The Effect of School Culture, Motivation, and Principal Leadership on Teacher Performance and Quality of Education 
(A Case Study of a Junior High School in Tangerang)

FX. Suwarto¹, Arief Subyantoro², Wahidin³

¹ A Professor of Economics and Business, Budi Luhur University, Jakarta
² A Professor of Economics and Business, National Development University “Veteran”, Yogyakarta
³ A Student of Program Pascasarjana Budi Luhur University, Jakarta

³ariefsubyantoro@yahoo.com

ABSTRACT
The present study aims to analyze the effect of school culture, motivation and principal leadership through teachers’ performance on education quality. It is specifically intends to identify the dominant variables affecting teacher performance. The fundamental contribution expected is that it can theoretically enriches insight and knowledge about improving the quality of education; provides input of actual knowledge in improving the quality of human resources; practically useful for schools in evaluating the management practices that have been implemented thus far; and as the material to consider, especially in efforts to improve teacher performance and quality of education. The first analysis of this study shows that variables X1, X2, and X3, simultaneously, affect Y by 0.989 or 98.9% R. Square (adjusted), while the rest 1.1% variables are excluded from the research analysis. X2 has the dominant effect on Y with regression coefficient equals to 0.690, at a significance level of .000. The second analysis shows that variables X1, X2, and X3, simultaneously, through teacher performance (Y), have an effect on Z by 0.5979 or 59.79% R. Square (adjusted), while the rest 40.21% variables are excluded from the research analysis. As for (Y), it has the dominant effect on education quality (Z) with the regression coefficient equals to 4.385 at a significance level of .010.

Keywords: School Culture, Work Motivation, Performance, Leadership, Education Quality.

1 INTRODUCTION
A nation’s progress depends highly on the human resources (HR). Education plays a very important role in the processes of HR improvement and serves as a major factor in the development of respectable human personality traits. The latter are required in the face of a highly competitive globalization era, either in education or technology, and changes and development in education need to be made accordingly. The National Education functions to develop the capability, character, and civilization of the nation for enhancing its intellectual capacity, and is aimed at developing learners’ potentials so that they become persons imbued with human values who are faithful and pious to one and only God; who possess morals and noble character; who are healthy, knowledgeable, competent, creative, independent; and as citizens, are democratic and responsible[1]. Likewise, there is a great hope for improvement in education. Teachers and lecturers are described as professional educators with the main tasks of educating, teaching, guiding, directing, training, assessing, and evaluating learners that cover early childhood education of formal education, basic education, and secondary education. Teachers have the most urgently needed potentials to advance Indonesia’s education and, therefore, they have to meet certain qualifications such as pedagogical, personality, social and professional competencies acquired in professional education system. This is because teachers guide their students into their future career. Improving the quality of education is the main factor for a successful nation building. Quality education means the one producing qualified graduates with significant contribution to national development. The quality of education is primarily determined by the teaching-learning processes in which teachers play an important role. Teachers are the initiators and creators of the teaching and learning process. They are the ones to provide freedom for students to study what they find
interesting and to express ideas and creativity within the limits and norms to be consistently enforced[2].

As the above description suggests, the phenomenon studied indicates that the quality of education is closely related to teacher performance. And, in turn, teacher performance is related to the school culture, motivation and leadership of the principal. For that reason, we decided to choose the paper title as follows: “The Effect of School Culture, Motivation, and Principal Leadership on Teacher Performance and Quality of Education”.

1.1 Problem Statement

As the above title suggests, we formulate the problem as follows:

1. To what extent do school culture, motivation, and leadership of the principal affect teacher performance?
2. To what extent do school culture, motivation, and leadership of the principal affect teacher performance and quality of education?
3. Which variable is dominantly affecting teacher performance?

1.2 Scope and Limitations

Based on problem statement mentioned above, we focus our study to the following variables. These include School Culture (X1) in terms of attitudinal aspect; Motivation (X2) in terms of effort/encouragement/driving aspects; Leadership of the Principal (X3) in terms of competency of the principal; Teacher Performance (Y) in terms of pedagogic, personality, professional, and social competencies; and Quality of Education (Z) in terms of learning outcomes, educational content, learning processes, assessment of learning and management of education.

2 CONCEPTUAL FRAMEWORK

2.1 Quality

The Great Dictionary of Indonesian Language defines quality as how good or bad something is; levels; extent or degree, for example, cleverness, intelligence and so on. In general, quality is the overall depiction and characteristics of the goods or services that indicate their capability to satisfy the expected or implied needs. The definition of quality implies the degree or superiority of a product (the work/effort) either that of goods or services, tangible or intangible. Tangible quality means that it can be observed or seen from an object, activity, or behavior. For example, a quality television set is one that is durable (not easily damaged), clear color display, great sound reproduction, the parts are highly available, interesting behavior, and so on. On the other hand, intangible quality is something that can neither be observed nor seen, yet it can be felt and experienced, such as the atmosphere of discipline, intimacy, cleanliness and so forth. The quality of education can be seen in two different ways: the processes and outcomes of education. Quality education processes are those in which all education components are involved in the education process itself. Factors in education process include various inputs, such as learning materials, methodology, school facilities, administrative supports, infrastructures, favorable atmosphere and other resources. The quality of education in the context of education outcomes refers to school achievement at any given period of time. Improvement of education quality serves as the major factor determining the success of nation building. Quality education means the one producing qualified graduates with significant contribution to national development. The quality of education is primarily determined by the teaching-learning processes in which teachers play an important role. Teachers are the creators of the teaching and learning process. They are the ones to provide freedom for students to study what they find interesting and to express ideas and creativity within the limits and norms to be consistently enforced. The acquired quality or the outcomes of education (student achievement) may take the forms of academic test results, such as general test, National Standard School Examination, and National Exam. Other forms could also be the achievement in sports, arts and special skills in computer, techniques, services and so forth. In fact, school achievement could be intangible in nature, such as a favorable school atmosphere, discipline, and closeness.

Law No. 20 of 2003 on National Education System views education as a process [2]. It formulates education as a conscious and well-planned effort in creating a learning environment and learning process so that learners will be able to develop their full potential for acquiring spiritual and religious strengths, develop self-control, personality, intelligence, morals and noble character and skills that one needs for him/herself, for the community, for the nation, and for the State.
2.2 Performance

Teacher performance is the work achieved by teachers in educational institution or madrasa in accordance with their duties and responsibilities in achieving the educational goals. A teacher must meet the established criteria to be considered as successful and must have the qualities that make him a good teacher, and the opposite is true. Factors affecting teacher performance can come from within the individual itself such as motivation, skills, and education. There can also be external factors such as work climate, salary range, and so on. To realize high performance school is not easy. It takes a high level of awareness in personnel as well as attention of the leader. The principal as a leader in the school should be able to create a favorable working atmosphere for his subordinates. The attention from the leader can be the fulfillment of adequate incentives or salaries, creating a comfortable working environment, providing subordinate opportunities for higher education, and motivates subordinates to give their best efforts. If all of these can be realized, we can be sure that it is a high performing school, and the customers will also not hesitate to enroll their children in that school.

2.3 Culture

Culture has great power to influence individuals and their achievements, even their working environment. Culture is basically the totality of socially transmitted behaviour patterns, arts, beliefs, institutions, and all other products of human work and thought of certain community or population. It also represents values contributed by individuals in groups that tend to persist for a relatively long time, even though members of the groups are changing. Organizational culture is the value system acquired and developed by organization, as well as the habitual pattern and the basic philosophy of its founder that subsequently developed into rules that serve as the guidelines in thinking and acting to achieve organizational goals. A culture that grows strong would lead organization to improved condition. A lot of previous studies, which examine cultural influences on work performance, found that organizational culture had a positive influence on work performance, and that organizational culture can improve employee job satisfaction. Findings related to organizational culture indicate that: (1) A strong organizational culture improves business organization performance as it creates an extraordinary level of achievement among students; (2) A strong organizational culture helps improve organizational performance because it provides the necessary structure and control without having to rely on a rigid formal bureaucracy that, in turn, inhibits the growth of motivation and innovation. Moreover, organizational culture has a significant and positive effect on employee job satisfaction.

2.4 Motivation

Motivation, defined, is the state of an individual's perspective which represents the strength of his or her propensity to exert toward some particular behaviour. It is, to borrow Stephen P. Robbins’s definition, the willingness to exercise high levels of effort towards organizational goals, conditional by the effort ability to satisfy some individual needs[3].

The former definition shares some similarities with the latter, apart from redactional differences. Broadly speaking, motivation refers to efforts to achieve any goals. Therefore, we focused our discussion on organizational goal in order to bring our attention to work-related behaviors. The above definitions consist of three key elements: effort, organizational goal, and needs. In organizational management, a manager must consider different motivations for a group of people that, in many ways, are unpredictable. Such diversity leads to differences in behavior, some of these being related to the individual starting point: needs and goals. Need is defined as circumstances in which something is felt to be a necessary at a given time. Goal constitutes end results that employees seek to achieve and consider it as the driving force that lead them to display certain behavior in order to achieve them to reduce unmet needs. From the opinion of experts mentioned above, it can be concluded that motivation is an organizational effort to mobilize employees to achieve the expected results or certain production rate. Social scholars argue that there are two main components for analyzing motivation as the basis of individual behavior, namely: (1) internal components, i.e. motivation based on needs or motives, and (2) components of goals to achieve. Accomplished goals mean that individual needs have been met. Elements of goal are external to the individual. With regard to this, Maslow points out that "motivational studies are partly the study of human goals, desires and needs". There are generally two main components of a motive, namely: (1) drive or need, or also referred to as "process power" which is internal, and (2) goal, which contains the learning element or habituation as the influence of external factors. The process of mutual interaction between the two elements occurs within the individual. However, it can be influenced by
factors external to humans, such as weather, environmental conditions and so forth. Therefore, it is highly likely that a person experiences a change of motivation in a short time in case the first motivation challenged or may not be fulfilled. Motivation theory related to growth or fulfillment of various advantages developed by Maslow, based on the well-known needs in operational, describes the motives of individuals in various levels. Once the lower-level needs have been met, individuals can move on to the next level of needs. Individual needs start from basic biological needs to complex psychological needs. A motive will drive individual’s behavior once lower order motives have been satisfied. Human behavior is initially controlled by the lowest physiological motives such as hunger, thirst, sex and so on. Once these physiological motives have been met, higher motives will drive individuals up to the highest level of motive: self-actualization. Need-fulfillment theory holds that individuals have certain needs and desires within themselves that causes them to act. The motivation level is inseparable from one's socio-economic condition, which include: 1) physiological needs such as clothing, food, shelter, social security and health, security and safety, old-age guarantee, day off, promotion, and esteems; 2) Wealth and life security; and 3) Social needs such as being respected, praised, accepted by others and feelings of progressing, not failing. An individual does an activity because of his or her personal drive. As for this drive, there are two theories: biogenic and sociogenic theories. The former deals with biological processes such as instinct and needs, and the latter put emphasis on the effect of culture and social life. Both theories indicate that a person does an activity because of biological needs, instinct, and other physic elements that influence human culture development.

Internal factors of work motivation are personality, attitude, experience, responsibility, education and expectation, as well as aspiration to achieve in the future. As for external factors of work motivation, they could take the forms of leadership style of superiors, competition among students, the demands of students' development and the encouragement or guidance of their superiors. Psychologists argue that in a person there is something that determines the behavior that makes him or her learn in a certain way to influence that behavior. Some of the psychologists refer to this behavior determination as ‘need’, some other refer as ‘motive’, and still others use both term interchangeably. Another somewhat different and often used term is motivation. Motive and motivation are two inseparable terms as both are used interchangeably to denote the same meaning. Motivation can also be regarded as a disposition of a person's value, which, once it taken shape, it will lasts relatively longer, although there is still a possibility for it to be modified. Process of motivation is an interaction between motivation and observed and relevant situational aspects. As the description suggests, motivation turned out to have a broad scope and refers more to the whole processes of interaction between motivation and the favorable situation as well as the emergence of behavior toward a particular purpose. From the above descriptions we can differentiate two types of motivation: intrinsic and extrinsic. Intrinsic motivation refers to behavior that is driven by internal rewards in a person. It takes the form of awareness of the importance of the benefits / meaning of work performed, either because it is able to meet the needs or as pleasure, or because it allows him or her to achieve a goal, or because it brings certain positive expectations in the future. The example could be the act of learning simply to gain opportunity for self-actualization to the fullest. Extrinsic motivation refers to behavior that is driven by external rewards. The examples include a condition that require worker to behave in a certain way to because of praise, punishment, or rules.

2.5 Leadership

The principal as the top leader, who is very influential and determines the progress of the school, should have administrative skills, high-level of commitment, and adaptive in carrying out its duties. Good principal leadership should be able to improve the performance of teachers through a program of capacity building for educational personnel. Consequently, principal must have the personality, qualities, abilities and skills required to lead an educational institution. In his role as a leader, the principal should pay attention to the needs and feelings of the people who work with him in order to maintain teacher's performance. Successful education in schools is largely determined by the success of the principal in managing his education personnel. He is among the educational components that have an effect on improving teacher performance. He is in charge of the implementation of education activities, school administration, coaching of other education personnel, and the utilization and maintenance of facilities and infrastructure.
2.6 Coordination-integration

Coordination and integration in educational quality development focus the attention on two targets: disciplining and harmonizing the perceptions and activities of all members of the organization. It is intended to avoid duplication and conflict of interest and, at the same time, to create harmonious and synergistic cooperation. Each party must fully aware of its position and function, and of the organization or coordination board's. Communication plays a very precise and effective role to realize an understanding that enables collaboration on the basis of coordination-integration. In addition to communication there is the most important determinant of the political will of the government to align their perceptions with school leaders, members of organizations and graduate users.

2.7 Strategy for Improving the Quality of Education

Overall, the Strategy for Improving the Quality of Education is conducted by analyzing the effect of school culture, principal leadership, and teacher performance on the quality of education, as well as analyzing the most dominant effect on the quality of education. The strategy to improve the quality of education will have an important impact on the dynamics of the entire life of educational institutions. On the other hand, the user community even expects improved living standards as the quality of education is improved.

2.8 Frame of Reference

From the above descriptions, we formulate the process of effect analysis in the context of a system for educational quality improvement as depicted in the following conceptual framework.

2.9 Hypothesis

School culture, motivation and principal leadership, in combination, have a significant effect on teacher performance. The Effect of School Culture, Motivation and Principal Leadership through Teacher Performance on Education Quality.

2.9.1 Hypothesis

School culture, Motivation and Principal Leadership, through Teacher Performance, have a significant effect on Education Quality.

3 METHODOLOGY

3.1 Research Object

The study on “Analysis of the Effect of School Culture, Motivation, and Principal Leadership on Teacher Performance and Education Quality” is conducted directly on the site of the research object (Junior High Schools in Tangerang). The data were collected from early May to early June 2018.

3.2 Type of Study

The present study is a descriptive analysis research. It aims to describe and illustrate the effect of school culture, motivation, and principal leadership, through teacher performance, on education quality. It also intends to determine which independent variable is most dominantly affecting teacher performance.

Further, it tested the hypotheses and answered the research questions concerning the subject of this study. Data collection to determine the effect of independent variable on dependent variable was
conducted by means of a questionnaire. The responses are measured through 5 point Likert scale: 5 for Strongly Agree (SA), 4 for Agree (A), 3 for Neutral (N), 2 for Disagree (D) and 1 for Strongly Disagree (SD). On the other hand, if the response is negative, the score is reversed: SA = 1, A = 2, N = 3, D = 4, and SD = 5. The results of the questionnaire will be used to determine the multiple linear regressions, assuming that the independent variable is valid and reliable at an alpha (α) level of 1%, this means that the margin of error is tolerable by 1%. The data analysis is further conducted using software for data processing, i.e., SPSS statistic software.

3.3 Sample Size Determination

Sampling was not conducted in this study, rather we used census method (or sample saturation). This means that the total amount of participants become the respondent. Considering that the number of participants is less than 100, it can be said that the present study employed a saturation principle. The alpha level equals to 1 percent ([α] =1%) which means that it can only tolerate a margin of error of 1 percent.

3.4 Analytical Method

In order to generate representative results, we use Multiple Linear Regression model. Further, the research framework can be illustrated as follows:

![Analytical Framework I](image1)

**Figure 4. Analytical Framework I**

a. First analysis: X1X2X3 on Y

b. Second analysis: X1X2X3 through Y on Z

The Effect of School Culture, Motivation and Principal Leadership, through Teacher Performance, on Education Quality

![Analytical Framework II](image2)

**Figure 5. Analytical Framework II**

3.5 Hypothesis Testing

Identification of the variables with most dominant effect on teacher performance and on education quality through teacher performance is based on the results of regression analysis. As for the hypothesis testing for multiple regressions, we conducted F-test to determine whether the effect of independent variable on dependent variable is simultaneously significant or not significant. This can be seen from the results of significance level of computer aided calculation, or statistically the description can be seen from F_count compared to F_table. To determine the effect of independent variable on dependent variable, simultaneously, it can be seen from the Adjusted Coefficient of Determination (Adjusted R-squared).

4 RESULTS AND DISCUSSION

The first analysis of computer calculation indicates that the Effect of School Culture, Motivation, and Principal Leadership on Teacher Performance as shown in the following table:

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>220</td>
<td>.737</td>
<td>299</td>
<td>.767</td>
</tr>
<tr>
<td>School Culture</td>
<td>0.071</td>
<td>0.56</td>
<td>108</td>
<td>1.272</td>
</tr>
<tr>
<td>Motivation</td>
<td>0.690</td>
<td>0.859</td>
<td>1.425</td>
<td>0.000</td>
</tr>
<tr>
<td>Principal Leadership</td>
<td>0.386</td>
<td>0.268</td>
<td>1.819</td>
<td>.001</td>
</tr>
</tbody>
</table>

Table 1 above shows that the constant coefficient is 0.220; the coefficient of school culture is 0.071; motivation 0.690; and principal leadership is 0.386. This illustrates that the relationship between school culture (X1), motivation (X2), principal leadership (X3), and teacher performance (Y) is unidirectional, and therefore the regression coefficient calculation is Y = 0.220 + 0.071(X1) + 0.690(X2) + 0.386 (X3). The constant in the above equation is 0.220, indicating that when the school culture, motivation, and principal leadership equal zero, the teacher performance is 0.220.

From the first analysis of the simultaneous effect of X1X2X3 on Y, in Table 1, we see the value of the regression coefficient, which means that the value of each independent variable represents its effect on dependent variable. The results indicate the value of regression coefficient (X1) = 0.071, (X2) = 0.690, and (X3) = 0.386. This
means that motivation (X2), compared to other independent variables, has the most significant effect on teacher performance (Y). The regression coefficient for Motivation (X2) is 0.690 at a significance level of .000.

The school culture (X1), motivation (X2), and principal leadership (X3), simultaneously, affect teacher performance (Y) by 0.989 or 98.9% R. Square (adjusted), while the rest 1.1% variables are excluded from the research analysis.

The second analysis from computer calculation of the effect of school culture, motivation, and principal leadership, through teacher performance, on education quality is shown in the table 3 below:

As indicated in the table above, the constant coefficient is 58.855. The coefficients of school culture (0.539), motivation (1.776), and principal leadership (1.896), through teacher performance (4.385), describe the direction of correlation between school culture (X1), motivation (X2), principal leadership (X3), through teacher performance (Y), and the education quality is unidirectional. Thus, the regression equation is as follows: Z = 58.885 + 0.539 (X1) + 1.776 (X2) + 1.896 (X3) + 4.385(Y). The above equation has a constant value of 58.885, indicating that when the school culture, motivation, and principal leadership equal zero, the teacher performance is 58.885.

The second analysis, in table 3, of the simultaneous effect of X1X2X3 through Y on Z, indicates the regression coefficient, which means that the value of each independent variable represents its effect on dependent variable. The results of regression coefficient calculation are as follows: (X1) = 0.539, (X2) = 1.776, (X3) = 1.89 and Y = 4.385. This indicates that teacher performance (Y) has the most dominant effect on education quality (Z). The regression coefficient is Y = 4.385, at a significance level of .010, in comparison with other independent variables.

<table>
<thead>
<tr>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.599</td>
<td>0.597</td>
<td>2.530</td>
</tr>
</tbody>
</table>

a. Predictors: (Constants), Principal Leadership, School Culture, Motivation

School culture (X1), motivation (X2), and principal leadership (X3), simultaneously, through teacher performance (Y) affect education quality (Z) by 0.5979 or 59.79% R. square (adjusted), while the rest 40.21% variables are excluded from the research analysis.

4.1 Hypothesis Testing

Hypothesis in the first analysis
School culture, Motivation and Principal Leadership, simultaneously, have a significant effect on Teacher Performance.

Statistical Hypothesis:
H0: Hx1 ≤ 0,
Hx: Hx1 > 0.

Based on table 5, hypothesis testing was conducted by measuring the school culture (X1), motivation (X2), and principal leadership (X3) simultaneously as independent variables, and teacher performance (Y) as dependent variable. The results indicate that F_count = 846.735. On the limit of 0.05 significance level, the significance level of 0.00 is thus lower than 0.05, and thereby the hypothesis in the first analysis is supported.

Second Hypothesis
School Culture, Motivation and Principal Leadership simultaneously, through Teacher performance, have an effect on Education Quality.
a. Dependent Variable: Education Quality
b. Predictors: (Constants), Teacher Performance, School Culture, Principal Leadership, Motivation

Statistical Hypothesis:
\[ H_0: H_{11} \leq 0, \]
\[ H_1: H_{11} > 0, \]

Based on table 6, hypothesis testing was conducted by measuring the school culture (X1), motivation (X2), and principal leadership (X3), through teacher performance (Y) simultaneously as independent variables, and education quality (Z) as dependent variable. The results indicate that \( F_{\text{count}} = 1.182 \). On the limit of 0.05 significance level, the significance level of 0.04 is thus lower than 0.05, and thereby the hypothesis in the second analysis is supported.

4.2 Discussion

Any organization, either government or private, is always driven by a group of people who play an active role to achieve the goals of the organization in question. Organizational goals will not be achieved if the employee's performance is suboptimal. Education quality implies the overall results or success of a person within a certain period in performing his or her tasks over the agreed upon standard of performance, target and goal. One of the strategies to improve the quality of education is to use an appropriate leadership style and advance the effectiveness of organizational culture. Leadership and organizational culture is described as a visible phenomenon within an organization, such as belief, harmony, calmness, coolness, beauty, school culture, motivation; and principal leadership is described as capable of achieving the goals, vision and mission of the organization.

The results indicate that school culture, motivation and principal leadership, simultaneously, have a significant effect on teacher performance. This means that the indicators of school culture, motivation, and principle leadership are simultaneously measured and do affect teacher performance. The present study also shows that school culture, motivation, and principal leadership, simultaneously through teacher performance, affect significantly the quality of education. However, future researchers should elaborate other independent variables in effort to analyze their effect on education quality, considering that there are still other variables excluded from the research conceptual framework.

4.3 Managerial Implications

As for the results of the present study, we still elaborate other independent variables that are valuable for analyzing the effect on education quality, considering that there are still many other variables excluded from the conceptual framework. For that very reason, it is highly likely that without proper follow-ups other independent variables will bring some unfavorable implications, because the results of this study can only be generalized on the exactly similar condition and object of the original study.

4.4 Conclusion

From the data analysis conducted this far, it can be concluded that principal leadership, provided that it is successfully motivating the teachers—who are parts of the effort to change the mindset, so that the leader will find it relatively easier to implement the leadership style in the school internal environment—has the most significant effect on improving education quality through teacher performance.

4.5 Suggestions

Relevant to the conclusion presented above, we will provide suggestions for future research. Future researchers need to elaborate other variables closely related to teacher performance, because school culture, motivation, and principal leadership, have a significant effect on the improvement of education quality, through teacher performance.

6 REFERENCES