The Influence of Transformational Leadership, School Culture and Work Motivation on School Effectiveness in Junior High School in Medan

Gunawan
Lecturer in Universitas Muhammadiyah Sumatera Utara, Medan, Indonesia
agunawanumsu@gmail.com

Abstract
This research is a quantitative study that examines the participatory leadership model, school culture and motivation with school effectiveness with path analysis techniques. The respondents of this study were 343 teachers in Junior High Schools in Medan from 2,140 teachers in 44 State Junior High Schools. The findings of this study statistically show that simultaneously there is a positive and significant influence of transformational leadership and school culture on the work motivation of Junior High School in Medan teachers, where the effect is 5.9%. Likewise transformational leadership, school culture and work motivation have a significant and significant influence on the effectiveness of State Junior High Schools in Medan, which amounted to 13.7%.

I. Introduction

Demands on the quality of education by society today are increasingly unstoppable. Because the superiority of a nation is no longer seen from the wealth of natural resources, but seen from the superiority of human resources owned, namely skilled workers who are able to anticipate and adjust to the dynamics of global life. Recognizing the importance of the quality of human resources for the development of a nation, the Indonesian nation's development strategy is directed at education. As expressly regulated in article 31 paragraph (1) of the 1945 Constitution which states that every citizen has the right to education. Paragraph (2) confirms that every citizen is required to attend primary and secondary education and the government is required to finance it. Paragraph (3) stipulates that the government strives and organizes a national education system that enhances faith and devotion as well as noble character in the context of intellectual life of the nation, which is regulated by law. Whereas paragraph (4) assigns the state to prioritize the education budget at least 20 percent of the state budget (APBN) and the regional budget (APBD) to meet the needs of national education.

With substantial financial support and various programs that have been rolled out, the reality is that until now the quality of education in Indonesia has not yet shown a change from being left behind with other countries. This lag is still evident from the low ranking of education development and the quality of the workforce both regionally and globally. In a global context, currently the index of Indonesian education development is still below the quality of several countries, including Malaysia and Thailand. UNESCO on the 2011 Global Monitoring Report said that Indonesia's education development index was 69th out of 127 countries.
countries in the world. This publication shows that education in Indonesia has not been able to improve the quality of Indonesian human resources globally. Likewise, data on the quality of the Indonesian workforce released by the Central Statistics Agency (2011) also show that 49.4% of workers have an elementary school education, where the quality of our workforce is far behind those of neighboring countries, namely Singapore and Malaysia. Regarding the quality movement and improving education, it has been carried out since 1999. Starting decentralized education, school-based management, school accreditation and school quality with national education standards and other educational programs.

The still low quality of Indonesian human resources is certainly something that is pushing down, in terms of the quality of education movement has been carried out since 1999 ago. It is in line with Ramlan (2020) that the quality of human resources is positively correlated with the quality of education, and the quality of education is often indicated by good conditions, compliance with requirements and all components that must be contained in education. These components are input, process, output, education staff, infrastructure and costs. The quality of education will be achieved if contributions, processes, results, teachers, facilities and infrastructure, as well as costs are available and implemented properly. But the question is "why is the quality of Indonesian education so far still low". This question must be raised and reviewed as an entry point to solve the problem of education quality. Typologically, the problem of the quality of education is congruent with the problem of school quality. Because through schools educational output is generated. Therefore, looking at education problems is not only seen at a macro level, but also must be seen at a micro level, namely the problem of the quality of education at the school level. As the quality of education movement in several countries has been carried out for a long time, such as the United States as the A Nation at Risk (1983) report explains about the importance of educational excellence related to the effectiveness of higher schools. This finding shows that schools with a high level of effectiveness, in fact education output can be increased.

Studies on the effectiveness of schools in various countries also show that schools have helped a lot in solving educational problems in relation to improving and improving the quality of education. Some research on school effectiveness known as "school influence" has been done by Coleman and Jenk (1966); Brookover, et al (1982); and Mortimore (1993) provide a conclusion that schools can make a difference in relation to student and school performance. Likewise Edmond's research (1979); Sammonds, at al (1995); Hawley and Rolly (2007) found that effective schools showed a very significant effect on improving student achievement in both traditional and modern schools. In its development, the issue of educational resources has also increasingly received the attention of researchers, especially for those who regard school input as a factor of effectiveness. As research by Card and Krueger (1992) found a positive association between school resources and differences in views between the work of parents of students and student achievement. In the most sophisticated contribution, studies on school effectiveness have also measured high educational standards and what characteristics support school effectiveness. International research on school effectiveness also measures what school characteristics are associated with international output. As Reynolds, et al in his book "World Class Schools: Some Preliminary Methodological Findings from the International Schools Effectiveness Research Project (2004)" studies on various school groups, such as in the United States, the Netherlands, the United Kingdom, New Zealand, Canada, Taiwan, Hong Kong and Australia, concluded that school effectiveness can be seen from two dimensions, namely quality and equity. Quality is seen as the extent to which school academic grades are better or worse than
what is expected by students, while they have differences in abilities when entering school. The equity dimension refers to the influence of school hypotheses on interactions in the relationship between incoming students and graduates.

The low quality of education at the national level is basically because the quality of education in various regions in Indonesia is still low. As is the quality of education in the city of Medan. In particular, the effectiveness of administering junior secondary education units (SMP) still has various problems. As the quality qualifications of junior high schools (SMP / MTs) in Medan city show evidence that there are still many SMP / Mts who have low quality qualifications. Data from the Ministry of Education and Culture of Medan City in 2013 explained that out of 367 SMP / Madrasahs, as many as 213 SMP / Madrasahs still had quality qualifications for independent development schools (SPM), ie schools that needed guidance to be more independent. As many as 46 junior high schools / madrasas with national standard pre-school quality qualifications (Pre SSN), namely schools that still do not meet some national education standards set by the government. While the remaining 93 SMP / Madrasahs meet the national school standard (SSN) qualifications, namely schools that have met the overall education standard. Concluding the data, there were 75.57% of SMP / Madrasahs in the city of Medan having quality qualifications that did not meet the national education standards (SPN) set by the government, both in terms of management and other accompanying support. Considering the national education standard is a minimum criterion regarding various aspects that are relevant in the implementation of the national education system and must be fulfilled by the organizers or education units in all jurisdictions of the Unitary Republic of Indonesia as stipulated in Government Regulation number 13 of 2015. Based on the school quality qualification data this shows that the capacity of junior high school education in the city of Medan is still far from expectations. Where the implementation of junior high schools in the city of Medan has not met the criteria of national education standards.

In terms of school performance, state junior secondary schools in Medan also have low performance. This still low school performance can be seen from the national school performance assessment by the Ministry of Education and Culture published by The Asean Parent Indonesian by measuring the student achievement index national integrity (UN) achievement index and school quality for 6 consecutive years 2011-2017 period nationally. Based on this data, the reality is that not even one state junior high school in Medan is included in the category of high-achieving school. As Table 1 below, shows a publication about the achievements of junior high schools in Indonesia that in general the effectiveness of Junior High School in Medan is still far from what was expected. This means that educational achievements in the city of Medan are still far behind and have not been able to compete nationally.

Table 1. Junior High School-achievers in Indonesia, Ministry of Education and Culture Version

<table>
<thead>
<tr>
<th>No</th>
<th>Province</th>
<th>Regency/City</th>
<th>School’s Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Nanro Aceh Darusalam</td>
<td>Banda Aceh</td>
<td>SMP Negeri 19 Percontohan</td>
</tr>
<tr>
<td>2</td>
<td>Sumatera Utara</td>
<td>Medan</td>
<td>SMP Sutomo 1</td>
</tr>
<tr>
<td>3</td>
<td>Sumatera Barat</td>
<td>Padang</td>
<td>SMP Negeri 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Padang</td>
<td>SMP Negeri 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Padang</td>
<td>SMP Negeri 11</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Padang</td>
<td>SMP Negeri 12</td>
</tr>
</tbody>
</table>

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The problem of educational achievement in Junior High School in Medan certainly cannot be separated from the issue of school effectiveness in relation to school output. Therefore, the effectiveness of schools with regard to the ability of schools as institutions managing education services in optimizing the function of all available school resources effectively to achieve goals and efficiency in the use of resources so as to produce the expected school output. This is in line with the opinion of Sinay and Ryan (2016) that the effectiveness of school success institutional arrangements are based on the achievements and comfort of staff, attention to the needs, aspirations and careers of staff, development of school culture and modern management based on share, care and fair so as to influence school results. Based on this opinion, perspectives on school effectiveness with regard to leadership factors, school culture, and teacher work motivation are some important factors in the framework of schools achieving their vision and mission.

As school effectiveness in the perspective of scientific management (scientific management) explains that in order to better understand the understanding of the school as an organization and system, then the measure of school success is a measurement of school effects. Hoy and Miskel (2014) view schools as organizations starting with an understanding of system theory. In the sense that input, process and output are important factors for schools. Thus based on system theory, that the focus of organizational attention on the existence of relationships between subsystems in one system, and between systems with other systems, which can influence each other. The relationship can be arranged in a hierarchical system through the organizational structure. Organizational structure is a structure that defines and regulates the relationship of hierarchical systems, involving issues of authority, responsibility and autonomy at the individual level or the level of parts or units in an organization. Schools as an integrated education system consisting of a number of interdependent components. Thus, the development of competencies in students cannot be left only to teaching and learning activities (KBM) in the classroom, but also other systems, such as the climate of life and overall school culture and the needs of each individual member of the school organization. This means that the school as a system, as a whole is expected to be able to impact the learning experience of all students to master the competencies that are appropriate to their level of education and the specific mission they carry. As Lezotte (2007) mentions the effectiveness of schools with regard to schools that are able to have the impact of learning to achieve all missions, showing a similarity in quality. Whereas Sanusi (1998) in the education management system in Indonesia, effectiveness emphasizes the relevance and adaptability of
decisions in plans and programs to the dynamics of values in employees' interpersonal relationships and cultural environments.

Realizing the effectiveness of schools as schools should be able to manage their resources, through breakthrough efforts, and innovation in order to have enough competitiveness. This means that the administration of schools must be supported by the existence of a school principal who has leadership abilities in developing learning capacity to produce new capabilities for schools, namely the ability of principals to create a future for their schools continuously, a process of continuous creativity for all members, and leadership able to transform all the potential that exists to achieve school goals. In addition to the leadership aspect, the other most important factor for the creation of school effectiveness is school culture. School culture is understood as a totality of life and academic activities that are lived, interpreted and practiced by the school community. Schools play an important role in efforts to build and develop cultural behavior in all components in the school to involve themselves and focus on academic activities and goals at school. Because the school culture is unique, this shows that the school as an organization has certain characteristics that are not possessed by other organizations such as the place where the learning process and the culture of human life occur. Hoy and Miskel (2014) schools are also seen as an open social system, which consists of parts, characteristics or activities that are interdependent with each other (school principals, teachers, staff and students) who act based on needs, beliefs and goals. Therefore, school as a social system has a unique culture, namely the dominant shared values and beliefs that influence behavior. In addition, the motivational factor also determines the effectiveness of the school. The more motivated the teacher, the higher the teacher's performance, the impact of student learning outcomes and school effectiveness will be higher. Therefore work motivation is the most important factor for school effectiveness. Because, motivation supports increasing school productivity. Through motivation, the teacher will have enthusiasm, both from within and from the encouragement of others to express their potential. In this regard leaders are required to have the ability to motivate teachers so that they are willing and able to develop themselves optimally. This is especially true in activities directly related to school effectiveness concerning job satisfaction, work productivity and teacher performance. This is supported by the research findings of Manzor (2012) concluding that motivated employees work best for the interests of the organization which directs them towards growth, prosperity, and productivity. Thus employee motivation and organizational effectiveness are directly related.

Based on the description above, research on school effectiveness is still very important to continue to be carried out in order to improve the quality of education, especially testing of school characteristics, such as the importance of transformational leadership, school culture and teacher work motivation and their impact on school effectiveness.

II. Research Method

This research is a quantitative research. According to Creswell (2015) quantitative research are methods to test certain theories by examining the relationships between variables. This study tries to examine the influence between independent (exogenous) variables namely transformational leadership (X₁), school culture (X₂) and teacher work motivation (X₃) with the dependent variable (endogenous) namely school effectiveness (Y), both direct and influence not directly in the framework of path analysis. The sample of this study were 343 teachers, from 45 state junior high schools in the city of Medan. Data
collection tools used in this study used a questionnaire or questionnaire. The questionnaire used in the form of a closed questionnaire in which the answer has been provided in advance by researchers. Measurement scale or answer choices in a questionnaire using a Likert scale measurement. The instrument has been tested for validity and reliability. Validity and reliability means that the instrument can be used to measure what should be measured. By using a valid and reliable instrument in collecting data the results of the study will be valid and reliable. Because, in research a valid and reliable instrument becomes an absolute requirement. The data analysis technique used in the study is path analysis.

![Figure 1. Effects of X1, X2 and X3 on Y](image)

**III. Discussion**

3.1 Research Result

a. Normality and Linearity Test

The results of data normality testing with the Kolmogorof-Smirnov Test show the value of Asymp. Sig (2-tailed) for transformational leadership variables, school culture and work motivation and school effectiveness is greater than 0.05. This shows that all variables are normally distributed and linear. Linearity test calculation results with Deviation from Linearity obtained all significance values greater (sig) > 0.05. Based on the results of the analysis it can be concluded that all forms of regression are linear and mean at α of 0.05.

b. The Effect of Transformational Leadership on Teacher Work Motivation

The test results obtained by the path coefficient value Coefficients values obtained sig. equal to 0,000 or 0.05 ≥ 0,000, meaning the path analysis means, or in other words the calculation results show for the value of t count > t table then 1.976> 1.960. Ho conclusions can be drawn and Ha accepted. This means that transformational leadership affects the work motivation of Teachers in Junior High School, Medan.

c. The Effect of School Culture on Teacher Work Motivation

The test results obtained by the path coefficient value Coefficients values obtained sig. equal to 0,000 or 0.05 ≥ 0,000, meaning the path analysis means, or in other words the calculation results show for the value of t count> t table then 3.652 > 1.960. Ho conclusions can be drawn and Ha accepted. This means that school culture affects the work motivation of Teachers in Junior High School, Medan.
d. Effects of Transformational Leadership on School Effectiveness
The test results obtained by the path coefficient value Coefficients values obtained sig. equal to 0,000 or 0.05 ≥ 0,000 that is meaningful path analysis, or in other words the calculation results show for the value of t count > t table then 2.504> 1.960. Ho conclusions can be drawn and Ha accepted. This means that transformational leadership influences the effectiveness of Junior High School in Medan.

e. The Effect of School Culture on School Effectiveness
The test results obtained by the path coefficient value Coefficients values obtained sig. of 0,000 or 0.05 ≥ 0,000, meaning the path analysis means, or in other words the calculation results show for the value of t count > t table then 3.358 > 1.960. Ho conclusions can be drawn and Ha accepted. This means that school culture influences the effectiveness of Junior High School in Medan.

f. The Effect of Teacher's Work Motivation on School Effectiveness
The test results obtained by the path coefficient value Coefficients values obtained sig. of 0,000 or 0.05 ≥ 0,000, meaning the path analysis means, or in other words the calculation results show for the value of t count> t table then 4,128> 1.960. Ho conclusions can be drawn and Ha accepted. This means that teacher work motivation affects the effectiveness of Junior High School in Medan.

The findings of this study statistically show that the determinant coefficient (R) or $R^2X_3X_1X_2$ of 0.059, which means the influence of transformational leadership and school culture on the work motivation of teachers in Junior High School in Medan is 5.9%. While the effect of other variables is $pX_3ε1 = 1 - 0.059 = 0.941$ or 94.1%. This means that the influence of transformational leadership variables and school culture on the work motivation of Teachers in Junior High School, Medan is 5.9%, while the remaining 94.1% is influenced by other variables outside the research model. Likewise, the determinant coefficient (R) or $R^2YX_3X_1X_2$ of 0.137, which means the influence of transformational leadership, school culture and teacher work motivation on the effectiveness of Junior High School in Medan is 13.7%. While the influence of other variables is $pX_3ε1 = 1 - 0137 = 0.863$ or 86.3%. With the meaning that the influence of transformational leadership variables, school culture and teacher work motivation on the effectiveness of Junior High School in Medan is 13.7%, while the remaining 86.3% is influenced by other variables outside the research model. Based on the results of data analysis in general, the findings of this study can be summarized as follows:

Table 2. Summary of Results of Path Coefficient Analysis between Variables

<table>
<thead>
<tr>
<th>Influence Between Variables</th>
<th>Path coefficient (Beta)</th>
<th>t_count</th>
<th>F_count</th>
<th>Result tests</th>
<th>$R^2X_3X_1X_2$</th>
<th>$pX_3ε1$</th>
</tr>
</thead>
<tbody>
<tr>
<td>X_1 between X_1</td>
<td>0,142</td>
<td>1,976</td>
<td>9,400</td>
<td>Ha accepted</td>
<td>0,059</td>
<td>0,941</td>
</tr>
<tr>
<td>X_2 between X_1</td>
<td>0,229</td>
<td>3,652</td>
<td></td>
<td>Ha accepted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X_1 between Y</td>
<td>0,144</td>
<td>2,504</td>
<td></td>
<td>Ha accepted</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X_2 between Y</td>
<td>0,168</td>
<td>3,358</td>
<td>15,808</td>
<td>Ha accepted</td>
<td>0,137</td>
<td>0,863</td>
</tr>
<tr>
<td>X_3 between Y</td>
<td>0,187</td>
<td>4,128</td>
<td></td>
<td>Ha accepted</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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Based on the table above, it can be explained that the research path analysis model is as follows:

![Figure 2. Effects of X₁, X₂ and X₃ on Y](image)

**Figure 2. Effects of X₁, X₂ and X₃ on Y**

### 3.2 Discussion

Simultaneously transformational leadership (X₁) and school culture (X₂) have a positive and significant effect on the work motivation of Teachers in Junior High School, Medan, which is 5.9%, while the remaining 94.1% is influenced by other factors. Based on these findings it can be explained that transformational leadership and school culture are important variables for the work motivation of teachers in Junior High School in Medan. As we all know, transformational leadership is often considered the most important is to provide a vision, direction and purpose where the organization is headed, as a center and energy provider for all members of the organization when trying various strategies, facing various failures, in an effort to build a strong organization. As the findings of this study prove that transformational leadership is effective leadership in initiating school change and improvement. Where transformational leadership clearly sees themselves as agents of change (change agents). They struggle to make a difference and to transform the organization under their responsibility. In addition, transformational leaders involve the teacher in achieving the goals and objectives set by the school. Likewise, the findings of this study prove that school culture has an impact on teacher work motivation in schools. Balkar’s research findings (2015) revealed that the dominant characteristics of empowering school culture (ESC) emphasized self-confidence, change, innovation and collaborative management. Teacher success, job satisfaction, strong social relationships and principal leadership are the main characteristics resulting from ESC as a result of the reflection of empowerment and motivation.

The relationship and close relationship between transformational leadership, school culture and motivation with school effectiveness based on the results of this study were also proven. Simultaneously the interagency effect was 13.7%. In school efforts to increase its effectiveness, transformational leadership factors, culture and work motivation have an equally important role. According to Burns, transformational leadership can be seen when leaders and followers make each other to advance to a higher level with morals and motivation. Through the power of their vision and personality, transformational leaders are able to inspire followers to change their hopes, perceptions, and motivation to work towards common goals. Transformational leaders must be able to define, communicate and articulate the vision of the organization, and subordinates must accept and recognize the credibility of
their leaders. Thus Bass and Avalio (1994) state that transformational leaders are charismatic leaders and have a central and strategic role in bringing organizations to achieve their goals. Transformational leaders must also have the ability to equate the vision of the future with their subordinates, and heighten the needs of subordinates at a higher level than what they need. Furthermore, transformational leaders must be able to persuade their subordinates to carry out their tasks beyond their own interests in the interests of the larger organization. In the sense that the existence of transformational leaders has a transformation effect both at the organizational level and at the individual level in terms of organizational culture and achievement motivation.

As many theories say, transformational leadership is related to motivating followers. The hallmark of transformational leadership is encouraging subordinate work motivation. Become an inspirational motivation where the principal can motivate all teachers and employees to have a commitment to the vision of the organization and support team spirit in achieving educational goals at school. Likewise, intellectual stimulation, namely the principal can foster creativity and innovation among teachers and staff by developing critical thinking and problem solving to make schools better direction. The findings of this study are also supported by the findings of Abdullah, et al (2018) revealed that transformational leadership in the teacher's perspective is very high while the level of work motivation among teachers is also high. The findings show that there are significant differences in the leadership style and motivation of teachers towards the sex of the teacher. Relationship analysis also shows that there is a positive and significant correlation between transformational leadership and teacher work motivation. Thus the research findings of Lourmpass and Dakoupoulo (2014) explain that there is an influence of the principal's transformational leadership in Greek secondary education influencing teacher ideas in incorporating innovative programs in education. This study is theoretically interesting from motivation theory, because motivation is a factor that influences teachers to be more innovative in their field of work.

IV. Conclusion

Based on data analysis and findings of this study, it can be concluded that (1) transformational leadership and school culture have a positive and significant influence on the work motivation of Teachers in Junior High School, Medan, (2) transformational leadership, school culture and teacher work motivation have significant and significant influence on the effectiveness of Junior High School in Medan, (3) this study has proven that transformational leadership, school culture and teacher work motivation are model forming variables for school effectiveness.

References

Abdullah, A.G.K., Ling, Y.L., Sufi, S.B., Principal Transformational Leadership and Teachers Motivation. Asian Education Studies; Vol. 3, No. 1; 2018 ISSN 2424-8487; E-ISSN 2424-9033. Pp 36-42.
Badan Pusat Statistik. (2011). Indonesia Dalam Angka. BPS, Jakarta,

DOI: https://doi.org/10.33258/birci.v3i1.824


Reynolds, D; Teddlie, C; Strangfield, S; and Creemers, Bert P.M. World Class Schools : Some Preliminary Methodological Findings from the International Schools Effectiveness Research Project (ISERP). 2004. Pp 1

