The Influence of School Culture as a Moderator to the Relationship between Transformational Leadership and Organizational Health of Secondary School Teachers in Malaysia

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ABSTRACT
This study aimed to determine the level of transformational leadership practices by school principals in the national secondary schools in the state of Kedah Darul Aman and Perlis Indera Kayangan, Malaysia. The four dimensions of transformational leadership studied were vision identification, modeling, goal acceptance and individual support. The study also looks at the level of organizational health as well as the relationship with the practice of transformational leadership by the national secondary school principals'. The respondents consisted of 327 teachers employed in 46 national secondary schools in the state of Kedah Darul Aman and Perlis Indera Kayangan, Malaysia. The data obtained was analyzed using SPSS version 20.0. Descriptive analysis and inferential analysis were used to analyze the influence of the relationship. The study found that school culture functions as a moderator in the relationship between the transformational leadership style of school principals' and the organizational health of the secondary school teachers' in the state of Kedah Darul Aman and Perlis Indera Kayangan, Malaysia. In addition, school culture as a moderator in the relationship between transformational leadership and organizational health is a new discovery in the field of leadership. This is because the organizational health of secondary schools has never been investigated by local researchers. Most previous studies have highlighted transformational leadership and school culture has a direct influence on school improvement.

Keywords: *transformational leadership style, school culture, organizational health, job satisfaction, school principals.*

1.0 Introduction

According to Ishak Sin and Nor Asikin Salleh (2012), it is the responsibility of school principals to develop a form of professional organization in which all members are able to learn new skills and knowledge continuously, so that they are capable of dealing with change and realizing the goals of the country's education system. In line with the needs of education reform in Malaysia, schools should become more effective learning organizations that ultimately increase the leadership capacity and support the personal development of every individual at the institution including teachers. Principals are often the main focus in school administration because school performance is

dependent on the level of effective school leaders (Yahya et al., 2007). Principals should show a very strong commitment to teachers' continuous learning by giving them opportunities to develop personally and professionally, building a collaborative learning culture, embracing a collective vision and forming a committed team dedicated to achieving school objectives (Sukor, 2010). According to Sukor (2010), most education literature suggests that transformational leadership is the most relevant type of leadership in dealing with change.

Schools with good turnover of students are more effective than others in their level of academic achievements (Othman, 2001). It has been observed that the school principal plays a key role in how effective the school is (Sabu, 2005). In an effective school the "principal" acts as a transformational leader and effectively and persistently communicates the school's mission to the staff, parents and students. The principal understands and applies effective leadership skills to enable both students and staff to achieve the desired school and student achievements. Studies on effective school have linked leadership to be the key factor both at primary and secondary schools (Mukhtar & Muslizah, 2004). Reviews by Othman (2001) concluded that leadership is necessary to initiate and maintain school improvement. Leadership is not simply about the quality of individual leader although this is, of course, important. It is also about the role that leaders play, their style of management, their relationship to the vision, values and goals of the school and their approach to change.

Organizational health of a school refers to the interpersonal relations of students, teachers and administrators in a school (Hoy & Tarter, 1997) and was used to examine the climate of schools. Organizational health term has been used in the management literature, mainly as an abstract idea of what constitutes a "good organization structure" (Orvik & Aselson, 2012). Miles (1969) asserted that a healthy environment was not only an organization surviving its environment but also a structure constantly using its abilities to cope with difficulties and surviving in the long run. Hoy, Tarter and Kottkamp (1991) refined the concept of organizational health as the ability of the organization to successfully adapt to its environment, create solidarity among its members and reach its objectives.

For this study, transformational leadership will mean the manner in which the school principal guide and encourage fellow staff to work, communicate the schools' goal and empower them to achieve the schools' vision.

- The transformational leadership in this study measures three dimensions as follows:

Vision identification: this factor relates to principal behaviors that are aimed at identifying new opportunities for staff members and developing, articulating and inspiring others with his or her vision for the future (Jantzi & Leithwood, 1996).

Attribution: this factor was designed to help understand work consensus, encouragement toward school goals, success and accomplishment, positive attitude towards work and leading by example. All the items here refer to understanding an event or behavior as being caused by the situation that the individual is facing (A.R. Arokiasamy, 2016).

Intellectual Stimulation: principal behaviors that challenge staff members to reexamine some of their assumptions about their work and to reconceive ways to do it are representative of this factor (Jantzi & Leithwood, 1996).

- The moderating variable, school culture in this study measures three dimensions as follows:

Collaborative leadership: describes the degree to which school leaders establish and maintain collaborative relationships with school staff. The leaders' value teacher's ideas, seek their input, engage them in decision-making and trust their professional judgments. Leaders support and reward risk-taking, innovation and sharing of ideas and practices (Gruenert, 1998).

Teacher Collaboration: describes the degree to which teachers engage in constructive dialogue that furthers the educational vision of the school. Teachers across the school plan together, observe and discuss teaching practices, evaluate programs and develop an awareness of the practices and programs of other teachers (Gruenert, 1998).

Professional Development: describes the degree to which teacher's value continuous personal development and school-wide improvement. Teachers seek ideas from seminars, colleagues, organizations and other professional sources to maintain current knowledge, particularly current knowledge about instructional practices (Gruenert, 1998).

- The dependent variable, organizational health in this study measures two dimension as follows:

Career Adaptability: this factor was designed to help understand trust, commitment, friendly attitude, adequate teaching resources, moral values, performance standards and promotion. (A.R. Arokiasamy, 2016).

Institutional integrity: As an institutional-level health indicator, institutional integrity was described by Hoy and Woolfolk (1993) as the school's level of ability to protect faculty members from any outside forces. Institutional integrity was one of the two out of the seven health dimensions to actually predict general personal efficacy of teachers. Institutional integrity represented a major predictor of the faculty members' trust in the school principal. Hoy also discovered teachers to be more committed to schools with a high institutional integrity.

Although this model served the educational field for the past two decades, the current demands for educational reform have forced many school leaders to reevaluate and adapt their leadership style to meet current demands. Many educational leaders are beginning to embrace and put into practice a school model of transformational leadership. This leadership model is espoused by school leaders because it "aspires, more generally, to increase members' efforts on behalf of the organization, as well as to develop more skilled practice" (Leithwood, Jantzi, & Steinbach, 1999). There is compelling evidence that transformational leadership behaviors, significantly affect teachers' psychological states, such as, teaching efficacy, job satisfaction, and organizational commitment (Bass & Riggo, 2006; Leithwood, Jantzi, et al., 1999). Furthermore, a review of school leadership research reveals that school leaders who demonstrate transformational leadership behaviors have

staffs who report higher levels of job satisfaction (Bogler, 2001; Griffith, 2004; A. Arokiasamy et al., 2015)), which is consistent with Bass and Riggo's (2006) claim.

2.0 Problem Statement

According to Zaidatol Akmaliah (1990), the success of the school's organization and leadership style is correlated. Transformational leadership of school principals affects student achievement and teacher willingness to drive for quality education (Noor Rezan, 2009). Abdul Shukor Abdullah (2004) argued that the leadership style of school principals have a significant impact on teachers' job satisfaction and effectiveness of the school. Changes to the leadership style of school principals should not only focus on the technical aspects of the schools administration but emphasize on professional leadership and guidance rendered to the teachers and students at the school. Hence, principals are solely responsible for the professional improvement of teachers to a higher level and to ensure students excel academically (Noor Rezan, 2009). Are the secondary school principals in Malaysia practicing transformational leadership in their management of school affairs? Also not much is known about the impact of transformational leadership style on the current situation at secondary schools in Malaysia. Creating conducive environment at schools for students to excel and teachers to perform professionally has placed more emphasis on the role of a principal. It is difficult to evaluate the attributes of principals at secondary schools who are committed to the mission and vision of cultivating a positive school environment.

At this point, no study has been done on transformational leadership behaviors' of the school principals in Malaysia although many studies have been conducted on other types of leadership. In order to assess the extent to which Malaysian secondary school principals provide transformational leadership, a survey of teachers' perceptions on their principals' transformational leadership behavior's will be carried out in the secondary schools in the state of Kedah Darul Aman and Perlis Indera Kayangan, Malaysia. This study hence was conducted to test the significant influence between principal's leadership styles and organizational health of secondary school teachers in Malaysia and the effects of school culture as a moderating variable.

3.0 Purpose of the Study

A healthy organization is characterized as one that adapts to its environment and has the presence of a strong leadership. In contrast, an unhealthy organization is one that is characterized as incapable of adapting to its environment and has no clear or lack of central leadership. The main purpose of this study will be to investigate the transformational leadership, school culture and organizational health that are being practiced at secondary schools in Malaysia and also the moderating influence of school culture on the relationship between transformational leadership and organizational health of secondary schools in Malaysia as perceived by teachers.

4.0 Objectives of the Study

The study aimed to investigate the influence of transformational leadership and its relationship to organizational and school culture. In particular, the objectives of the study are:

1. To investigate the influence of transformational leadership on school culture of secondary schools in the state of Kedah Darul Aman and Perlis Indera Kayangan, Malaysia.

2. To investigate the influence of transformational leadership on organizational health of secondary schools in the state of Kedah Darul Aman and Perlis Indera Kayangan, Malaysia.

3. To investigate the influence of school culture on organizational health of secondary schools in the state of Kedah Darul Aman and Perlis Indera Kayangan, Malaysia.

4. To investigate the moderating influence of school culture on the relationship between transformational leadership and organizational health of secondary schools in the state of Kedah Darul Aman and Perlis Indera Kayangan, Malaysia.

5.0 Research Hypotheses of the Study

Based on the research objectives, the research hypothesis was formed to test the validity. Research findings were tested at the level of $p < 0.05$. The following are the research hypotheses:

HA1: There is a significant influence of transformational leadership on school culture of secondary schools in the state *of Kedah Darul Aman and Perlis Indera Kayangan, Malaysia.*

HA2: There is a significant influence of transformational leadership on organizational health of secondary schools in the state of Kedah Darul Aman and Perlis Indera Kayangan, Malaysia.

HA3: There is a significant influence of school culture on organizational health of secondary schools in the state of Kedah Darul Aman and Perlis Indera Kayangan, Malaysia.

HA4: There is a significant moderating influence of school culture on the relationship between transformational leadership and organizational health of secondary schools in the state of Kedah Darul Aman and Perlis Indera Kayangan, Malaysia.

6.0 Significance of the Study

This study aims to benefit the school principals to identify approaches towards schools improvement and to create an atmosphere of well-being at work among teachers. It can motivate teachers to improve the teaching quality, especially in the classrooms. By doing so they will be able to produce students who will excel physically, emotionally, spiritually and intellectually in line with the national educational philosophy. This study will benefit the following parties:

- *Ministry of Education*: In recent years, the Malaysian education system has come under increased public scrutiny and debate, as parents' expectations rise and employers voice their concern regarding the system's ability to adequately prepare young Malaysians for the challenges of the 21st century (Malaysia Education Blueprint 2013-2025).

- *Institut Aminuddin Baki*: This study will also be significant to IAB to focus on management and leadership development training for school principals. The main institution in the country responsible for the training of school principals is IAB or in English, the National Institute of Educational Management and Leadership (NIEML) (IAB, 1997).

- *School Principals*: The data to be collected from this research will enable school principals to examine more closely the impact of their leadership style on the organizational health of

their school. Based on the results of the questionnaire and data analysis, principals will be able to utilize the results to change and cultivate a healthier school culture.

- *Complement Existing Knowledge*: It is hoped that this study will complement existing literature regarding the influence of transformational leadership and organizational health of secondary schools in Malaysia. With increased literature and knowledge on school leadership behavior, prospective principals and all those involved in education may find the findings useful for identifying behaviors, beliefs and values that could advance the development of a school.

7.0 Research Framework

The research framework in this study is built upon the literature review. It is therefore theorized that each variable in transformational leadership style has an influence on organizational health of teachers. Figure 1 below depicts the research framework of this study:

8.0 Research Methodology

8.1 Research Design and Population Sampling

According to Uma Sekaran (2003), descriptive study is undertaken when the characteristics or the phenomena to be tapped in a situation are known to exist and one wants to be able to describe them better by offering a profile of factors. It is suggested by Spunt (1999) that surveys with diverse type of questioning are a more convenient way of gathering information. Hence, this study chose this type of survey method as opposed to in -depth interviews or focus groups. Self-administered surveys are more convenient and less expensive to administer, eliminates interviewer bias, gives respondents privacy and results can be analyzed more quickly. In this study a self-administered questionnaire consisting of four sections were used: Section A contains Teacher Demographic Information, Section B contains Principal Leadership Questionnaire (PLQ), Section C contains the School Culture Survey Questionnaire (SCS) and finally Section D consists of the Organizational Health Index for Secondary School Questionnaire (OHI-S).

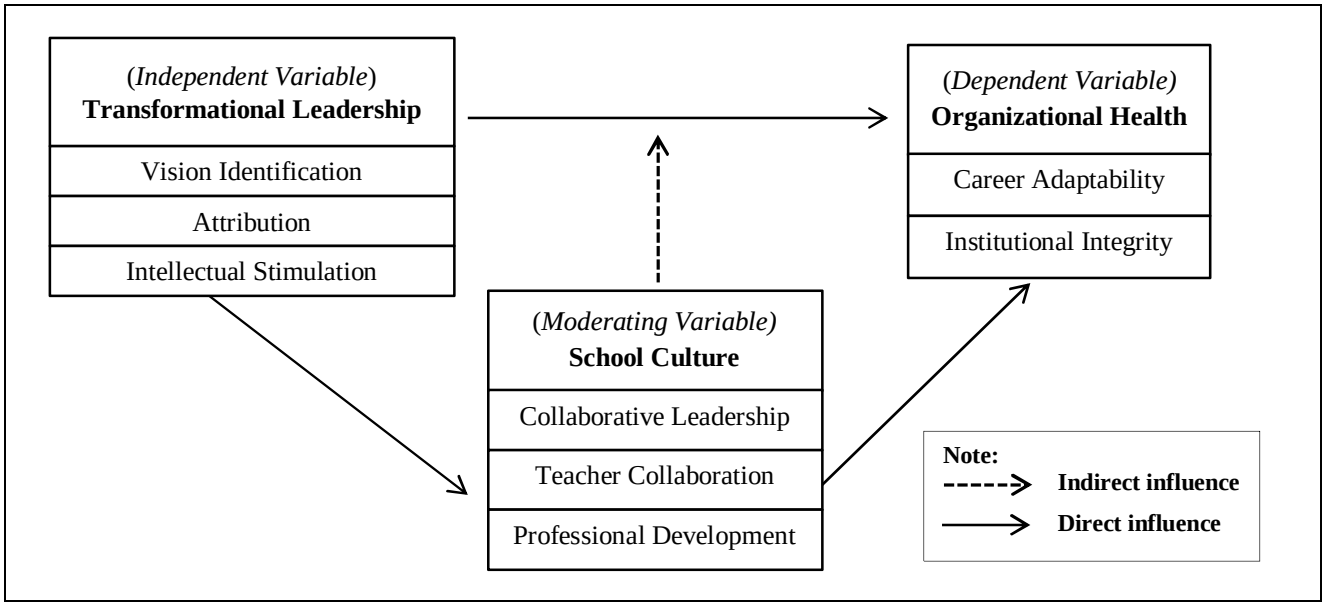

Figure 1: The Research Framework

In this study, the targeted population was teachers from national secondary schools from the state of Kedah Darul Aman and Perlis Indera Kayangan, Malaysia. A cover letter informed the participants that the aim of this research was to examine attitudes about work and leadership style and that they were to return the completed questionnaires in sealed envelopes within three to five days. Participants were encouraged to respond as accurately and honestly as possible, and they were assured that their participation would be kept confidential, anonymous and used strictly for academic research purposes only. A total of 395 structured questionnaires were distributed to teachers from 46 schools around Kedah Darul Aman and Perlis Indera Kayangan. The respondents were randomly selected by means of systematic random sampling, whereby 100 percent of the respondents were secondary school teachers.

A total of 349 questionnaires were received and out of this, 22 sets of the questionnaires were considered unusable because over 25 percent of the question in Part 1 Section A of the questionnaire were not answered (Sekaran, 2003). It was assumed that the respondents were either unwilling to cooperate or not serious with the survey. Therefore, only 327 usable sets of received questionnaires were used for the data analysis indicating a response rate of 82 percent.

Data were analyzed using SPSS v. 20 for Windows PC and is reported in percentage, frequency, mean and standard deviation. Descriptive statistics were used to obtain the frequency, percentage, mean and standard deviation. The inferential statistics of Multiple Regression Analysis and Moderated Multiple Regression Analysis is used to identify if there is an influence between schools principals' transformational leadership with secondary school teacher's organizational health and the influence of the moderating variable.

9.0 Conclusion on Result of Factor Analysis

The results of factor analysis for Transformational Leadership identified inclusion of all 24 items of the independent variables and no item were deleted from this analysis. The dimension goal acceptance and modeling have been combined and named as Attribution. As for the School Culture variables; no items were deleted and all 35 items of the moderating variables were retained for further analysis in this study. The results of factor analysis for Organizational Health identified exclusion of 16 items of the dependent variables and the remaining 28 items were retained for further analysis. The dimension resource support, morale and academic emphasis have been named as Career Adaptability. Whereas, the dimension Initiating Structures were deleted because it did not meet the requirement by Hair et al. (2006).

10.0 Findings

10.1 Testing the Influence of Transformational Leadership on School Culture

The first hypothesis (HA1) about the influence of transformational leadership on school culture is tested using multiple regression analysis. The more detailed picture of the relationship between transformational leadership and school culture at construct and factor levels were revealed by the findings of regression analyses. Table 1 summarizes the regression results of the regression analysis at the construct level.

Table 1: The Influence of Transformational Leadership on School Culture

	Dependent Variable (*School Culture*)		
Variable	**1 (*β*)**	**2 (*β*)**	**3 (*β*)**
Independent Variable (*Transformational Leadership*)			
Vision Identification	**.136***	**.439***	-.185
Attribution	**.669***	**.370***	**.492***
Intellectual Stimulation	-.014	.084	**.500***
R	.790	.725	.808
R^2	.624	.526	.653
Adjusted R^2	.621	.552	.651
F-statistics	226.89	151.31	257.15
Durbin-Watson	1.44	1.53	1.35

**Significant at p < .05* 1= Collaborative Leadership, 2= Teacher Collaboration, 3= Professional Development

The data indicate that the transformational leadership style accounts for 62 percent of the variance in collaborative leadership (adjusted R^2 0.621). The *F* test statistics for the adjusted R^2 is 226.89 and the associated p-value is .000. It indicates that $p<.05$; therefore, a statistically significant relationship exists between collaborative leadership and the transformational leadership style at the 95.0 percent confidence level. The vision identification variable has positive effect on the collaborative leadership (β = 0.136) variable and this is statistically significant at the 95.0 percent confidence level because the *t* test statistics for the Beta is 18.43 and the associated p-value (.000) is less than .05. The attribution variable has the strongest positive effect on the collaborative leadership (β = 0.669) variable and this is statistically significant at the 95.0 percent confidence level because the *t* test statistics for the Beta is 18.43 and the associated p-value (.000) is less than .05. The results indicated that 2 variables of transformational leadership were the positive predictors to collaborative leadership variable whereas intellectual stimulation contributed to negative effect to collaborative leadership (β = -.014) variable. The Durbin-Watson test (1.44 < 2.00) points out that the extracted parameters are not the only possible explanations for the development of the item collaborative leadership. This indicated that vision attribution and attribution were the predictors of collaborative leadership variable.

The regression results depicted from Table 1 indicates that the transformational leadership style accounts for 52 percent of the variance in teacher collaboration (adjusted R^2 0.552). The *F* test statistics for the adjusted R^2 is 151.31 and the associated p-value is .000. It indicates that $p < .05$; therefore, a statistically significant relationship exists between teacher collaboration and the transformational leadership style at the 95.0 percent confidence level. The Beta (β) weighting are calculated between the predictor variables and criterion variables. Vision identification variable has the strongest positive effect on the unity of purpose (β = 0.439) variable and this is statistically significant at the 95.0 percent confidence level because the *t* test statistics for the Beta is 10.81 and the associated p-value (.000) is less than .05. The variable attribution has a positive effect on teacher collaboration (β = 0.370) variable and this is statistically significant at the 95.0 percent confidence level because the *t* test statistics for the Beta is 9.1 and the associated p-value (.000) is less than .05.

According to Durban-Watson statistic test (1.53 < 2.00) disposes of significantly correlated residuals. Further input parameters would be needed that have not been assessed empirically. This indicated that vision identification and attribution were the predictors of teacher collaboration variable. The results indicated that 2 variables of transformational leadership were the positive predictors to teacher collaboration whereas intellectual stimulation contributed to low effect to teacher collaboration (β = 0.084) variable.

The regression results depicted from Table 1 indicates that the transformational leadership style accounts for 65 percent of the variance in professional development (adjusted R^2 0.651). The *F* test statistics for the adjusted R^2 is 257.15 and the associated p-value is .000. It indicates that $p < .05$; therefore, a statistically significant relationship exists between professional development and the transformational leadership style at the 95.0 percent confidence level. The intellectual stimulation variable has the strongest positive effect on the professional development (β = 0.500) variable and this is statistically significant at the 95.0% confidence level because the *t* test statistics for the Beta is 13.85 and the associated p-value (.000) is less than .05. The variable attribution has a positive effect on professional development (β = 0.492) variable and this is statistically significant at the 95.0 percent confidence level because the *t* test statistics for the Beta is 14.11 and the associated p-value (.000) is less than .05. The Durban-Watson statistic test (1.35 < 2.00) points out that the extracted parameters are not the only possible explanations for the item professional development hence there is positive autocorrelation. This indicated that intellectual stimulation and attribution were the predictors of professional development variable. The results indicated that 2 variables of transformational leadership were the positive predictors to professional development whereas vision identification contributed to negative effect to professional development (β = -.185) variable.

The result confirms the alternative hypothesis of transformational leadership as having a positive influence on school culture and is accepted. Thus, the hypothesis HA1 is supported. All the 3 independent variables of transformational leadership; vision identification, attribution and intellectual stimulation has positive and significant influence on school culture.

10.2 Testing the Influence of Transformational Leadership on Organizational Health

The second hypothesis (HA2) about the influence of transformational leadership on organizational health is tested using multiple regression analysis. Table 2 summarizes the regression results of the regression analysis at the construct level.

Table 2: The Influence of Transformational Leadership on Organizational Health

Variable	Dependent Variable (*Organizational Health*) 1 (*β*)	2 (*β*)
Independent Variable (*Transformational Leadership*)		
Vision Identification	**.157***	**.315***
Attribution	**.256***	**.191***
Intellectual Stimulation	-.182	.063
R	.616	.575
R^2	.379	.330
Adjusted R^2	.375	.325
F-statistics	83.53	67.35
Durbin-Watson	1.72	1.22

**Significant at p < .05* 1= Career Adaptability, 2= Institutional Integrity

The regression results depicted from Table 2 indicates that the transformational leadership style accounts for 37 percent of the variance in career adaptability (adjusted R^2 0.375). The F test statistics for the adjusted R^2 is 83.53 and the associated p-value is .000. It indicates that $p < .05$; therefore, a statistically significant relationship exists between career adaptability and the transformational leadership style at the 95.0 percent confidence level.

The Beta (β) weighting for the independent variables (vision identification, attribution and intellectual stimulation) and dependent variable (career adaptability and institutional integrity). The Beta (β) weighting are calculated between the predictor variables and criterion variables. The attribution variable has the strongest positive effect on the career adaptability (β = 0.256) variable and this is statistically significant at the 95.0 percent confidence level because the t test statistics for the Beta is 5.50 and the associated p-value (.000) is less than .05. The vision identification also has a positive effect on career adaptability (β = 0.157) variable and this is statistically significant at the 95.0 percent confidence level because the *t* test statistics for the Beta is 3.4 and the associated p-value (.001) is less than .05. According to Durban-Watson statistic test (1.72 < 2.00) disposes of significantly correlated residuals. Further input parameters would be needed that have not been assessed empirically. This indicated that vision identification and attribution were the predictors of career adaptability variable.

The regression results depicted from Table 2 indicates that the transformational leadership style accounts for 33 percent of the variance in institutional integrity (adjusted R^2 0.325). The *F* test statistics for the adjusted R^2 is 67.35 and the associated p-value is .000. It indicates that $p < .05$; therefore, a statistically significant relationship exists between institutional integrity and the transformational leadership style at the 95.0 percent confidence level. The Beta (β) weighting are calculated between the predictor variables and criterion variables. The vision identification variable has the strongest positive effect on the institutional integrity (β = 0.315) variable and this is statistically significant at the 95.0 percent confidence level because the *t* test statistics for the Beta

is 6.52 and the associated p-value (.000) is less than .05. The variable attribution has a positive effect on institutional integrity (β = 0.191) variable and this is statistically significant at the 95.0 percent confidence level because the *t* test statistics for the Beta is 3.95 and the associated p-value (.000) is less than .05. According to Durban-Watson statistic test (1.22 < 2.00) disposes of significantly correlated residuals. It implies that independence of residual is accepted in this model and there is no autocorrelation problem in the data. This indicated that vision identification and attribution were the predictors of institutional integrity variable. The result confirms the alternative hypothesis of transformational leadership as having a positive influence on organizational health and is accepted. Thus, the hypothesis HA2 is supported. Two out of three independent variables of transformational leadership; vision identification and attribution has positive and significant influence on organizational health.

10.3 Testing the Influence of School Culture on Organizational Health

The third hypothesis (HA3) about the influence of school culture on organizational health is tested using multiple regression analysis. Table 3 summarizes the regression results of the regression analysis at the construct level.

The regression results depicted from Table 3 indicates that the school culture accounts for 31 percent of the variance in career adaptability (adjusted R^2 0.309). The *F* test statistics for the adjusted R^2 is 52.34 and the associated p-value is .000. It indicates that $p < .05$; therefore, a statistically significant relationship exists between career adaptability and school culture at the 95.0 percent confidence level. The Beta (β) weighting are calculated between the predictor variables and criterion variables. The collaborative leadership variable has the strongest positive effect on the consideration (β = 0.212) variable and this is statistically significant at the 95.0 percent confidence level because the *t* test statistics for the Beta is 11.48 and the associated p-value (.000) is less than .05. The variable teacher collaboration has a positive effect on career adaptability (β = 0.198) variable and this is statistically significant at the 95.0 percent confidence level because the *t* test statistics for the Beta is 3.95 and the associated p-value (.000) is less than .05. for the Beta is -3.64 and the associated p-value (.000) is less than .05. The variable professional development contributed low effect to principal influence variable (β = 0.90) and this is not statistically significant at the 95.0 percent confidence level because the *t* test statistics for the Beta is 1.88 and the associated p-value (.060) is more than .05. When we look at the results with regard to Durbin-Watson statistic test, the value is determined as 1.85 in this study. Durbin-Watson value indicates that there is no autocorrelation in the model if it is in the range of 1.5 to 2.5 (Durbin & Watson, 1951). This indicated that collaborative leadership, teacher collaboration and professional development were the predictors of career adaptability variable.

Table 3: The Influence of School Culture on Organizational Health

Variable	Dependent Variable (*Organizational Health*) 1 (*β*)	2 (*β*)
Independent Variable (*School Culture*)		
Collaborative Leadership	**.212***	**.072***
Teacher Collaboration	**.198***	**.462***
Professional Development	-.090	**.109***
R	.561	.711
R^2	.315	.505
Adjusted R^2	.309	.501
F-statistics	52.34	116.07
Durbin-Watson	1.85	1.75

**Significant at p < .05* 1= Career Adaptability, 2= Institutional Integrity

The regression results depicted from Table 3 indicates that the school culture accounts for 50 percent of the variance in institutional integrity (adjusted R^2 0.501). The F test statistics for the adjusted R^2 is 116.07 and the associated p-value is .000. It indicates that $p < .05$; therefore, a statistically significant relationship exists between institutional integrity and school culture at the 95.0 percent confidence level. The teacher collaboration variable has the strongest positive effect on the institutional integrity (β = 0.462) variable and this is statistically significant at the 95.0 percent confidence level because the *t* test statistics for the Beta is 11.70 and the associated p-value (.000) is less than .05. Whereas, the variable professional development also has a positive effect on institutional integrity (β = 0.109) variable and this is statistically significant at the 95.0 percent confidence level because the *t* test statistics for the Beta is 2.73 and the associated p-value (.000) is less than .05. The collaborative leadership variable has a positive effect on institutional integrity (β = 0.072) variable and this is statistically significant at the 95.0 percent confidence level because the *t* test statistics for the Beta is 2.33 and the associated p-value (.020) is less than .05. For the purpose of making an assessment and validation of the independence of error assumptions, the Durbin-Watson statistic test was utilized. Table 4.19 shows that the value of 1.75 is a positive serial correlation. This indicated that collaborative leadership, teacher collaboration and professional development were the predictors of institutional integrity variable. The results indicated that all 3 variables of school culture were the positive predictors to institutional integrity.

The result confirms the alternative hypothesis of school culture as having a positive influence on organizational health and is accepted. Thus, the hypothesis HA3 is supported. All the 3 independent variables of school culture; collaborative leadership, teacher collaboration and professional development has positive and significant influence on organizational health.

11.0 Testing the Moderating Influence of School Culture on the Relationship between Transformational Leadership and Organizational Health

Hypothesis HA4 addressed the moderating influence of school culture on the relationship between transformational leadership and organizational health. The role of school culture variables as a moderator variable will be identified from the significance of the interaction coefficient between the interaction terms (transformational leadership x school culture). A positive and significant coefficient indicates that school culture moderates the relationship between transformational leadership and organizational health outcomes. Higher relative scores on school culture will increase the magnitude of the effect between transformational leadership and organizational health outcomes. Results of the MMR analysis for the interaction effect between transformational leadership and school culture are shown in Table 4.

The MMR analysis shown in Table 4 revealed that the full model (Step 1, 2 & 3) includes the control variable, the independent variables, the moderator variable and the interaction terms of the moderator variable and independent variables. Step 1 shows that three variables (vision identification, attribution and intellectual stimulation) have a positive and significant relationship with organizational health variable (career adaptability). The vision identification variable (β=.092, p=.003); attribution (β=.185, p=.000) and intellectual stimulation (β =.266, p=.000). Transformational leadership variables and collaborative leadership variable as main effect variables were entered in Step 2 and the result shows two variables has positive and significant relationship with career adaptability. The intellectual stimulation variable (β=.206, p=.000) and collaborative leadership (β=.131, p=.000). The interaction terms of transformational leadership variables and collaborative leadership variable were entered in Step 3. Interaction term shows two variables have significant relationship with career adaptability. The vision identification variable (β = -.245, p=.000) and intellectual stimulation (β =.278, p=.000). The results of the MMR analysis for the interaction effect between transformational leadership and school culture suggests that the exploratory power of the model increases because of the inclusion of the interaction term. As shown in Table 4, an additional 15 percent of variance (ΔR^2 =0.150, p<.05) in career adaptability was explained by the inclusion of the interaction term. Thus, the results indicate the evidence that collaborative leadership moderates the relationship between transformational leadership and career adaptability.

The MMR analysis shown in Table 4 revealed that the full model (Step 1, 2 & 3) includes the control variable, the independent variables, the moderator variable and the interaction terms of the moderator variable and independent variables. Step 1 shows that three variables (vision identification, attribution and intellectual stimulation) have a positive and significant relationship with organizational health variable (career adaptability). The vision identification variable (β=.092, p=.003); attribution (β=.185, p=.000) and intellectual stimulation (β =.266, p=.000). Transformational leadership variables and teacher collaboration variable as main effect variables were entered in Step 2 and the result shows two variables; intellectual stimulation variable (β=.206, p=.000) and teacher collaboration variable (β=.224, p=.000) has positive and significant relationship with career adaptability.

The interaction terms of transformational leadership variables and teacher collaboration variable were entered in Step 3. Interaction term shows two variables have significant relationship with career adaptability. The attribution variable (β = .219, p=.000) and intellectual stimulation (β =.178,

p=.000). The results of the MMR analysis for the interaction effect between transformational leadership and school culture suggests that the exploratory power of the model increases because of the inclusion of the interaction term. As shown in Table 4, an additional 5.2 percent of variance (ΔR^2 =0.052, p<.05) in career adaptability was explained by the inclusion of the interaction term. Thus, the results indicate the evidence that teacher collaboration moderates the relationship between transformational leadership and career adaptability.

The MMR analysis shown in Table 4 revealed that the full model (Step 1, 2 & 3) includes the control variable, the independent variables, the moderator variable and the interaction terms of the moderator variable and independent variables. Step 1 shows that three variables (vision identification, attribution and intellectual stimulation) have a positive and significant relationship with organizational health variable (career adaptability). The vision identification variable (*β*=.092, *p*=.003); attribution (*β*=.185, *p*=.000) and intellectual stimulation (*β* =.266, *p*=.000). Transformational leadership variables and teacher collaboration variable as main effect variables were entered in Step 2 and the result shows no variables has positive and significant relationship with career adaptability. The interaction terms of transformational leadership variables and professional development variable were entered in Step 3. Interaction term shows three variables have significant relationship with career adaptability. The vision identification variable (*β* = -.236, *p*=.000), attribution variable (*β* = -.038, *p*=.000) and intellectual stimulation (*β* =.184, *p*=.000). The results of the MMR analysis for the interaction effect between transformational leadership and school culture suggests that the exploratory power of the model increases because of the inclusion of the interaction term. As shown in Table 4, an additional 7.8 percent of variance (ΔR^2 =0.078, p<.05) in career adaptability was explained by the inclusion of the interaction term. Thus, the results indicate the evidence that professional development moderates the relationship between transformational leadership and career adaptability.

Table 4: Test Statistics for Moderated Relationship (Transformational Leadership, School Culture and Organizational Health

	Dependent Variable					
	(*Career Adaptability*)			**(*Institutional Integrity*)**		
Variable	**Step 1 (*β*)**	**Step 2 (*β*)**	**Step 3 (*β*)**	**Step 1 (*β*)**	**Step 2 (*β*)**	**Step 3 (*β*)**
Independent Variable (*Transformational Leadership*)						
Vision Identification	**.092***	.075	**-.245***	**.323***	**.291***	**.206***
Attribution	**.185***	.099	**.210***	**.211***	-.055	.090
Intellectual Stimulation	**.266***	**.206***	**.239***	**.118***	.073	.097
Moderating Variable *(School Culture)*						
Collaborative Leadership (CL)		**.131***	**.120***		**.131***	**.478***
Interaction Terms						
Vision Identification*CL			**-.245***			**-.119***
Attribution*CL			-.031			**.227***
Intellectual Stimulation*CL			**.278***			-.042
R^2	.366	.373	.523	.309	.310	.491
Adjusted R^2	.363	.368	.517	.307	.307	.487
R^2 Change	.366	.006	**.150**	.309	.001	**.181**
Sig. F Change	.000	.008	.000	.000	.000	.000

Moderating Variable						
(School Culture)						
Teacher Collaboration (TC)		**.224***	**.204***		**.136***	**.416***
Interaction Terms						
Vision Identification*TC			.036			**.107***
Attribution*TC			**.219***			**-.116***
Intellectual Stimulation*TC			**.178***			**.176***
R^2	.189	.210	.262	.366	.367	.550
Adjusted R^2	.187	.207	.256	.363	.362	.544
R^2 Change	.189	.021	**.052**	.366	.000	**.183**
Sig. F Change	.000	.000	.000	.000	.551	.000
Moderating Variable						
(School Culture)						
Professional Development (PD)		-.027	.086		**.150***	.071
Interaction Terms						
Vision Identification*PD			**-.236***			**.119***
Attribution*PD			**-.038***			**.227***
Intellectual Stimulation*PD			**.184***			-.042
R^2	.309	.335	.413	.326	.337	.373
Adjusted R^2	.307	.332	.409	.323	.333	.367
R^2 Change	.309	.026	**.078**	.326	.011	**.036**
Sig. F Change	.000	.000	.000	.000	.001	.000

* *Significant at p < .05*

The MMR analysis shown in Table 4 revealed that the full model (Step 1, 2 & 3) includes the control variable, the independent variables, the moderator variable and the interaction terms of the moderator variable and independent variables. Step 1 shows that three variables (vision identification, attribution and intellectual stimulation) have a positive and significant relationship with organizational health variable (institutional integrity). The vision identification variable (β=.323, p=.003); attribution (β=.211, p=.000) and intellectual stimulation (β =.118, p=.000). Transformational leadership variables and collaborative leadership variable as main effect variables were entered in Step 2 and the result shows two variables has positive and significant relationship with institutional integrity. The vision identification variable (β=.291, p=.000) and collaborative leadership (β=.131, p=.000). The interaction terms of transformational leadership variables and collaborative leadership variable were entered in Step 3. Interaction term shows two variables have significant relationship with institutional integrity. The vision identification variable (β = -.119, p=.000) and attribution (β =.227, p=.000). The results of the MMR analysis for the interaction effect between transformational leadership and school culture suggests that the exploratory power of the model increases because of the inclusion of the interaction term. As shown in Table 4, an additional 18.1 percent of variance (ΔR^2 =0.181, p<.05) in institutional integrity was explained by the inclusion of the interaction term. Thus, the results indicate the evidence that collaborative leadership moderates the relationship between transformational leadership and institutional integrity.

The MMR analysis shown in Table 4 revealed that the full model (Step 1, 2 & 3) includes the control variable, the independent variables, the moderator variable and the interaction terms of the moderator variable and independent variables. Step 1 shows that three variables (vision identification, attribution and intellectual stimulation) have a positive and significant relationship

with organizational health variable (institutional integrity). The vision identification variable (β=.323, p=.003); attribution (β=.211, p=.000) and intellectual stimulation (β =.118, p=.000). Transformational leadership variables and teacher collaboration variable as main effect variables were entered in Step 2 and the result shows one variable vision identification variable (β=.291, p=.000) has positive and significant relationship with institutional integrity. The interaction terms of transformational leadership variables and teacher collaboration variable were entered in Step 3. Interaction term shows three variables have significant relationship with institutional integrity. The vision identification variable (β = .107, p=.000); attribution variable (β = -.116, p=.000) and intellectual stimulation (β =.176, p=.000). The results of the MMR analysis for the interaction effect between transformational leadership and school culture suggests that the exploratory power of the model increases because of the inclusion of the interaction term. As shown in Table 4, an additional 18.3 percent of variance (ΔR^2 =0.183, p<.05) in institutional integrity was explained by the inclusion of the interaction term. Thus, the results indicate the evidence that teacher collaboration moderates the relationship between transformational leadership and institutional integrity.

The MMR analysis shown in Table 4 revealed that the full model (Step 1, 2 & 3) includes the control variable, the independent variables, the moderator variable and the interaction terms of the moderator variable and independent variables. Step 1 shows that three variables (vision identification, attribution and intellectual stimulation) have a positive and significant relationship with organizational health variable (institutional integrity). The vision identification variable (β=.323, p=.003); attribution (β=.211, p=.000) and intellectual stimulation (β =.118, p=.000). Transformational leadership variables and professional development variable as main effect variables were entered in Step 2 and the result shows two variables has positive and significant relationship with institutional integrity; vision identification variable (β=.291, p=.003) and professional development variable (β=.150, p=.000). The interaction terms of transformational leadership variables and professional development variable were entered in Step 3. Interaction term shows two variables have significant relationship with institutional integrity. The vision identification variable (β = .119, p=.000) and attribution variable (β = .227, p=.000). The results of the MMR analysis for the interaction effect between transformational leadership and school culture suggests that the exploratory power of the model increases because of the inclusion of the interaction term. As shown in Table 4, an additional 3.6 percent of variance (ΔR^2 =0.036, p<.05) in institutional integrity was explained by the inclusion of the interaction term. Thus, the results indicate the evidence that professional development moderates the relationship between transformational leadership and institutional integrity. Thus, the hypothesis HA4 is supported.

12.0 Conclusion

The results indicate that collaborative leadership, teacher collaboration and professional development moderate the relationship between transformational leadership and organizational health. According to Gruenert (1998), “collaborative leadership refers to the ways in which leaders within the school create and foster collaborative relationships with faculty and staff” (p.131). School leaders completely value ideas of the teachers, seek input, engage staff in decision-making and trust the professional judgement of the staff. In addition, collaborative leaders empower teachers to make their own decisions and encourage them to be innovators as well as risk-takers (Gruenert, 1998). The current body of literature (Day, Harris & Hatfield, 2001; Deal & Peterson, 1999; Hallinger & Heck, 1999; Leithwood et al., 1999; Leithwood & Jantzi, 2005; Sergiovanni,

1984) suggested that vision identification is an action taken by school leaders to improve academic success. In this study, the findings reveal a negative significant influence of vision identification which indicates the principal failed to identify new opportunities for the teachers. The principal is perceived as someone who have not created a vision for the school that will move the school in a positive direction; failed to articulate the school's vision to the staff and also been lacking in inspiration to achieve school goals. The findings of this study is not congruent with the study by Leithwood et al. (2006) whereby the teachers and principals work together to make school decisions, ensuring student success.

REFERENCES

A. Arokiasamy & Stanley Yap Peng Lok (2014). "Causal Relationship between Incentive and Job Satisfaction: Evidence of the Malaysian Academic Staff in Higher Education Institutions". *Asian Research Journal of Business Management*, Issue 2, Volume 2, November 2014, ISSN: 2321-9246, pp. 16-27.

A. Arokiasamy, Abdullah, A.G.K & Ismail, A. (2015). "Correlation between Cultural Perceptions, Leadership Style and ICT Usage by School Principals in Malaysia". *ELSEVIER-Procedia Social and Behavioral Sciences*, March 2015, Vol. 176, pp. 319-332.

A. Arokiasamy (2016). *The Influence of Transformational Leadership and School Culture on Organizational Health of Secondary schools in the Northern States of Peninsular Malaysia*. Unpublished Ph.D Thesis. The Universiti Sains Malaysia.

Bass, B M & Avolio, B J, (2003). *Improving Organizational Effectiveness Through Transformational Leadership*, Thousand Oaks, Sage Begley, P & Johansson, O. The Ethical Dimensions of School Leadership, Dordrecht, Kluwer Academic Publishers.

Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

Bogler, R., (2001). The influence of leadership style on teacher job satisfaction. *Educational Administration Quarterly*, 37(5), 662-683

Cemaloglu, N., Sezgin, F., & Killing, A.C. (2012). Examining the Relationships between School Principals' Transformational and Transactional Leadership Styles and teachers Organizational Commitment. *The Online Journal of New Horizons in Education*, 2(2); 53-63.

Creswell, J. W. (2005). Educational research. *Planing, conducting and evaluating qualitative and quantitative approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Gruenert, S. (1998). *School Culture Survey*. Unpublished doctoral dissertation, University of Missouri, Columbia.

Geijsel, F., Sleegers, P., Leithwood, K. and Jantzi, D. (2003).Transformational leadership effects on teachers' commitment and effort toward school reform. *Journal of Educational Administration*, 41 (3), 228-256.

Gersten, R., Keating, T., Yovanoff, P., & Harniss, M. (2001). *Working in special education: Factors that enhance special educators' intent to stay*. The Council for Exceptional Children, 67 (4) 549-567.

Griffith, J. (2004). Relation of principal transformational leadership to school staff job satisfaction, staff turnover, and school performance. *Journal of Educational Administration* 42(3), 333-356.

Hallinger, P. (2003). Leading educational change: Reflections on the practices of instructional and transformational leadership. *Cambridge Journal of Education*, 33(3), 329-351. http://dx.doi.org/10.1080/0305764032000122005.

Hallinger, P. (2007). *Leadership for Learning: Reflections on the practices of instructional and transformational leadership.* Paper presented, Seminar at East Asia University.

Harris, A., & Chapman, C. (2002). *Effective leadership in school facing challenging circumstances.* Nottingham: National College for School Leadership.

Harris, A., Day, C., Hopkins, D., Hadfield, M., Hargreaves, A., & Chapman, C. (2013). *Effective leadership for school improvement*. London: Routledge.

Heller, H. W., Clay, R., & Perkins, C. (1993). The relationship between teacher job satisfaction and principal leadership style. *Journal of School Leadership*, 3, 74-86.

Hersey, P., & Blanchard, K. H. (1996). *The management of organizational behavior* (7 ed.). Englewood Cliffs, NJ: Prentice-Hall.

Hoy, W. K., & Miskel, C. G. (2013). *Educational administration*. Theory, research, and practice (9th ed.) New York, NY: McGraw Hill.

Leithwood, K., & Jantzi, D. (in press). A review of transformational school leadership research: 1996 – 2005. *Leadership and Policy in Schools*.

Leithwood, K., Jantzi, D., & Mascall, B. (2002). Large-scale reform: What works. *Journal of Educational Change*, 3(1), 7 – 33.

Leithwood, K., Jantzi, D., & Steinbach, R. (1999). *Changing leadership for changing times*. Buckingham, UK: Open University Press.

Leithwood, K., Jantzi, D., Earl, L., Fullan, M., Levin, B. (2004). Leadership for large-scale reform. *School Leadership and Management*, 24(1), 57 – 80.

Littrell, P.C., Billingsley, B. & Cross, L. (1994). The effects of principal support on special an general educators' stress, job satisfaction, school commitment, health, and intent to stay in teaching. *Remedial and Special Education*, 15, 297-310.

Locke, E. (1969). What is job satisfaction? *Organizational Behavior and Human Performance*. 4, 309-336

McLeskey, J., Tyler, N.C., & Flippin, S.S. (2004). The supply and demand of for special education teachers: A review of research regarding the chronic shortage of special education teachers. *The Journal of Special Education* 38(1) 5-21.

Ministry of Education Malaysia. (2014). *Pelan Pembanguan Pendidikan Malaysia 2013-2025*. Putrajaya: KPM.

Muijs, D, Harris, A, Chapman, C, Stoll, L & Russ, J, (2004), Improving schools in socio-economically disadvantaged areas: A review of research evidence, *School Effectiveness and School Improvement*, 15(2).

Noor Rezan Bapoo Hashim (2009). Sekolah Kluster Lonjak Institusi Pendidikan (Cluster School Accelerate the Educational Institutions) in *Majalah Pendidik* (Educators Digest), 18-21.

Nguni, S., Sleegers, P., & Denessen, E. (2006). Transformational and transactional leadership effects on teachers' job satisfaction, organizational commitment, and organizational citizenship behavior in primary schools: The Tanzanian case. *School Effectiveness and School Improvement*, 17(2), 145-177.

Rahman Sukor bin Abdul Samad (2010). Education management in the context of quality improvement: managing change for improving learning community. *Jurnal Pendidikan*, 30(2); 93-108.

Reitzug, U & Patterson, J, (1998). "I'm not going to lose you!": Empowerment through caring in an urban principal's practice with pupils, *Urban Education*, 33(2), 150–81.

Selamat, N., Nordin, N., & Adnan, A.A. (2013). Rekindle teachers' organizational commitment: The effect of Transformational leadership behavior. *Procedia Social and behavioral sciences*, 90, 566-574. http://dx.doi.org/10.1016/j.sbspro.2013.07.127

Seltzer, J. and Bass, B.M. (1990). Transformational Leadership: Beyond Initiation and Consideration. *Journal of Management*, 16 (4), 693- 703.

Silins, H & Mulford, W, (2002*), Leadership and school results*. In K Leithwood & P Hallinger (eds), Second International Handbook of Educational Leadership and Administration, pp 561–612, Dordrecht, Kluwer Academic Publishers.

Spector, P. (1997). *Job Satisfaction: Application, Assessment, Causes and Consequences*. California: Sage.

Spunt, T. M. (1999). *Guide to customer surveys : Sample questionnaires and detailed guidelines for creating effective surveys*. New York, NY: Customer Service Group.

Uma, Sekaran, (2000). *Research Methods for Business: A Skill-building Approach*. Third Ed. New York: John Wiley & Sons, Inc., p. 288.

Zaidatol Akmaliah (1990). *Pentadbiran Pendidikan.* Shah Alam: Penerbitan Fajar Bakti Sdn. Bhd.