

The Influences of Compensation and Supply Chain Management towards Education System: The Mediating Role of Job Motivation

Faisal Matriadi¹, Siti Raha Agoes Salim², Ritha F. Dalimunthe², Parapat Gultom²

¹Department of Management, Universitas Malikussaleh, 24351 Lhokseumawe, Aceh, Indonesia

²Department of Management, Universitas Sumatera Utara, Medan, Sumatera Utara, Indonesia

*Corresponding author: faisalmatriadi@unimal.ac.id

Abstract- The education service today's is increasingly competitive and supply chain management in this system can be distinguish. It is encouraging schools at this time to improve their performance. One way can be used to improve teacher performance is job motivation. Therefore, the purpose of this study was to analyze the role of job motivation as mediating variable in the relationship between compensation and competence towards teacher performance in Lhokseumawe. A total of 351 teachers from seven senior high schools were participated and collected using cluster random sampling. There are seven hypotheses were formulated as well as for direct and indirect effects (mediating) and performed by using statistical software namely WarpPLS 3.0. The results show that compensation and competence have a significant relationship on job motivation. Also, the result indicate that the compensation, competence and job motivation have a significant relationship on teacher performance. In addition, job motivation has mediated the relationship between compensation and competence towards teacher performance among senior high school teacher in Lhokseumawe.

Keywords- Compensation, Competence, Job motivation; Educational system performance, Supply chain management.

1. Introduction

Job performance of employees plays a crucial factor in determining an organisation performance since highly performing individuals will be able to assist organisation to achieve its strategic aims thus sustaining the organization competitive advantage [1]. Job performance has always been the central issue in research work in the field of human resource and organizational behavior [2]. Researchers are constantly trying to come up with the best variables that can reliably and accurately explain and forecast future job performance of all organizational employees [3,4]. Over the years, a

substantial amount of research on job performance have been contemplated not only by scholars in the human resource and organizational behavior, but also, those in the applied psychology, adult learning, management, and education areas as well. Although performance-related research has been extensively covered, performance was proven to be dynamic in nature [5]. Thus, there are always meaningful variations or diversification that can trigger new research questions pertaining to job performance. Timely and accurate supply chain information allows system to make and ship only as much product as can be sold. Effective supply chain systems help both students and teachers to reduce excess inventory, which make the educational system more efficient.

In short, quality and high-performing teachers are very crucial [6]; thus, studying individual and organizational factors which contribute towards job performance among teachers was considered as not only theoretically significant and but practically in line with the current national aspirations to upgrade teacher quality and performance. In addition, in order to improve teacher quality and performance, there must be improvement made to the human resource practice such as compensation, competence and job motivation [6]. Research on Performance-related studies have been dealt in depth in the business and industrial setting. It was worth to investigate if some of the concepts used in the business and industrial setting could also be applied to in the educational setting, to explain teachers' performance.

The significance of this present research can be divided into two perspectives. Firstly, the significance of this study can be seen from the theoretical perspective. Even though there were

many research interest on the determinants of job performance [7-14], most of them were conducted abroad, and thus lack of evidence exist to understand the job performance of Senior High Schools teachers in the Indonesian context.

Furthermore, lack of attempt was made in the study of job performance which focus on teachers working in the Senior High Schools as many previous studies regarded all employees of the educations as the same regardless of the sectors they were in which had been proven to be different [15,16]. This condition had therefore illuminated a significant gap in the past literatures on Indonesian education that tend to focus on overall sectoral problems and organisational level problems rather than from the individual level problems in respect to job performance. Thus, the present study may contribute to the existing literatures on education in Indonesia specifically in the context of education, which has not received much attention. At the same time, it was hopeful that this study will be able to add on to the present literatures of education by highlighting the issues faced by education sector from the teachers' perspectives that often been overshadowed by many researches on organisation level performance.

Secondly, from the applied significance perspective, this study was able to provide better understanding on the performance of teacher in Senior High Schools sector within the education context. The knowledge obtained can assist teachers in developing strategies that may help to motivate teachers to perform better. In addition, this research was an opportunity for education to view the present problems faced by the education in relation to skill shortages and lack of productivity from the perspective of teachers. Therefore, it was also hope for these problems to be resolved through better understanding of the factors that can affect teachers' job performance, which in turns may help to overcome the on-going human resources issues of the education.

Contrary to measures of job performance in studies in business and industrial context, the construct of teacher job performance was usually referred to as unidimensional in many research work involving teachers. The measure of teacher performance usually concentrates on the ratings of a teacher's teaching skill, as the sole dimension [17,18,19]. Some authors measure teachers' organizational citizenship behavior as a form of performance measure [20, 21]. However, more recently, there

has been attempts to measure performance multi dimensionally [22,23, 24].

In addition, employees in a service setting also need to possess the right competency in order to be effective in their job performance. According to [25], it was necessary for service workers to be skilled and trained in order to deliver effective service. Some examples of competencies that are necessary for service employees consist of friendliness, concern, insight, communicative and adaptive were noted [26, 27]. Previous studies [28, 29,30, 31] on the relationship between competency and job performance were conducted abroad while studies on competency [32,33, 34] focused on issues either related to the entrepreneurs' or the public sector employees. Therefore, the present study aims to advance the researcher understanding of the relationship between compensation, competence, job motivation and teacher performance in Senior High Schools in Indonesia's context.

2. Basic theory and hypotheses development

2.1 Performance

Generally, performance was a measurement or indicator for evaluation and assessment of individuals, group, firm and organizations. It reveals the strength and weakness of what we want to measure. Teachers play key roles in the education process. This could be because they provide professional touch in the profession. People see them as persons having the adequate knowledge to impart knowledge to people. In examining what teacher's role should be, noted that there has been little sustained analysis of the role of the teacher. In the academic domain, it has been noted that a good and well systematic performance measurement system should be designed in such a way that it will give room for collecting, analyzing and reporting data and information which are related to the performance of the academic departments. This has led to some major development and significant continuities with performance measures in educational organizations.

Accordingly, reported that there are about four groups of performance indicators which are as follows; internal performance indicator, indicators of operational performance, external performance indicator and last but not the least, research indicator performance,. In another dimension, noted

that performance measure provides information relating to following; planning, investigating, coordinating, evaluating, supervising, staffing, negotiating, representing and your or firm or organization overall performance. These indicators are well related to both individual and organizational performance, and deeply related to the human resources domain. provided performance indicators such as efficiency, internal liquidity, strategic human resources effectiveness, profitability and leverage.

With respect to teacher performance, it can be defined as the ability in planning, implementing, and evaluating the teaching-learning process. It involves teacher's efficacy in doing or completing a job. On like other aspects of performance, teacher performance has been measured using different dimensions. For instance, in investigating the teacher performance adopted a performance measure that assessed the overall performance rating of the teacher by using two dimensions of; effective and best educator. Similarly, in measuring the performance of the lecturers in the university adopted an objective approach.

There seems to be no end to what performance measure should be among authors and researchers, however, whatever the performance measurement, a researcher should be able to justify which performance measure he or she adopts in the course of his/her research. Based on the insight derived above, this study operationalized teacher performance as: effectiveness, professionalism and overall performance.

2.2 Job Motivation

Motivated employees are one of the criteria that contribute to organizational success. Motivated employees will concentrate their effort and direction towards the achievement of organization's goal. Motivation was very important because it can drive an individual to work hard or perform well in their work. According to, employee motivation toward works refers to the way employee does their work and expresses it by their service or work to the organization. Employees that have high motivation will be more loyal and dedicated to their job and always perform for the best interest of the organization. Previous studies stated that employee motivation do have a positive relationship with organizational performance. showed that there are relationships between employee motivation and the organizational performance. The study reveals that

motivated workers in an organization has a significant influence on their performance. This was in line with equity theory which emphasizes that fairness in the remuneration package tends to produce higher performance from workers.

Other researchers like identified that employee motivation has significant relationship with performance where the motivational factors inside an employee will enhance their productivity in organization. Other than that, [48] also found that there was positive relationship between employee motivation and organizational performance. The study shows that firm's performance increase when the employee motivation increases. Financial rewards actually influence the employee performance and boost their motivation. Hence, financially satisfied workers contribute to firm's performance. In contrast, there was also study that says payment does not influence or improve employee motivation but non-financial factors like non-financial rewards, social recognition and performance feedback actually give positive influence to employee motivation.

2.3 Compensation

This study focuses on the relationship between compensation, competence, job motivation and teachers performance in Senior High Schools on Aceh Province. There are many past studies that have been conducted on employees' performance. claim that reward package as compensation can influence the employee's performance in their work. According to them, compensation system gives an impact to employee performance by improve employee knowledge, skill and abilities to achieve to organization goals. agree that compensation give an impact to employee performance, the compensation give indirect effect to employee in-role and extra role behavior so it will improve employee in-role performance without sacrificing extra-role performance. also agree that compensation practices play an important role in improving employee performance and to achieve organizational goal.

As mentioned before, numerous previous studies found that employees' performance was associated to the compensation. Nevertheless, these researches are predominantly western oriented and highlighted cases in the context of western environment which are not reflected the Asian countries especially Indonesia. In addition, less attention also has been given in looking the best

practice of compensation system in the field of education. As this study refers to the Indonesia's context, it was key important to understand the compensation system in Senior High Schools and its relationship with the employee performance specifically on productivity, job quality and job accomplishment in the Indonesian private tertiary education institution.

2.4 Competence

Generally, teaching has been considered as one of the most interesting challenging professions in human endeavour. Probably because it deals mainly with human beings. People need to teach others in order for them to learn and be educated, while those who teach others must possess the right competence and compensation to enable them impart knowledge and education to the people or learners as whatever they teach has a durable effect in the lives of the people they teach.

The term competence has been widely used in various contexts by several authors. Hence, the term has several definitions. For instance, it has been used in the context of teacher education and job performance. By simple description, competence was a prerequisite for the competency-based-teacher education that comprises of skills, value and knowledge which professional teachers should exhibit for effective and successful completion of the teacher education programme.

The importance of competence in teaching profession cannot be underestimated. According to, it offers guidelines for success and assists in assessing measurable gaps that will be directly aligned with the work results required of the job as well as with the goals of the organization.

Many empirical studies have been conducted with respect to teacher competence and performance. The competence model provided demonstrated that a teacher's performance depends on the teachers' knowledge, (comprised of subject matter and general pedagogy), which was directly linked to the

teachers' competencies, characteristics and attitudes.

The Competency-Based Education Theory which is very popular in the education domain argued on the need for teachers to possess the right attributes and characteristics for better performance. Thus, the theory argued on the importance of individual characteristics that will aid teacher performance. Utilising this theory, argued that activities of teachers as well as their attributes will be more helpful in training teachers than individual opinion information. Therefore, they contended that teachers' characteristics play indispensable role in the teachers' effectiveness and performance. noted that teachers' competencies are based on competency based teacher education theory which are connected to all areas of performance which performance can be assessed.

Furthermore, it was also noted that there was a close association between teaching effectiveness or teaching ineffectiveness and teachers' competence. It was further argued that teachers who are competent would provide conducive environments and climate as well as the enabling classroom conditions for effective students' learning. argued that performance was a function of competence and therefore, teachers must possess the competence for better performance. In summary, competent teachers are those who have the ability to provide valuable outcomes without excessively costly behavior. It was the teaching skill and ability possess by the teachers.

Figure 1. shows the conceptual framework of the study, developed based on the study of the literature. The frameworks consists three independent variables namely compensation, competence and job motivation, together with the relationship with the dependent variable which is teacher performance.

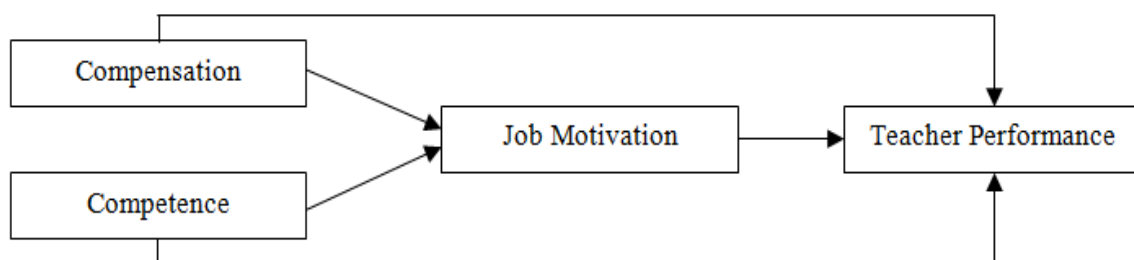


Figure 1. The research frameworks

Based on the above discussion, we expect a constructive relationship of the compensation, competence, job motivation with teacher performance and propose the following hypotheses:

H1: The compensation positively influences job motivation.

H2: The competence positively influences job motivation.

H3: The compensation positively influences teacher performance.

H4: The competence positively influences teacher performance.

H5: The job motivation positively influences teacher performance.

H6: The job motivation is positively mediate the relationship between compensation and teacher performance.

H7: The job motivation is positively mediate the relationship between competence and teacher performance.

3. Methodology

3.1 Respondents and research procedure

Data were collected through a questionnaire that distributed to 351 teachers from seven senior high schools that made the object of research. In addition, supporting data was obtained from interviews with respondents.

3.2 Data Analysis

There are four variables studied which were compensation (X1), competence (X2), career commitment, job job motivation (Z), and teacher performance (Y). This data study was analyzed by Partial Least Square (PLS) with WarpPLS 3.0. This technique has powerful analytical tool because it does not assume the data should have certain measurement scale, a certain amount, and can be used to confirm theory.

The Partial Least Square (PLS) that has been used in this research was Warp software PLS. It was used to analyse the causal relationship between the variables of compensation, competence, job motivation and teacher performance in accordance with the hypothesis that has been proposed. PLS have two stages of analysis, namely the inner evaluation model (testing the construct validity and reliability) and

outer evaluation model (testing the causal relationship between the magnitudes of the variables in the study).

4. Results and discussion

Before embarking on testing of causal relation, we are conducted the assessment of measurement model involving the test of validity and reliability of measurement instruments. The validity testing using the PLS approach can be running using two common test, namely the convergent and discriminant validities. As previous elaboration, the first evaluation of the measurement model can be referring the value of average variance extracted (AVE). It aims to measure the items under latent construct fulfill the condition of convergent validity. The construct can categorized convergence when the value of loadings is high or AVE is higher 0.50. There are two criteria to assess whether the model qualifies outer convergent validity. Further, the second evaluation model criteria can referring the value of outer model. It aims to test the discriminant validity or another words, the constructs are not present the symptom multicollinearity. Following the result of analysis, we found that the value of cross loading among all of indicator in variables were largest compared to other variables or it means that the variables fulfilled the discriminant validity. Thus, all of the indicators in each of the variables have met the criteria of discriminant validity. For measuring the reliability of measurement scale, we used two prominent tests were frequently utilized by researcher to test a reliability instrument measurement i.e. Cronbach Alpha (CA) and Composite Reliability (CR). Using Table 1, we found that the result of reliability testing is more than threshold proposed by Hair et al., 2014 i.e. the value of CA and CR are more than 0.70

Table1. Composite Reliability And Cronbach Alpha

Composite reliability coefficients			
Compensation (X1)	Competence (X2)	Job Motivation (Z)	Teacher Performance (Y)
0.902	0.932	0.926	0.947
Cronbach's alpha coefficients			
Compensation (X1)	Competence (X2)	Job Motivation (Z)	Teacher Performance (Y)
0.884	0.914	0.911	0.932

Table 1 displays the result of reliability testing using CA and CReach study variable value greater than 0.7. It can be concluded that each variable has met the composite reliability.

Evaluation of Structural Model Section inner evaluation includes an assessment of the model R-squared, Q-squared, the effect size, goodness of fit and test causality. Rated average path coefficient (APC) generated at 0,352 and significantly less than 5%. Average value of R-Square (ARS) generated by

0.502 and significantly less than 5%. Average value of variance inflation factor (AVIF) amounted to 1,327 less than 5. Thus, it can be concluded that the goodness of fit of models have been met.

4.1 Hypothesis testing

Here was the Table of proof hypothesized relationship between the variables directly and indirectly (a relationship which sees the role of job motivation as an intervening variable)

Table 5. COEFFICIENT ESTIMATE AND HYPOTHESIS SIGNIFICANCE EVIDENCE

Direct Effect			
Path	Coefficient Estimate	Significant	Information
X1 → Z	0.317	0.001	Affect + significant
X2 → Z	0.338	0.000	Affect + significant
Z → Y	0.394	0.000	Affect + significant
X1 → Y	0.367	0.000	Affect + significant
X2 → Y	0.344	0.000	Affect + significant
Indirect Effect			
Path	Coefficient Estimate	Significant	Information
X1 → Z → Y	0.148	0.028	Affect + significant through JM
X2 → Z → Y	0.133	0.032	Affect + significant through JM

The theoretical model on the conceptual framework of the study, can be said fit if it supported by empirical data, as given in Figure 2 below.

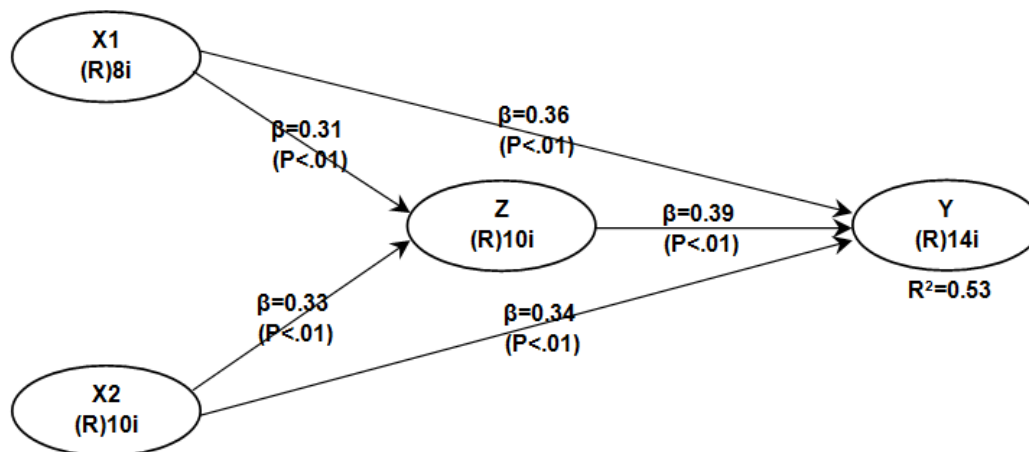


Figure5. The result of structural model for hypothesis testing

Path coefficient value of compensation affects job motivation at 0.317 with a p-value less than 0.001 it indicated that there was significant positive effect of compensation on job motivation of the Senior High

Schools Teachers. That was, the increase in compensation will result in an increase in job motivation. Based on these results, the hypothesis of the research first suspected an influence compensation

significantly to job motivation on Senior High Schools Teachers was accepted. Path coefficient value of competence affects job motivation at 0.338 with a p-value less than 0.001 it indicated that there was significant positive effect of competence on job motivation of the Senior High Schools Teachers. That was, the increase in competence will result in an increase in job motivation. Based on these results, the hypothesis of the second studies indicated that a competence gave significant effect to job motivation on Senior High Schools Teachers was accepted. Path coefficient value compensation affects teacher performance of 0.394 with a p-value of 0.001 which is less than 5%, this indicated that there was a significant positive influence of compensation on the teacher performance. That was, the increase in compensation will result in an increase teacher performance. Based on these results, the hypothesis of the three studies alleging that there was significant influence to the compensation of teacher performance on Senior High Schools was acceptable. The coefficient of path of competence influence teacher performance of 0.367 with a p-value of 0.000 which is less than 5%, this showed that there was a significant positive influence of the competence on teacher performance. That was, the increase in competence will result in an increase in teacher performance. Based on these results, four of the study hypothesis suspected an competence significant influence of teacher performance on Senior High Schools, was acceptable.

Path coefficient value that job motivation affects teacher performance amounted to 0,344 with p-value of 0.000 which is less than 5%, this indicated that there was a significant positive effect of job motivation on teacher performance. That was, an increase in job motivation will result in an increase in teacher performance. Based on these results, the hypothesis fifth suspect there are studies that influence job motivation, teacher performance significantly to the teachers Senior High Schools, was acceptable. Job motivation on proven research as an intervening variable between compensation with teacher performance significant effect on job motivation and teacher performance. The results of the study indicate that the PLS on the path coefficient value of 0.148 with a p-value of 0.028 which is less than 5%, this shows there was a significant indirect influence between the compensation with teacher performance on the Senior High Schools teachers. Job motivation on proven research as an intervening variable between competence with teacher performance significant effect on job motivation and

teacher performance. The results of the study indicate that the PLS on the path coefficient value of 0.133 with a p-value of 0.032 which is less than 5%, this shows there was a significant indirect influence between the competence with teacher performance on the Senior High Schools teachers.

5. conclusions and recommendations

Using the results of analysis, we conclude that compensation and competence has significant relationship on job motivation. The compensation, competence and job motivation also significant relationship on teacher performance. Besides that, the job motivation found mediates the relationship between compensation and competence towards teacher performance among senior high school teacher in Lhokseumawe. Based on the results, also, we are creating some recommendation for improving the teacher performance : a) advice to teachers in order to improve aspects of compensation that are supported with the satisfaction of a good work, will be able to improve the performance of teachers, b) advice to the principal in order to improve the competence, given the findings shows that the higher competence that are supported by job motivation, the better the performance of teachers. c) advice to policy makers, in order to carry out leadership training for principals on a regular basis, in order to improve school performance that was lead, control the competence of teachers periodically, in order to improve the skill and ability of the teachers in terms of teaching.

References

- [1] G. Dessler, *Human Resource management*. (12 th ed.). Prentice-Hall, USA, 2011.
- [2] J. P. Campbell, M. B. Gasser, and F. L. Oswald, *The Substantive nature of job performance variability*. In K. R. Murphy (Ed.), *Individual Differences and behavior in organizations* (pp. 258-299). San Francisco: Jossey-Bass, 1996.
- [3] F. L. Schmidt, and J. E. Hunter, "The validity and utility of selection methods in personnel psychology: Practical and theoretical implications of 85 years of research findings," *Psychological Bulletin*, 124, 262-274, 1998.
- [4] N. Schmitt, and D. Chan, *Personnel selection: A theoretical approach*. Newbury Park, CA: Sage Publications, 1998.
- [5] G. B. Yeo, and A. Neal, "A multilevel analysis of effort, practice, and performance: Effects of ability, conscientiousness, and goal orientation," *Journal of Applied Psychology*, 89, 231-247, 2004.

- [6] B. Egbo, "Teacher capacity building and effective teaching and learning: a seamless connection," *Mediterranean Journal of Social Sciences*, 2 (5), 1-7, 2011.
- [7] S. J. Motowidlo, W. C. Borman, and M.J. Schmit, "A theory of individual differences in task and contextual performance," *Human Performance*, 10, 71-83, 1997.
- [8] E.J. Delery, and H.D. Doty, "Models of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions," *Academy of Management Journal*, 39, 802-835, 1996.
- [9] J.R. Van Scotter and S.J. Motowidlo, "Interpersonal facilitation and job dedication as separate facets of contextual performance," *Journal of Applied Psychology*, 81, 525-531, 1996.
- [10] A. W. Harrison, R. K. Rainer, W. A. Hochwarter, and K. R. Thompson, "Testing the self-efficacy performance linkage of social-cognitive theory," *Journal of Social Psychology*, 137 (1), 79-87, 1997.
- [11] G. Hurtz, and J. Donovan, "Personality and job performance: The big five revisited," *Journal of Applied Psychology*, 85 (6), 869-879, 2000.
- [12] L.T. Canty, *Conceptual assessment: transformational, transactional and laissez-faire leadership styles and job performances of managers as perceived by their direct reports*. (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. 2005 (AAT 3187790).
- [13] T. L. Messer, "A study on the General self-efficacy: training, job performance and attrition of novice army mechanics in a simulated work environment," (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database, 2007, (AAT73247815).
- [14] D. L. Sommer-Krause, "Exploring the relationship of employee wellness and job performance," Capella University. (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database, 2007, (AAT 3258752).
- [15] Bowen, J., and Ford, R. C. "Managing service organisations: does having a "thing" make a difference?," *Journal of Management*, 28 (3), 447- 469, 2002
- [16] D. E. Bowen, and R. Hallowell, "Suppose we took service seriously? An introduction to the special issue," *Academy of Management Executive*, 16 (4), 69-72, 2002.
- [17] A. S. Shaari, Hubungan motivasi, keupayaan mengajar dan komitmen kerja dengan prestasi kerja guru Bahasa Melayu Sekolah Menengah. Unpublished Doctoral dissertation, Universiti Utara Malaysia, Malaysia, 2003.
- [18] R. Andreu, L. Canas, S. de Juana, E. Manresa, and L. Rienda, & J. J. Tari, "Quality performance assessment as a source of motivation for lecturers: A teaching network experience," *Journal of Educational Management*, 20, 73-82, 2006.
- [19] C. P. Flowers, and D. R. Hancock, *An interview protocol and scoring rubric for evaluating teacher performance*," *Assessment in Education*, 10, 162-168, 2003.
- [20] A. Azman, *Hubungan keafiatan sekolah. Gelagat kewarganegaraan organisasi dan keberkesanan sekolah*. Unpublished doctoral dissertation, Universiti Utara Malaysia, Malaysia, 2007.
- [21] A. Somech, and I. Ron, "Promoting organizational citizenship behavior in schools: The impact of individual and organizational characteristics," *Educational Administration Quarterly*, 43, 38-66, 2007.
- [22] R. Bogler, and A. Somech, "Organizational citizenship behavior in school: How does it relate to participation in decision making?," *Journal of Educational Administration*, 43, 420-438, 2005.
- [23] E. Kraus, *Personality and performance: The mediating roles of leader member exchange quality and action control*. Florida International University, Miami, 2002.
- [24] I. H. Van Emmerik, and M. C. Euwema, "Who is offering a helping hand? Associations between personality and OCBs, and the moderating role of team leader effectiveness," *Journal of Managerial Psychology*, 22, 530-548, 2007.
- [25] V.A. Zeithaml, A.Parasuraman, and L.L. Berry, *Delivering Quality Service: Balancing Customer Perceptions and Expectations*. New York, NY: Free Press, 1990.
- [26] J.D. Nyquist, M.J. Bitner, and B.H. Booms, *Identifying communications difficulties in the service encounter: a critical incidents approach*", in Czepiel, J., Solomon, M. and Surprenant, C. (Eds), *The Service Encounter*, Lexington Books, Lexington, MA, pp. 195-212, 1985.
- [27] Hartline, M.D., and Ferrell, O.C. "The management of customer-contact service employees: An empirical investigation," *The Journal of Marketing*, 60(4), 52-70, 1996.
- [28] L. Spencer, and S.Spencer, *Competence at work: Models for superior performance*. New York: John Wiley & Sons, Inc, 1993.
- [29] V. Vathanophas, and J. Thai-ngam, "Competency requirements for effective job performance in the thai public sector," *Contemporary Management Research*, 3 (1), 45-70, 2007.
- [30] M. Vakola, K.E. Soderquist, and G.P. Prastacos, "Competency management in support of

- organisational change*,” International Journal of Manpower, 28 (3/4), 260-275, 2007.
- [31] R. M. Potluri, and A.A. Zeleke, “*Evaluation of customer handling competencies of Ethiopian employees*,” African Journal of Business Management, 3 (4), 131-135, 2009.
- [32] B.M. Deros, S. M. Yusof, and A. M. Salleh, “*A benchmarking implementation framework for automotive manufacturing SMEs*,” Benchmarking: An International Journal, 13 (4), 396 – 430, 2006.
- [33] N.H. Ahmad, T. Ramayah, C. Wilson, and Kummerow. “*Is entrepreneurial competency and business success relationship contingent upon business environment? A study of Malaysian SMEs*,” International Journal of Entrepreneurial Behaviour & Research, 16 (3), 182-203, 2010.
- [34] I.A.G. Azmi, “*Competency-based human resource practices in Malaysian public sector organisations*,” African Journal of Business Management, 4 (2), 235-241, 2010.
- [35] Hosain, Zare , Ahmad Reza ,Shekarchi Zade. *The Application of Tichy's Model In Iranian Public Universities*, UCT Journal of Management and Accounting Studies, Issue1, pp. 08-13, 2014.