# A STUDY ON THE EFFECT OF SCHOOL LEADERSHIP AND TEACHERS' PERFORMANCE ON STUDENTS' SATISFACTION

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#### Abstract

This research aimed to reveal the effect of school leadership on teachers' performance and its impact on the students' achievement of private vocational high school. This study made use of a quantitative approach with survey method. The population of this study was second-year students and teachers of private VHS. The instrument of data collection used questionnaires. The data were analysed by means of path analysis. This study found that school leaders gave a positive effect on the students' satisfaction directly and indirectly through the mediation of teachers' performance. A school leadership gave a positive effect on the teachers' performance and teachers' performance also gave a positive effect on the students' satisfaction. The implication of this research is VHS should empower the role of school leadership to improve teachers' performance to meet the students' satisfaction and expectation.

**Keywords:** school leadership, teachers' performance and students' satisfaction

#### A. Introduction

Vocational high education plays an important role to contribute to national development, the presence of VHS is expected to generate skilful workers to meet the needs of the labour market. VHS must understand deeply its role as the provider qualified worker so that VHS should focus on continuously improving the quality of learning either theoretically or practically. Meanwhile, ADB (2009:5) confirms that technical and vocational education and training (TVET ) can develop the growth of economy and competitiveness by increasing productivity—individual, enterprising, and national.

For the state, the purpose of VET is to increase and improve the capacity of society in productivity so that the greater effort and more investment can be considered for developing VET, in addition, for the individual, the function of VET is used to prepare the students to enter in the labor market and also for the preparation for working life (Clarke & Winch, 2007:1). VET aims to prepare the acquirement of qualifications in relation to a certain profession, art and employment that provides the special training and the necessary skills as well as technical knowledge, so that the students are able to develop a profession, art or activity, autonomously of their age and training level, although the program of training also includes the aspects of general education (Kotsikis, 2007).

The important role of school leadership is to provide a qualified learning of the students to develop teacher's capacity to give them the opportunity to increase the learning achievement of their students (Sallis,1993:89). In addition, Collie et al., (2012) explain that school leaders should create the qualified working environment that supports the teacher's job satisfaction and commitment.

From the students' perspective, high-quality education creates better opportunities in terms of learning and knowledge, and they believe that the satisfaction or dissatisfaction strongly influences students' success or failure in learning (Li Wei, 2005). On the other hand,

the students as the main customers of schools should have values or students' values, namely the satisfaction of accepting the service from their schools.

Based on the statistics of the vocational senior secondary school year (VSSS) the 2016/2017 Republic of Indonesia, the data overview of Vocational Senior Secondary School (VSSS) in Indonesia consists of 13, 236 schools both public and private schools with the total students 4,682,913. In Central Java Province the number of VSSS is 1,547 schools and the number of students is 10,867 (Ministry of Education and Culture, 2017). Seeing from the data, VSSS has an important mission to educate and train the students as well as possible so they have the knowledge and skill to get into the labour market when they have passed. To make the mission into reality, VSSS should empower the role of school leadership in improving the quality of teachers to meet the students' expectation and satisfaction.

This research will try to reveal empirically the effect of school leadership on teachers performance and its impact on the students' satisfaction.

## **B.** Literature Review

## 1. School Leadership

The quality of leadership and the effectiveness of schools to provide qualified learning to the students is more and more important in this global era. Brungardt (2011:1) states that leadership involves a relational process that builds working with others to achieve a purpose or create positive change. Educational for leadership focuses on the soft skills, that relationship factor involved in human communication requires to get positive outcomes from the leadership process.

Empowering capacity of leadership and its distribution within a school is considered to be a crucial aspect for the success of the organization (Gold et. al., 2003). Teacher leadership gives an impact positively on teachers and then in turn on student passion and achievement in learning (Harris, 2009). Lifelong professional development of teachers is influenced significantly by leadership practices in the school setting (Flores, 2007). School leadership, in this case, plays a paramount role to develop and empower teachers towards a great responsibility to improve and promote their learning in school institution (Bogler, 2001; Day et al, 2001).

The leader can facilitate several programs concerning teachers' professional development in learning or by giving them training and mentoring to improve their skill in teaching the students better (Leithwood & jantzi, 2006).

Therefore, the meaning of successful leadership must be considered in relation to the context in which people are situated and the values underlying the schools' organization in society (Dimmock & Walker, 2000).

Effective leadership according to DuFour & Marzano 2011 (in Barrett & Breyer, 2014:7) refers to heading by giving an example, and in this case, supporting teachers to feel more capable by having them become more capable and skilful. Then, Preedy, et al. (2006:1) explains that it is crucial for educational leaders to build a shared strategic overview of the future direction of the organization, vividly concentrated on the improvement of teaching and learning process.

## 2. Teachers' Performance

The motivation of the students will increase if the school provides effective teaching and learning; hence teachers must understand how to push, direct, and maintain high levels of interest among students. Teachers must be able to shape intrinsic motivation by stimulating the students' curiosity and making them feel more competent as they learn, but it is easy to say than to do because some tasks simply are not inherently interesting (Hoy & Hoy, 2003:5)

Papa (2011:101) states that qualified teaching is determined by the capability to give inspiration for learners. Stimulate the learner and you will be able to catch his or her attention. Keeping a learner's attention is more complicated. Educational leaders require strategies at their fingertips to maintain others' attention. Then, Jones et al., (2006:99) state that one method of increasing performance of teachers is for schools to create a cultural professional development through the provision of a professional team development.

Adeyemi (2010:85) states that the performance of teachers could be assessed by annual reports of his/her activities in terms of teaching, lesson preparation, lesson presentation, mastery of subject matter, competence, teachers' commitment to the job and extra-curriculum activities.

Finally, experts recognize the essence of feedback about ways to adapt the instructional strategies observed in a classroom for the advantage of student learning. Experts possess pedagogical content knowledge that makes them able to give alternative suggestions to teachers of how to promote student learning, grounded in evidence from observation and their knowledge of content and pedagogy (Stein & Nelson, 2003).

## 3. Students' Satisfaction

Kotler et. al. (2009:120) state that satisfaction is as an 'a customer's feeling of pleasure after they compare the service and product's perceived performance (or result) to their expectation. It means that the customers (students) will feel satisfied if the performance of their school matches their expectation. The educational institution makes use of certain methodologies to decide the level of their students' satisfaction relating to the service and program they offer to meet student needs and satisfy student expectation and aspirations (Qureshi et al., 2011).

The study of students' satisfaction is concentrated on the view of customers, a researcher is encountering a problem of determining an accurate definition for student satisfaction thus providing a need of customer satisfaction concept to be selected and modified so that it can give understanding to the meaning of student satisfaction (Hom, 2002 in Hishamudin 2008:165).

Meanwhile, Sevda & Ozlem (2014) tried to determine the satisfaction with student life by including the variables of student life quality (social, scientific and servicing factors), life satisfaction and identification.

Douglas et al. (2006) list four main reasons of why it is necessary to look into the opinions, expectation and satisfaction of students:" (1) to get evidence that students have an opportunity to comment on the situation, and to use this information in improving the services of a higher education institution; (2) to encourage students to reflect on the process of their acquisition of knowledge; (3) to allow the institution to set the quality criteria and to create the indicators that might contribute to the reputation of their institution on the market; and (4) to give students an opportunity to express their satisfaction with their academic experience."

At this time, the concept of quality and satisfaction level has got serious attention both in the public and in the private sector. According to Malik, et. al, (2010), the quality service in the educational organization is an essential aspect that is taken into consideration for drawing and retaining the students in particular and other stakeholders in general. In addition, (Randall, 2002 cited by Naser 2014:173) states that the quality of education must be built and focused to meet the students' need and expectation continuously.

## C. Research Methodology

This research made use of the survey method with the multi-analysis approach. The focus of research was private vocational high schools which consist of 16 schools in Magelang Municipality. The population of this research consists of 1918 students and 423 teachers. The sample of the students consists of 95 students and the sample of the teachers consists of 81 teachers. The technique of drawing the sample used Tamara Yamane or Slovin with random sampling. The instruments for collecting the data use questionnaires. The data are analyzed by means of path analysis. The variables of research consist of two Independent variables, school leadership (X1) and teacher's performance (X2) and the dependent variable is a students' satisfaction (Y).

#### **D.** Results And Discussions

## 1. Test of Assumption

#### a. Normality

Kolmogorov Smirnov was used to measure normality. The test results of Coefficient Kolmogorov Smirnov and Acquisition of P> 0.05 explained that the data distribution was normal (table 1).

**Table 1.** The Results of Normality Test

| No | Variable               | Coefficient k-s | P     |
|----|------------------------|-----------------|-------|
| 1  | School Leadership      | 1.211           | 0.106 |
| 2  |                        | 1.351           | 0.052 |
|    | Teachers' Performance  |                 |       |
| 3  | Students' Satisfaction | 1.273           | 0.078 |
|    |                        |                 |       |

**Source:** Primary data Processing

#### b. Test of Linearity

To measure independent data linear to dependent variable was confirmed with F test. The result of the test revealed that P<0.05 and explained that the independent data were linear to the dependent variable.

Table 2. The Results of Linearity Test

| No | Independent           | $F_{test}$ | P     |
|----|-----------------------|------------|-------|
| 1  | School Leadership     | 98.174     | 0.000 |
| 2  | Teachers' Performance | 102.164    | 0.000 |

## 2. The Result of Path Analysis

The effect of school leadership on teachers' performance and its impact on students' satisfaction can be visualized as the following:

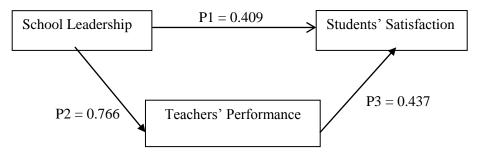


Figure 1. Relationship Structure of Variables

Based on Figure 1 above, the school leadership gave effect on the students' satisfaction directly by 0.409 and indirectly through the mediation variable of teachers' performance by P2 x P3 ( $0.766 \times 0.437 = 0.3347$  or 33.47%).

The result of the analysis explained that the hypothesis testing was empirically proved. Table 3 below explained that the coefficient of  ${\rm sig} < 0.05$  explained that school leadership variable empirically influenced directly and indirectly through the mediation of teachers' performance on students' satisfaction.

| No. | Exsogen     | Endogen      | Unstandardized |            | Standardized | T      | Sig   |
|-----|-------------|--------------|----------------|------------|--------------|--------|-------|
|     |             |              | Coefficient    |            | Coefficient  |        |       |
|     |             |              | В              | Std. Error | Beta         |        |       |
| 1   | School      | Teachers'    | 0.758          | 0.072      | 0.766        | 10.576 | 0.000 |
|     | Leadership  | Performance  |                |            |              |        |       |
| 2   | Teachers'   | Students'    | 0.442          | 0.108      | 0.437        | 4.105  | 0.000 |
|     | Performance | Satisfaction |                |            |              |        |       |
| 3   | School      | Students'    | 0.410          | 0.107      | 0.409        | 3.842  | 0.000 |
|     | Leadership  | Satisfaction |                |            |              |        |       |

**Table 3.** Results of Analysis

Based on table 3 above it can be explained as the following:

- 1. The Effect of School leadership on teachers' performance School leadership gave a positive effect on teachers' performance with the standardized coefficient of 0.766 and sig. 0.000 < 0.05 and explained that school leadership gave a positive effect on teachers' performance by 58.67%
- 2. The Effect of Teachers' Performance on the Students' Satisfaction Teachers' performance gave an effect on the students' satisfaction with the standardized coefficient of 0.437 and sig. 0.000 < 0.05 and explained that teachers' performance gave a positive effect on students' satisfaction by 19.09%

3. The Effect of School Leadership on the Students' Satisfaction Directly and Indirectly School leadership gave effect on the students' satisfaction directly by 0.409=16.73% and indirectly through the mediation variable of teachers' performance by P2 x P3 (0.766 x 0.437= 0.3347 or 33.47%).

#### 3. Discussion

## a. School leadership on the teachers' performance

The research revealed that school leaders gave a positive effect on teachers' performance with the result of 0.766 (table 3) which was interpreted that school leadership gave a contribution on teachers' performance by 0.7662 or 58.67 %. Based on the research school leadership should focus on developing and empowering the role of teachers to meet the students' satisfaction. The finding of this study was in line with the result of the studies by Emmanouil et al., (2014:34) and revealed the role of school leadership in the teacher's educational process. Leadership capacity plays an important role in empowering the teacher's effectiveness.

As for modelling, Blasé & Blasé (2000) found that effective principals demonstrated the model of teaching technique in the teaching-learning process and during a scientific discussion; they also gave an example of positive communications with their students. Moreover, the principal stimulated teachers to do exchange visits to each others' classes in order to do an observation on each other's lessons, to exchange teaching materials and also search further education innovation through seminars (Pashiardis, 2011).

The best practices of school leadership give a positive effect on job satisfaction and work commitment as a result of personal communication to develop the teacher's self-esteem, which has a close relationship to social identity, to grow a sense of loyalty to a group (Vaughan & Hogg, 2011).

Cooperation with a school principal who always motivates teachers to take a role actively in decision making responsibility has a positive impact on teachers' role and commitment to their teaching tasks and classes (Bogler, 2001). In addition, teacher's job satisfaction and commitment may be influenced by the leadership role of the principal inside the school environment (Davis & Wilson, 2000; Heller, 1993; Price, 2012).

In a study Brackett et al. 2010 (in Graham et al. 2014:20) found that a school principal plays an essential role to push a positive emotional effect on teachers, especially leading towards teachers' personal accomplishment in the school environment. Then, the principal's support is very important to bridge teachers' emotional regulation for job satisfaction and commitment.

#### b. Teachers' Performance on the Students' Satisfaction

This research found that teachers' performance gave a positive effect on the students' satisfaction directly by 0.437 or 19.09 %. It means that the students will feel satisfied if their teachers perform qualified in the teaching and learning process. This result is in accordance with the result of the research carried out by Jones et. al (2006:45) and experience shows that it is the teacher's own performance, personal and professional skills, expectation and relationship in the classroom that are the key factors in influencing the pupil's behaviour, attitudes, and subsequent progress. Then, Suldo et al., (2009) state that teachers who are friendly and supportive toward their students may assist them in feeling that they belong to or are cared for while also increasing student satisfaction. Students also see the teachers who do

diverse and best teaching practices that help foster collaboration as being supportive and show increased levels of satisfaction (House, 2005; Suldo et al., 2009).

Teachers who feel satisfied and comfortable with their responsibility are more enthusiastic and interested in devoting more energy and time to increase student achievement (Nguni et al., 2006 cited by Huang Hui et al., 2013:175).

To measure the impact of teachers' experience on the academic achievement of the students, many researchers use the scores of the students as the outcomes of the result (Freiberger et al., 2012; Marsh & O'Mara, 2008). Meanwhile, (Robinson, 2011:93) states that the improvement of teaching quality is developed through cycles of inquiry and action built to increase the effect of teaching on the engagement and success of the students.

In an educational institution, the students are important clients and their satisfaction will be determined by the interaction between teachers and students during the teaching-learning process. The students will feel more satisfied if they are able to overcome the handicaps they are facing in learning. Otherwise, those who can not solve the problem of learning will relatively have less satisfaction (Guolla, 1999 in Suarman 2015:628).

The findings of many researchers have revealed that the influence of a sympathetic teacher-student relationship on the students' achievement scores is based on the direct influence of the quality of teacher-student association on the students' involvement in the teaching-learning process (Hughes et al., 2008; O'Connor & McCartney, 2007). However, the students' performance showed no significant correlation with the teachers' job satisfaction (Igbal et al., 2016:336).

Based on the report of teachers, high students' satisfaction with professional development turns out to give little effect on their practice. On the other hand, they may carry out new practices that do not give a direct effect on the students (Timpereley & Alton Lee, 2008 in Robinson, 2011:109).

#### c. School leadership on the students' satisfaction directly and indirectly

This research found that school leaders gave a positive effect on the students' satisfaction directly by 0.409 or 16.73% and indirectly by 0.766 x 0.437 (0.3347 or 33.47 %). This finding was in line with the results of the studies by Robinson (2011:1) is that most school leaders want to improve their students' achievement, strengthen their confidence and provide them opportunities they would never receive elsewhere to give something different to their students so that they feel satisfied with the service of their school.

School leadership focuses on the objective of supporting and developing the improvement of the school which deals with the *quality* of the teaching-learning process, the most important factor of the student's achievement, teacher's motivation and effectiveness have a relationship with the quality and effectiveness of school leadership (Fullan, 2001 as cited by Emmanouil, 2014:35).

Some authors claim that students are customers and need to be treated as the customers of manufacturing companies. They are considered that they buy knowledge in order to satisfy their own needs for knowledge. The students' satisfaction with the overall faculty environment is essential in keeping them relevant (Danjuma, Rasli, 2012).

Meanwhile, Bigne et al. (2003) have revealed that the students' satisfaction has a significant relationship with the overall service quality of their school. Then, Ham & Hayduk, 2003 (in Hishamuddin, 2008:166) have found that there is a significant relationship between the perception of service quality and the satisfaction of the students, and have made an

analysis upon the relationship based on the dimension of service quality, even in the higher educational settings

The relationship between the students' expectations and their satisfaction with the quality of the services provided by an educational institution plays an important role in shaping the reputation of the academic institution. Understanding and knowing the expectation of students may constitute a source of information for higher education institution, and these could be involved in the creation of their strategy in developing their service quality and gaining an advantage on the market of higher education (Sander et al., 2000 Cited by Mihanovic et al., 2016:42).

The importance of students' satisfaction has become a serious attention in an academic institution, it gives an effect to their students' decision to continue their education at the institution, and the prospective students will come because of the positive words of mouth (Harrison Walker, 2014)

On the other hand, Ross & Gray (2006:798) have found that students' achievement becomes the responsibility of the school principals. On the other hand, most findings of researchers have revealed that they do not have a direct influence on it. Principals give a contribution indirectly to the student achievement through the teachers' commitment and belief about their collective capacity.

## **E.** Conclusions And Implications

#### 1. Conclusions

The objective of this research is to reveal the effect of school leadership on teachers' performance and its impact on the students' satisfaction. Based on the result of the analysis, it can be inferred that the major finding of this research explains that school leadership gives a positive effect on the students' satisfaction directly and indirectly through the mediation of the teachers' performance empirically. The result of the research confirms the crucial role of school leadership in improving and empowering teachers' performance to meet the students' expectation and satisfaction.

### 2. Implications

- 1) The school leadership should be improved to meet the students' expectation and satisfaction.
- 2) The finding of this research could be followed up to construct a theory of students' satisfaction related to school leadership and teachers' performance.
- 3) The school leadership plays an important role in meeting the students' satisfaction and Vocational High School should improve the quality of school leadership continuously and put the students' satisfaction on the first priority.

## **REFERENCES**

Adeyemi, T.O. (2010). Principals' leadership styles and teachers' job performance in senior secondary schools in Ondo State, Nigeria. *Journal of Education Administration and Policy Studies Vol.2(6), pp. 83-91* 

Asian Development Bank (ADB). (2009). Good Practice in Technical and Vocational Education and Training.

- Barrett, C & Breyer, R.(2014). The influence of effective leadership on teaching and learning. *Journal of Research Initiatives*, Vol. 2 (2), pp. 1-9
- Bigne, E., et. al. (2003). Perceived quality and satisfaction in a multi-service organization: The case of Spanish public services. *The Journal of Services Marketing*, 17 (4), 420-442.
- Blase, J & Blase, J. (2000). Effective instructional leadership. *Journal of Educational Administration*, 38 (2), 130-141
- Bogler, R. (2001). The influence of leadership style on teacher job satisfaction. *Educational Administration Quarterly*, 37, 662.
- Brackett, M. A., et. al. (2010). Emotion-regulation ability, burnout, and job satisfaction among British secondary-school teachers. *Psychology in the Schools*, 47(4), 406-417.
- Brungardt, C. (2011). The interaction between soft skill development and leadership education. *Journal of Leadership Education*, 10 (1), 1-21
- Clarke, L & Winch, C. (2007). *Vocational education: International approaches, developments and systems.* London: Rontledge
- Collie, R. J., et. al. (2012). School climate and social-emotional learning: Predicting teacher stress, job satisfaction and teaching efficacy. *Journal of Educational Psychology*, 104(4), 1189-1205
- Day, C., et. al. (2001). Challenging the orthodoxy of effective school leadership. *International Journal of Leadership in Education*, 4(1), 39-56.
- Dimmock, C & Walker, A. (2000). Developing comparative international educational leadership and management: a cross-cultural model. *School Leadership and Management*, 20(2), 143-160
- Danjuma, L & Rasli, S. (2012). "Service quality, satisfaction an attachment in higher educations: A theory of planned behaviour perspective". *International journal of academic research*, Vol. 4, No. 2
- Douglas et al. (2006). "Measuring student satisfaction at a UK university", Quality Assurance in Education. Vol. 14 (3), 251-267.
- Davis, J., & Wilson, S. M. (2000). Principals' efforts to empower teacher: Effects on teacher motivation and job satisfaction and stress. *The Clearing House*, 73(6), 349-353
- DuFour, R., & Mattos, M. (2013). How do principals really improve schools? Educational Leadership: The Principalship. 70:7, pp. 30-40
- Emmanouil, et.al (2014). The Impact of leadership on teachers' effectiveness. *International Journal of Humanities and Social Sciences*. Vol. 4 No. 7 (1). pp. 34-39.
- Flores, M. A. (2007). The impact of school culture and leadership on new teachers' learning in the workplace. *International Journal of Leadership in Education: Theory and Practice*, 7(4), 297-318
- Fullan, M. (2001). Leading in a culture of change. San Francisco: Jossey Bass
- Freiberger, V., et. al. (2012). Competence beliefs and perceived ability evaluation: How do they contribute to intrinsic motivation and achievement? *Learning and Individual Differences*, 22 (4), 518-522.
- Gold, A., et. al. (2003). Principled principals? Values-driven leadership: Evidence from ten case studies of 'outstanding' school leaders. Educational management & Administration 31, No. 2, 127-38

- Graham, K. (2014). How can principals enhance teacher job satisfaction and work commitment? Paper presented at the Australian Association of Research in Education (AARE) Conference, Brisbane, Australia.
- Guolla, M. (1999). Assessing the teaching quality to student satisfaction relationship: Applied customer satisfaction research in the classroom. *Journal of Marketing Theory and Practice*, Summer 87-97
- Ham, L., & Hayduk, S. (2003). Gaining competitive advantages in higher education: analyzing the gap between expectation and perception of service quality. *International Journal of Value-Based Management*, 16(3), pp. 223-242.
- Harris, A. (2009). *Distributed school leadership: Evidence, issues and future directions*. Penrith: Australian Council for Educational Leaders.
- Harrison Walker, L, J. (2014). When opposites detract: Student (dis) satisfaction in higher education and the importance of compatibility management. *Academy of Educational Leadership Journal*, Vol. 18 No. 1
- Heller, H. W. (1993). The relationship between teacher job satisfaction and principal leadership style. *Journal of School Leadership*, 3(1), 74-86
- Hishamuddin et.al. (2008). Service quality and student satisfaction: A case study at private higher education institution. *International Business Research*, Vol. 1 No. 3, pp. 163-175
- Hom, W. (2002). Applying customer satisfaction theory to community college planning of student service. *IJournal*.
- House, J. (2005). Motivational qualities of instructional strategies and computer use for mathematics teaching in Japan and the United States. *International Journal of Instructional* Media, 32(1), 89.
- Hoy, A. W. & Hoy, W.K. (2003). Instructional leadership. Boston: A Pearson Company
- Huang Hui et. al. (2013). Principal's leadership style and teacher job satisfaction: A case study in China. *International Journal of Contemporary Research in Business*, Vol. 5 (4), pp. 175-184
- Hughes, J., et. al. (2008). Teacher-student support, effortful engagement, and achievement: A three-year longitudinal study. *Journal of Educational Psychology*, 100, pp. 1-14.
- Iqbal, A., et. al. (2016). Relationship between teachers' job satisfaction and students' academic performance. *Eurasian Journal of Educational Research*, Issue 65, pp. 335-344
- Jacinto, C.(2010) *Recent trends in technical education in Latin America*. United Nations: International Institute for Educational Planning.
- Jones, J., Jenkin, M., & Lord, S. (2006). *Developing Effective Teacher Performance*. London: Paul Chapman
- Kotler, P & Keller, K. L. (2009). Manajemen pemasaran. Erlangga: Jakarta
- Kotsikis, V.(2007). Educational administration and policy. Athens: Ellin
- Lethwood, K & Jantzi, D. (2006). Transformational school leadership for large-scale reforms: Effects on students, teachers, and their classroom practices, school effectiveness and School Improvement, 17 (2), 201-227
- Li-Wei Mai. (2005). A comparative study between the UK and US: The student satisfaction in higher education and its influential factor. *Journal of Marketing Management*, 21, pp. 859-878

- Malik, M.E. (2010). The impact of service quality on students' satisfaction in Higher Education Institutes of Punjab, University of the Punjab, Pakistan; Rizwan Qaiser Danish
- Marsh, H. W., & O'Mara, A. (2008). Reciprocal effects between academic self-concept, self-esteem, achievement, and attainment over seven adolescent years: the Unidimensional and multidimensional perspective of self-concept. *Personality and Social Psychology Bulletin*, 34(4), 542-552
- Ministry of Education and Culture of Republic Indonesia. (2017). The statistics of vocational senior secondary school (VSSS) year 2016/2017
- Mihanovic, Z. (2016). The link between students' satisfaction with faculty, overall students' satisfaction with student life and student performances. Croatia: the University of Split, Faculty of Economics
- Naser, I. S. (2014). The effect of service quality on student satisfaction: A field student for health service administration students. *International Journal of Humanities and Social Science*, Vol. 4 (8) pp. 172-181
- Nguni, S, et. al. (2006). Transformational and transactional leadership effects on teachers' job satisfaction, organizational commitment, and organizational citizenship behaviour in primary schools: The Tanzanian case. *School Effectiveness and School Improvement*, 17, pp. 145-177.
- O'Connor, R., & McCartney, K.(2007). Examining: teacher-child relationship and achievement as part of an ecological model of development. *American Educational Research Journal*, 44, pp. 340-369
- Pashiardis, P., et. al. (2011). Successful school leadership in rural contexts: The case of Cyprus. *Educational Management & Leadership*, 39(5), 536-553
- Preedy, M., Glatter, R., & Wise, C. (2006). Strategic Leadership and Educational Improvement. London: Paul Chapman
- Price, H. E. (2012). Principal-teacher interaction how affective relationship shapes principal and attitudes. *Educational Administration Quarterly*, 48(1), 39-85.
- Papa, R. (2011). Technology leadership for school improvement. London: Sage Publication
- Qureshi, et.al. (2011). Service quality SERVQUAL model in the higher educational institution, What factors are to be considered. *Interdisciplinary Journal of Contemporary Research in Business*. Vol. 2, No. 5. Pp. 281-290
- Randall, J. (2002). Quality assurance: Meeting the needs of the user. *Higher Education Journal*, Vol. 56 (2), pp. 188-203.
- Robinson, V. (2011). Student-centred leadership. San Francisco: Jossey-Bass
- Ross, J. A & Gray, P. (2006). School leadership and student achievement: The mediating effects of teacher beliefs. *Canadian Journal of Education*, 29, (3)
- Sallis, E. (1993). Total Quality Managemen in Education. London: Kagan Page Limited
- Sander, P., et. al. (2000). University students' expectation of teaching. *Studies in Higher Education*, Vol. 25 (3), pp. 309-323.
- Sevda, A. & Ozlem, A. A. (2014). Quality of college life (QCL) of students in Turkey: Students' life satisfaction and identification. *Social Indicators Research*. Vol. 115 (2), pp. 869-884.
- Stein, M. K., & Nelson, B. S. (2003). Leadership content knowledge. *Educational Evaluation and Policy Analysis*, 25(4), 423-448.

- Suarman (2015). Teaching quality and students satisfaction: The intermediatory role of the relationship between lecturers and students of the higher learning institutes. *Mediterranean Journal of Social Sciences*. MCSER Publishing, Rome Italy Vol. 6 (2) pp. 626-632
- Timperley, H., & Alton-Lee, A. (2008). Reframing teacher professional learning: An alternative policy approach to strengthening valued outcomes for diverse learners. In G. Kelly, A. Luke, & J. Green (Eds.), *Review of Research in Education*, Vol 32, pp. 328-369.
- Suldo, S. et. al. (2009). Teacher support and adolescents' subjective well-being: A mixed methods investigation. *School Psychology Review*, Vol. 38, No. 1, pp. 67-85.
- Vaughan, G. M., & Hogg, M.A. (2011). *Social psychology*. Frenchs Forest, NSW: Pearson Australia