of overall economic development. The important elements of innovativeness are educators' readiness to expand new knowledge, practices, and improvement to achieve organizational goals. Innovation can also be used as a method to solve persistent problems that occur in the workplace.

According to Paavola, Lipponen & Hakkarainen (2004) development, adoption, and implementation are important features of investigation for understanding school achievement of true innovative behavior among teachers in the school. Theyconcluded that schools with an open environment for applying innovativeness (where teachers are willing to take risks and share new methods) would be more successful rather than school that has less innovation. Innovativeness is also associated with practices, procedures, and behaviors that encourage the creation of new knowledge and practices to other people, where educators need to be more open to change and willingness to adopt new structures within the organization (Van der Vegt, Van de Vliert & Huang, 2005).

One of the most important organizational factors that could influence innovation among the workforce is leadership style. Jung, Chow, & Wu (2003) have demonstrated the relationship between transformational leadership and innovative work behavior. An abundance of empirical studies has found a positive relationship between transformational leadership and work unit effectiveness where indirectly innovativeness is included as a dimension (Judge & Piccola, 2004; Lowe, Kroeck & Sivasubramaniam, 1996; Reuvers, van Engen, Vinkenburg and Wilson - Evered, 2008).

In the education field of study, transformational leadership is positively correlated with lower faculty turnover rates, higher levels of faculty job satisfaction, increased faculty commitment to reform, and faculty empowerment (Griffith, 2004; Jason, 2000; Pounder, 2009). There were also studies that relate to instructor transformational leadership and positive student outcomes (Politis, 2001; Harvey, Royal & Stout, 2003; Hallinger, 2003; Harrison, 2011). However, even though innovation is an important element of in educational field (Messmann, 2012), no studies were found relating it to transformational leadership style. In study by Leithwood (1994), he highlight the *"people effect"* as a cornerstone of transformational model and suggested that the most significant outcome is producing changes in people and fostering *group goals,* rather than in promoting specific instructional practices. Based on these empirical findings, this study believe that the adoption of the transformational leadership style in schools or other educational institutions could have a positive impact on the teacher's innovative behavior and teamwork (group) attitude.

Problem Statement

School effectiveness will increase based on the level of innovation in school. Empirical studies have demonstrated that transformational leadership style has a positive impact on organizational members including fostering innovative behavior. However, could similar outcome be expected in an educational organization setting?

This research will examine the relationship between the four established dimensions of transformational leadership (*intellectual stimulation*, *idealized influence, inspirational motivation,* and *individualized consideration*) and teacher innovative behavior. To comprehend further the relationship between leadership style and innovative behavior, *attitude toward teamwork* is also introduced as a mediating variable.

Research Questions

1) To what extend does idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration have in influencing innovative behavior among teachers?

2) Is the relationship between transformational leadership dimensions and teachers' of innovative behavior being *mediated* by teamwork attitude?

Literature Review

1. Innovation Behavior at School

Innovative work behavior can be defined as a dynamic and context - bound construct, where the sum of physical and cognitive work activities carried out by employees in their work context, either solitary or in a social setting, order to accomplish a set of task required for achieving the goal of innovation development (Messmann, 2012). Carmeli, Meitar & Weisberg (2005) expressed innovative work behavior as individual behavior that produce, introduce, and apply the new thing which is beneficial to the organization. Innovative behavior will cover an employee's creativity to produce new and useful ideas regarding products, services, processes and procedures (Sarros, Cooper & Santora, 2008), based on the creative thought processes that are supported by high internal motivation in the process (Ferrari, Cachia & Punie, 2009). Messman, Mulder & Gruber (2010) offered a more stringent conditions which describe innovative work behavior only referring to those work activities that are actually carried out in order to generate ideas or to support other persons in realizing their ideas.

Research on innovation has a relation with organizational management and science literature (Oldham & Cummings, 1996). It puts

emphasis on the creation of new knowledge rather than delivery of existing knowledge as an important factor. In the education sector, research on innovation is truly needed because innovations and innovative work behavior are an important issue and could aid school management and teachers to make positive changes as well as to collaborate for continuous improvement of the school. Messman, Mulder and Gruber (2010) argued that analyses of teachers's work activities that are carried out to develop innovations are still inadequate. Although there is recognition of the crucial role of teachers in the development of innovations, it has not yet been investigated how teachers are involved in innovation processes and how their active contributions can be encouraged and fostered.

2. Transformation Leadership

Leadership is really crucial in the innovation process. It is because it will affect individual innovative behavior directly and indirectly. Transformational leadership can be defined as a change or transformation of the fundamental values, beliefs, and behaviors of adherent, so that they are ready to commit beyond the minimum standard that has been set by the organization (Podsakoff, MacKenzie, Moorman, and Fetter, 1990).

Avolio, Bass, & Jung (1999) in their study of transformational leadership over the two decades found that leaders need to become more transformational and less transactional if they are to remain effective. They are encouraged to empower their followers by developing them into high involvement individuals and teams focused on aspects like quality, service, cost-effectiveness, and quantity of output of production. In addition, transformational leadership that fosters autonomy and challenging work has become progressively more important to subordinates' job satisfaction. According to their studies, transformational leadership refers to the leader influences the subordinates beyond immediate self - interests

through *idealized influence (charisma), inspiration, intellectual stimulation, or individualized consideration.* It lift the subordinates' level of maturity and ideals as well as concerns for achievement, self - actualization, and the well - being of others, the organization, and society.

A transformational leader should possess characteristics that can influence innovative behavior. That person should be an individual who envisages a culturally competent organization, inspires confidence in the achievement, uses intellectual stimulation to encourage new ways of dealing with the increasing diversity of the subordinates and is empathetic and considerate with the individual subordinates' different needs (Bass, 1999).

In adddition, effective leadership is vital in achieving team success. It is considered as the most critical factor in the success of organizational teams. It is expected that the effective leader is capable to define team directions and organise team to maximise progress in order to achieve goal and success (Zaccaro, Rittman & Marks, 2001). Therefore, transformational leadership model is the best example to be implemented by school leaders. In addition, transformational leadership approaches that are adopted by the headmaster or principal will be able to bring changes for the transformation of education as well as to give high impact towards the success of the school.

2.1 Idealized Influence

Idealized influence covers influence over ideology, influence over ideals, and influence over "bigger - than - life" issues and the expression is used to substitute for the term charismatic (Bass, 1999). According to Bass, charismatic leader is a leader who is willing to sacrifice for the organization's interest and optimistic toward the vision and mission to be achieved. For example, in school, principal should be a role model, who is greatly respected and admired by the teachers. Principal is also regarded as a leader who has clear vision and mission of the school, as well as is

brave in facing the risks. When assessing idealized influence, Bass (1999) cautioned that the followers' attributions must be obtained because it is subjective and open to different perspectives as perceived by different individuals. In order to encourage innovation among teachers, principal need to provide the teachers with an inspiring vision to contribute the ideas and create innovation in their work. Teachers strive to identify innovation with their leader (principal) and then increase their commitment to innovative ideas raised by leaders. As such, this study proposes the following hypothesis :

Hypothesis 1 : *Idealized influence has a significant and positively influences innovative behavior among teachers at school.*

2.2 Inspiration Motivation

An effective leader is a leader who has high motivations that tend to show high interest as well as often engages in the improvement made in the organization (Shibru & Darshan, 2011). The role can be done directly or indirectly. It can be direct motivation by presenting motivational strategies whereas it can be indirect through planning, coordinating, personnel development, and feedback behaviors (Zaccaro, Rittman & Marks, 2001). Moreover, a transformational leader has the credibility that can motivate followers' behaviors, increase fighting spirit and be able to take up the challenge. Highly motivated leaders are capable to provide an inspirational vision and encourage their followers to look beyond a different perspective in their work. When transformational change involve innovation is being introduced in the school, the leader (principal) has the task to continuously stimulate teachers to follow the ideas such as by creating team work, indicate positive results, advantages, emphasize aims and stimulating followers. As such, this study proposes the following hypothesis :

Hypothesis 2 : *Inspirational motivation has a significant and positive influence on innovative behavior among teachers at school.*

2.2.1 Intellectual Stimulation

According to Shibru & Darshan (2011), intellectual stimulation referred to a leader seeking opinions or ideas in different perspectives from workers in solving problem. Furthermore, an aspect of intellectual stimulation is the weapon of transformational leaders who always motivate the subordinate to be thoughtful as well as see new perspectives while emphasizing creativity (Hemsworth, Muterera & Barengeh, 2013). A transformational leader will dare to challenge the "status quo" in a positive way because he believes the changes in thinking patterns will lead the organization towards excellence. For example, principal with intellectual stimulation will encourage teachers to take more responsibility and autonomy such as increased level of accomplishment and satisfaction in their work. By encouraging teachers to think critically by using new approaches, involving teachers in the decision - making process, as well as recognizing and appreciating the different needs of teachers in order to develop his or her personal potential, teachers would realize that they have potential to produce innovative ideas in their work. As such, this study proposes the following hypothesis:

Hypothesis 3 : *Intellectual stimulation has a significant and positive influence on innovative behavior among teachers at school.*

2.2.2 Individualized Consideration

Individualized consideration is a leader that act as advisor, coach or mentor to the followers and gives full attention for their improvement and achievement in their work (Shibru & Darshan, 2011). Individualized consideration is very important to an individual employees' needs for support and personal growth. A school leader (principal) will do

his best to recognize the ability as well as to encourage the teachers' spirit, provide opportunities for widening knowledge and train them constantly to develop themselves because he is convinced that the success of the school would be achieved in an integrated manner. As such, this study proposes the following hypothesis:

Hypothesis 4 : *Individualized consideration has a significant and positive influence on innovative behavior among teachers at school.*

2.3 Attitude toward Teamwork

A team is a group of professionals who work together to produce products or deliver services for which they are mutually accountable. Team members share goals and are mutually held accountable for meeting them, they are independent in their accomplishment, and they affect the results through their interactions with one another (Mohammed, 2010). Moreover, in a team, each member is interdependent and requires skills that complement between each other to achieve the organization's objectives. Each individual has their own advantages and disadvantages. Only through the sharing of skills, experience and knowledge, the complex problem can be solved easily and effectively. When all employees are aware of their responsibility to the team, not only the organizations obtain benefit, it also provides job satisfaction to employees (Cohen and Bailey, 1997; Zaccaro, Ritman, & Michelle, 2001).

Attitude toward teamwork can be defined as "a general preference (like or dislike) for teamwork" (Beigi & Shirmohammadi, 2012) and the willingness to keep on working together with the similar team or with different team (Ulloa & Adams (2004). Studying attitude toward teamwork helps us determine teamwork - related future behavior.

Studies on teamwork attitudes have been extensive within the educational and pedagogical field of research (Chapman and Van Auken, 2001; Curran, Sharpe, Forristall, & Flynn, 2008). Teachers must

collaborate in a team to enhance the process of learning as well as can improve their performance in school. It also involves effective communications, participation in decision making and problem solving, faith and support and acceptance among each member. Only through the sharing of skills, experience and knowledge, the complex problem can be solved easily and effectively. When all employees are aware of their responsibility to the team, not only the organizations get benefits, but it gives satisfaction of work to employees.

While there have been studies about the influence of transformational leadership on innovative teamwork behavior in an organizations (Eisenbeiss, Knippenberg & Boerner, 2008), this study proposed that teamwork attitude as an outcome of transformational leadership, while at the same time act as a predictor for teachers' innovative work behavior.

Research Design and Methodology

Population and Sampling Procedure

This exploratory study was carried out to explore the potential influence of perceived leadership style and attitude toward teamwork on an individual's innovative behavior. As such, the scope and interpretation made is very much limited to the sample selected for this study, and is not intended for generalizations. The population of this study is high school educators teaching in the state of Kedah, Malaysia (N = 400). The questionnaires were distributed to the entire population elements, but only 140 (35%) responded. Official permission was granted by the state education department was obtained to ensure cooperation during data collection process. The respondents are various ethnic backgrounds. Majority of the respondents are between 41 - 50 years old (42%), while only 11.4% are below the age of 30. Majority of the respondents are experienced (70% have been teaching for more than 9 years).

Measurements

Transformational leadership explains how leaders change teams or organizations by creating, communicating and modeling a vision for the organization and inspiring its members to strive for that vision. The dimensions of transformational leadership are measured using items that were adopted from the Multifactor Leadership Questionnaire (MLQ) by Bass (1999). The reliability score for each of the dimensions are .80 (idealize influence), .74 (inspirational motivation), .832 (individualized consideration) and .698 (intellectual stimulation).

The measurement for innovative behavior has 5 items and was adapted from Kleysen dan Street (2001). The Cronbach's alpha for this scale is .80. Finally, the instrument for measuring attitude toward teamwork was adapted from Beigi dan Shirmohammadi (2012). The six items measuring it has an acceptable reliability score of .767.

The questionnaire items measuring transformational leadership style and attitude toward teamwork uses the Likert scale; ranging from 1 (strongly disagree) to 5 (strongly agree). While the questionnaire items measuring innovative behavior uses 5 scale (1 = almost never; 2 = sometimes; 3 = fairly often; 4 = very often and 5 = always).

Analysis

As reported above the results from Cronbach's alpha test showed a good reliability scores for all the variables, ranging from 0.700 to 0.832 (Nunnally, 1978). The range for the mean is between 4.26 to 4.60, indicating that majority of the respondents agreed with all the statements measuring the independent variable (*idealized influence; 4.48, inspirational motivation; 4.49, intellectual stimulation; 4.42, and individualized consideration; 4.44*),

mediating variable (*attitude toward teamwork; 4.60*) and dependent variable (*innovative behavior; 4.26*). The Pearson Correlation between all the independent variables ranges between r = 0.260 and r = 0.697 indicating no problem of multicollinearity. Apart from that, a rule of thumb for VIF (variance inflation factor) of more than 10 was also applied, especially during multiple regression analysis (Hair, Anderson, Tatham and Black, 1998; and Cohen, Cohen, West and Aiken, 2003). After looking at the histogram or normal probability plot, the differences between the obtained and predicted dependent variable scores is used be estimate and decide whether the data are normally distributed. The differences between residuals obtained and predicted, as shown through the partial scatter plot is also used to determine the linearity of the relationship. Finally, the acceptable range of 1.50 – 2.50 for the Durbin-Watson statistic, to test the residual of a regression equation is used to decide whether it is free from significant error term.

A multi - step hierarchical regression was employed to examine the effect of mediating variable in the research model. Baron and Kenny (1986) laid out three assumptions that needed to be fulfilled before the effects of the mediating variables could be tested. Firstly, the independent variables should produce a significant relationship with the dependent variable. Secondly, the independent variables should also have a significant relationship with the mediating variables. And lastly, the mediating variable must also show a significant relationship with the dependent variable.

After all these conditions have been fulfilled, the mediating effect is tested using a 2 step hierarchical regression approach. The first step involves the direct relationship between the independent variables with the dependent variable, and the outcome as stated earlier, needs to be significant. On the second step, the mediator is included in the model, and again should also result with a significant outcome. However, if by the introduction of the mediator, the earlier significant relationship between the independent

and dependent variable is cancelled; then a full mediating effect is proven. The entire explanatory power of the regression model is taken over by the mediator. However, if the relationship between the independent variable and dependent variable remains significant, it shows that the explanatory power of the model is shared by both the independent and the mediating variable, thus showing a partial mediating effect.

Results

As reiterated earlier, the main objective of this study is to explore the possible influence of transformational leadership style on teacher's innovative behavior. These independent variables are postulated to influence the teachers' attitude toward teamwork before ultimately contributing to the individual behavior to produce, introduce and apply new ideas in school. ๖ Table 1.

The first step is to establish the relationship between transformational leadership dimensions with innovative behavior. The regression analysis shows that transformational leadership dimensions have a significant and positive influence over teacher innovative behavior (R^2 = .432, F Change : 22.082). However, only two of the transformational leadership dimensions are found to be significant (*inspirational motivation,* β : 0.376 and *intellectual stimulation,* β : 0.262).

The second step is to establish the relationship between transformational leadership dimensions with attitude toward teamwork. The regression model is significant at F Change : 7.226 and R^2 is .199 which means that the independent variables could only explain approximately 20% of the variance in the dependent variable. Again *inspirational motivation* has a stronger influence over attitude toward teamwork (β : 0.301) compared to *intellectual stimulation* (β : 0.284). The remaining two dimensions (*idealize influence and individualize consideration*) are also found to be not significant.

The third step is the relationship between attitude toward teamwork and innovative behavior. As expected the relationship is positive and significant (β : 0.413; F Change : 24.516; R^2 = 0.171).

Table 1 : Multiple regression analysis

Independent Variables	Dependent Variable (Standardized Coefficient-Beta)		Hypotheses
	Step 1	Step 2	
Dimensions of Transformation Leadership	Innovative behavior	Attitude toward Teamwork	
Idealized Influence	0.066	0.018	Rejected
Inspirational Motivation	0.376**	0.301*	Accepted
Intellectual Simulation	0.262*	0.284*	Accepted
Individualized Consideration	0.171	0.166	Rejected
R^2	0.432	0.199	
F Change	22.082**	7.226**	
		Step 3	
		Innovative behavior	
		0.413**	Accepted
Attitude toward Teamwork		0.171	
R^2		24.516**	
F Change			

Note: * $p < 0.05$, ** $p < 0.01$

The forth step is to test the mediating role of attitude toward teamwork. To establish the full mediating effect of *attitude toward teamwork* between the dimensions of *transformational leadership* and *innovative behavior,* the impact of all the independent variables on the dependent variable, while controlling the mediating variable (*Attitude toward Teamwork*), should be zero (not significant). Whereas if the relationship between the IV and DV is still significant even after introducing the mediating variable, then the mediating effect would be considered as partial. Below is the detail output of the hierarchical multiple regression tests that have been carried out (Table 2).

Table 2 : Hierarchical multiple regression analysis

Dependent Variable	Independent Variables	Step 1	Step 2
Innovative Behavior	Inspirational Motivation	0.390**	0.346**
	Intellectual Stimulation	0.324**	0.289**
Mediating Variable : Attitude Toward Teamwork			0.166**
R^2		0.418	0.440
F Change		42.337**	30.667

Note : * $p < 0.05$, ** $p < 0.01$

Idealized influence and individualized consideration has to be dropped from the regression model because it is found to be not significant in Step 2 and Step 1. The result showed in Table 2 reconfirmed the stronger influence of *inspirational motivation* in all the regression models (Step 1, β : 0.376** and Step 2, β : 0.301*). *Intellectual stimulation* is also still significant (Step 1, β : 0.262* and Step 2, β : 0.284*) even when the mediating variable is introduced in the regression model (thus confirming it as a partial mediator).

Conclusion and Discussion

Scholars have agreed that as a consequence of societal and economic developments, technological advancements, and the dynamic nature of organizational structures and tasks, innovations have become a crucial feature of any occupation, including those related to the educational profession. Schools and colleges are increasingly expecting their educators to contribute to change and improvement at work. Teachers and instructors are required to reflect on their work practice and pro-actively deal with wide ranging classroom related issues and challenges. Innovations in schools can be new instructional objectives or didactic methods, changes in work processes such as collaboration between teachers, or new work

tasks of teachers. Innovations are not restricted to the classroom but include the wider context within and outside the school. This study have shown a strong willingness of teachers to work with non-routine issues, to experiment with new ideas and solutions, while trying to recognize opportunities to make a positive difference in their work, department and organization. A significant part of this willingness to be innovative is attributed to the leadership style that is being adopted by their superiors.

This study has proven that transformational leadership style has a positive influence on the development of an organization's capacity to innovate and to support the development of changes to practices of teaching and learning. To develop and nurture innovative behavior among educators, the result shows that school administrators need to focus on generating enthusiasm and clearly communicate expectations for shared visions and goals (inspirational motivation). They also need to stimulate the employees to be innovative and creative by questioning assumptions, reframing problems and diagnosing old problems in new ways (*intellectual stimulation*). Consistent with studies by Hater and Bass (1988), and Bass and Avolio (1990) transformational leaders is able to induce followers, by means of intellectual stimulation, to re-evaluate potential problems and their work environment from which innovative ideas can grow. By using inspirational motivation, a transformational leader is able to induce within their followers a belief in their ability to perform. It is likely that teachers who are aware and confident of their ability to successfully implement their competencies, are prone to exhibit innovative behavior.

Interestingly however, the study also found that two other dimensions of transformational leadership style (*idealized influence* and *individualized consideration*) are found to be not significant to innovative behavior and attitude toward teamwork. Two reasons could be given for such an unexpected outcome. Firstly, teachers are trained professional,

with clear understanding of what and how they need to go about implementing their responsibilities. A leader charismatic influence would only be effective in situation where the followers are unknowledgeable and with low self - esteem. Furthermore, as stated earlier, 70% of the respondents having at least nearly a decade or more years of teaching experience. Individualized or personal attention is would only play minimal role in the personal growth of the senior teacher as compared to a young and junior teacher. Secondly, as most school principal are administrators, with very limited on-going teaching responsibilities, it would be difficult for the respondents to relate to them as *"teaching role - model"*.

Another significant contribution of this study is the confirmation of "attitude toward teamwork" as a mediating variable. Majority of the respondents believe that doing projects in teams' results in better outcome and that task are done faster when they work as a team. However, as can be seen from the differences in the R2 values, the influence of transformational leadership is far greater than the influence of attitude toward teamwork (R^2 transformational leadership .432; R^2 attitude toward teamwork .171) where innovative behavior of teachers are concern.

Finally, given the limitations of this study, there are several areas that should be explored by future researchers. To increase the generalizability of the findings, future research should focus on using a larger sample which is more representative of the population. A similar research design could also be applicable to colleges and other institute of higher learning. A qualitative research could discover the types of innovative behaviors taking place in schools and the environmental context that could have a positive or negative influence on it.

References

Avolio, B.J., Bass, B.M., & Jung, D.I. (1999). **Re - examining the components of transformational and transactional leadership using the Multifactor Leadership Questionaire.** Journal of Occupational and Organizational Psychology. 2 (4), 441 – 462.

Baron, R.M., & Kenney, D.A. (1986). **The Moderator-Mediator Variable Distinction in Social Psychology Research: Conceptual Strategic and Statistical Consideration.** Journal of Personality and Social Psychology. 51, 1173 – 1182.

Bass, B. M. (1999). **Two decades of research and development in transformational leadership.** European Journal of Work and Organizational Pschology. 8 (1), 9 - 32.

Bass, B.M., & Avolio, B.J. (1990). **The Implication of Transactional and Transformational Leadership for Individual, Team, and Organizational Development.** Research in Organizational Change and Development. 4, 231 – 272.

Beigi, M., & Shirmohammadi, M. (2012). **Attitudes toward teamwork : are Iranian university students ready for the workplace?** Team Performance Management. 18 (5), 295 – 311.

Carmeli, A., Meitar, R., & Weisberg, J. (2005). **Self-leadership skills and innovative behavior at work.** International Journal of Manpower. 27 (1), 75 - 90.

Chapman, K.J., & Van Auken, S. (2001). **Creating Positive Group Project Experience: An Examination of the Role of the Instructor on Students' Perception of Group Projects.** Journal of Marketing Education. 23 (2), 117 – 127.

Cohen, S. G., & Bailey, D. E. (1997). **What makes teams work : group effectiveness research form the shop floor to the executive suite.** Journal of Management. 23 (3), 239 - 290.

Cohen, J., Cohen, P., West, S.G., & Aiken, L.S. (2003). **Applied Multiple Regression Analysis for the Behavioral Sciences.** (3rd ed.). Mahwah, NJ : Lawrence Erlbaum.

Curran, V.R., Sharpe, D., Forristall, J., & Flynn, K. (2008). **Attitudes of Health Science Students towards Inter - Professional Teamwork and Education.** Learning in Health and Social Care. 7 (3), 145 - 156.

Eisenbeiss, S. A., Knippenberg, D.V., & Boerner, S. (2008). **Transformational leadership and team innovation: integrating team climate principles. Journal of Applied Psychology.** 93, 1438 - 1446.

Ferrari, A., Cachia, R., & Punie, Y. (2009). **Innovation and creativity in education and training in the EU member states : Fostering creative learning and supporting innovative teaching.** Literature review in innovation and creativity in E&T in the EU member states (ICEAC).

Griffith, J. (2004). **Relation of Principal Transformational Leadership to School Staff Job Satisfaction, Staff Turnover, and School Performance.** Journal of Educational Administration. 4 (3), 333 – 356.

Hair, J.F., Anderson, R.E., Tatham, R.L., & Black, W.C. (1998). **Multivariate Data Analysis.** (5th ed.). New Jersey : Prentice Hall.

Hallinger, P. (2003). **Leading Educational Change: Reflections on the Practice of Instructional and Transformational Leadership.** Cambridge Journal of Education. 33 (3), 329 – 351.

Harrison, J.L. (2011). **Instructor Transformational Leadership and Student Outcomes.** Emerging Leadership Journeys. 4 (1), 82 – 136.

Hater, J.J., & Bass, B.M. (1988). **Superior's Evaluations and Subordinate's Perceptions of Transformational and Transactional Leadership.** Journal of Applied Psychology. 73, 695 – 702.

Harvey, S., Royal, M., & Stout, D. (2003). **Instructor's Transformational Leadership: University Student Attitude and Ratings.** Psychological Reports. 92, 395 – 402.

Hemsworth, D., Muterera, J. & Barengeh, A. (2013). **Examining Bass's transformational leadership in public sector executives : A psychometric properties review.** Journal of Applied Business Research. 29 (3).

Jason, M.H. (2000). **The Role of Principal as Transformational Leader in Multi Cultural Learning Community.** High School Journal. 83 (3), 1 – 9.

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

Jung, D.I., Chow, C., & Wu, A. (2003). **The Role of Transformational Leadership in Enhancing Organizational Innovation: Hypotheses and Some Perliminary Findings.** The Leadership Quarterly. 14, 525 – 544.

Kleysen, R. F., & Street, C. T. (2001). **Toward a multi-dimensional measure of individual innovative behavior.** Journal of intellectual Capital. 2 (3), 284 – 296.

Leithwood, K. (1994). **Leadership for School Restructuring.** Educational Administration Quarterly. 30 (4), 498 – 518.

Lowe, K.B., Kroeck, K.G., & Sivasubramaniam, N. (1996) **Effectiveness Correlates of Transformational and Transactional Leadership: A Meta-analytic Review of the MLQ Literature.** Leadership Quarterly. 7, 385 – 425.

Messmann, G. (2012). **Innovative Work Behavior: Investigating the Nature and Facilitation of Vocational Teachers' Contributions to Innovation Development.** Inaugural-Dissertation zur Erlangung der Doktorwurde der Philosophischen Fakultat II. University Regensburg. (English version).

Messmann, G., Mulder, R.H., & Gruber, H. (2010). **Relation between Vocational Teachers' Characteristics of Professionalism and their Innovative Work Behavior.** Emperical Research in Vocational Education and Training. 2 (1), 21 – 40.

Ministry of Education. (2012). **Preliminary Report Malaysia Education Blueprint 2013 – 2025.** Kuala Lumpur, Malaysia.

Mohammed, A.F. (2010). **Professionals attitudes towards teamwork in the social welfare organizations.** Fayoum University. (access on the 3rd January 2014 at : www.fayoum.edu.eg/stfsys/stfPdf//244//615//20131114411.pdf).

Nunnally, J.C. (1978). **Psychometric theory.** (2nd ed.). New York: McGraw - Hill of Management Review. Vol. 12 No. 2, 278-87.

Oldham, G. R., & Cummings, A. (1996). **Employee creativity : Personal and contextual factors at work.** Academy of Management Journal. 39 (3), 607 - 634.

Paavola, S., Lipponen, L. & Hakkarainen, K. (2004). **Models of innovative knowledge communities and three metaphors of learning.** Review of Educational Research. 74(4), 557-576.

Podsakoff, P.M., MacKenzie, S.B., Moorman, R.H., & Fetter, R. (1990). **Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviours.** Leadership Quarterly. 1 (2), 107 - 142.

Politis, J.D. (2001). **The Relationship of Various Leadership Styles to Knowledge Management.** Leadership & Organizational Development Journal. 22 (8), 354 – 364.

Pounder, J.S. (2009). **Transformational Classroom Leadership: A Basis for Academic Staff Development.** Hournal of Management Development. 28 (4), 317 – 325.

Reuvers, M., van Engen, M.L., Vinkenburg, J.C., & Wilson-Evered, E. (2008). **Transformational Leadership and Innovative Work Behavior : Exploring the Relevance of Gender Differences.** Creativity and Innovation Management. 17 (3), 227 – 244.

Sarros, J. C., Cooper, B. K., & Santora, J. C. (2008). **Building a climate for innovation through transformational leadership and organizational culture.** Journal of Leadership & Organizational Studies. 15 (2), 145 - 158.

Sekaran, Uma. (2003). Research **Methods for Business, A skill Building Approach, Southern Illinois University at Carbondale : John Wiley & Sons, Inc.** Thomson Learning South - Western.

Shibru, B., & Darshan, G. M. (2011). **Transformational leadership and its relationship with subordinate satisfaction with the leader (the case of leather industry in Ethiopia).** Interdisciplinary Journal of Contemporary Research in Business. 3 (5).

Ulloa, B. C. R., & Adams, S. G. (2004). **Attitude toward teamwork and effective teaming.** Team Performance Management. 10 (7/8), 145 - 151.

Van der Vegt, G. S., Van de Vliert, E., & Huang, X. (2005). **Location - levels link between diversity and innovative climate depend on national power distance.** Academy of Management Journal. 48 (6), 1171 - 1182.

Zaccaro, S. J., Ritman, A. L., & Michelle, M. A. (2001). **Team leadership.** The Leadership Quarterly. 12, 451 - 483.