Develop Model of Transactional, Transformational, Democratic and Authocratic Leadership Style for Indonesian School Performance in Education 4.0 Era

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ABSTRACT

This study aims to analyze the influence of transactional, transformational, democratic and authocratic leadership styles on the performance of elementary school teachers. The method used in this research is quantitative method. Data collection was carried out by distributing an electronic questionnaire online to all 282 elementary school teachers in Jakarta. Online electronic questionnaires were distributed using simple random sampling technique. Software for data processing is SPSS and uses SmartPLS version 3.0. The conclusion of this study is that transactional, transformational leadership, democratic leadership style and autocratic leadership style has a positive and significant effect on teacher’s performance. This study provides a novelty model for primary school teacher leadership in the education 4.0 era and can be a reference for further research and can also be developed at other school levels and elsewhere.

Keywords: Leadership Style, transactional, transformational, democratic and authocratic, performance of elementary school teachers

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INTRODUCTION

This century’s age of education is a big challenge. We will have considerable difficulties in schooling, teaching and learning in the next 30 years. Living with information and learning, overcoming the present attitudes and abilities, can lead to students unable to cope with computer devices. Education and learning Therefore, teachers need to reduce the prevalence of information in education and education with the goal that students will surpass machine intelligence. Training, which is combined with character and experience, makes students very wise to use machines for society’s good. Teachers 4.0 are more responsible for training students to face the industrial revolution 4.0. teachers Professor 4.0 teaches interactive technology for learning and teaches it. Industrial Revolution 4.0 is characterised by four things: super-computers, artificial intelligence, cyber networks and development collaborations. This requires expertise that can hold these four items in the age of education 4.0 up to date. The skills needed are a projection of ability requirement for the 21st century. Competencies needed in the era of Education 4.0 are critical thinking and problem-solving skills. This competency is very important for students to have in 21st century learning. Teacher 4.0 must be able to concoct learning so that they can explore this competence from students. communication and collaborative skills. As a competency that is needed in the 21st century, this skill must be able to be constructed in learning. Information and communication technology-based learning models must be applied by teachers in order to construct communication and collaboration competencies, creative thinking and innovation skills. The industrial revolution 4.0 requires students to always think and act creatively and innovatively. This action needs to be done so that students are able to compete and create industry-based employment 4.0. This condition is necessary considering that there have been many professions are being replaced by robotic digital machines, information and communication technology literacy. The leadership style of school school leaders has undergone a transformation following changes, the leadership style of school school leaders is more suitable today, namely democratic leadership that can embrace teachers, students, school committees, guardians of students, and the community. In the study of the sociology of education, schools must carry out their functions properly so that the leadership of the school leaders can be the progress of the led educational institution. Becoming a professional school school leader is required to have personality, managerial, entrepreneurial, supervisory and social competences. Skills in facing the era of the industrial revolution 4.0 can be seen from the ability of the school leaders in the use of technology and entrepreneurial skills. Efforts made by the school leaders to improve his / her abilities are by continuing education, participating in various trainings, seminars, workshops, and various supporting activities. There needs to be collaboration from various parties, especially policy makers so that school school leaders can become professional and quality leaders.
On the basis of past research, leadership has no important influence on teacher’s success as are: (David et al., 2017; Elyiana et al., 2019; Khalifa Elgelal & Noermijati, 2014, Makena, 2017; Monoyasa et al., 2017; Putri & Soedarsono, 2017; Siwatiningsih et al., 2019). In addition to other research, leadership has a meaningful influence on teacher results, accordingly (Ashari 2019, Fayzahull, Ashari, Purwanto, Goestjahjanti, et al. 2020, Jumiran et al. 2020, Maesaroh et al. 2020, Nugroho et al. 2020, Waruwu et al. 2020, Yanthy et al. 2020). Since the partnership between management still has a research void. This research gap therefore encourages researchers to establish the connections between the two constructs more thoroughly and generally. The goal of this study is to examine the impact on the performance of basic education teachers by transactional, transformational, democratic and autocratic leadership. The study offers a new model for the leadership of primary school teachers in the education 4.0 period and can be established at other levels of schools and elsewhere.

**LITERATURE REVIEW AND HYPOTHESES**

**Leadership**

According to (Bass & Avolio 2000), transformational leaders have three characteristics: first, to boost people’s perception of processes and efforts. Secondly, to allow supporters to give preference to community interests over individual interests. Thirdly, the need for a follower to switch to a higher degree of valuation and upgrading than material items. In other words, (Burn 1978), transformational leaders are those who influence followers to do so in a particular way that reflects the ideals and motives of leaders and supporters — their expectations, needs, ambitions and hopes. They can alter people’s consciences and build regulatory principles, morals, to achieve higher morality, including equality, democracy, justice, humanitarianism and peace.

**Performance**

Performance Indicators according to Swanson and Holton, cited by Keban (2004: 194) states that: “individual employee performance can be seen from whether the employee’s mission and goals are in accordance with the mission of the institution, whether employees face obstacles in their work and achieve results, whether employees have the ability to perform emotionally at work, and whether they have high motivation, knowledge, skills and experience at work. Performance can be measured by (1) work quantity, (2) quality of work, (3) cooperation, (4) knowledge of work, (5) work independence, (6) attendance and timeliness, (7) knowledge of policies and objectives, organization, (8) healthy initiatives and ideas, (9) supervisory skills and techniques (Schuler and Dowling, in Keban, 2004: 195). To measure performance individually, McKenna and Beech (1995) have several indicators, indicators of performance that are often used to assess individual employee performance according to McKenna and Beech are Knowledge, abilities and skills at work / competence, work attitude, expressed as the ability to relate to others in a team. Transformational Leadership Styles and teacher performance.

According to Ismail (2009) the transformational leadership style focuses on developing the employee’s value system, their level of motivation, the development of their skills. According to Bass (1994), the transformational leadership style focuses on encouraging followers to achieve the goals of working in the organization. According to Avolio (2009) behavior that changes and inspires followers to work beyond expectations for the good of the organization.

**Hypothesis 1 (H1) Transformational leadership style has a positive effect on teacher performance**

**Transactional Leadership Style and teacher performance**

Transactional leadership style incentives, penalties and goals among employees and management according to Asfari & Gibson (2016). According to Robbins & Hakim (2017), they direct their followers through explanation of tasks and work requirements to meet their goals. The transactional leadership style contributes to punishment and rewards according to Podsakoff et al. (2006) return for positive results in the organisations, and Robbin et al. (2009).

**Hypothesis 2 (H2) transformational leadership style has a positive effect on teacher performance**

**Democratic Leadership Style and teacher performance**

According to Tannenbaum and Schmidt (1958) the democratic leadership style of decision making is decentralized and divided by subordinates. According to Parker (2003) democratic leadership style is used when group participation is involved and according to Clark R (2009) democratic leadership style involves subordinates in the decision-making process. Mullins (2005) consulting democratic leadership style with subordinates and evaluating their opinions and suggestions before making decisions. Lewis (1939) democratic leadership style Acting to reward input and commitment through participation, listening to bad news and good news.

**Hypothesis 3 (H3) democratic leadership style has a positive effect on teacher performance**

**Autocratic Leadership Style and teacher performance**

According to Michael (2010), there is no common vision and no incentive without power in autocratic leadership. Creativity and creativity are generally excluded from dedication. Autocratic leadership style, Richard and Robert (2009). Workers are encouraged to set objectives; supervisors offer employees little to no instruction, Bass and Riggio (2006) Leaders escape accountability and do not take account of the needs of their followers. Swarup (2013) is the most influential individual and leading decision maker for handling autocratic leadership.

**Hypothesis 4 (H4) autocratic leadership style has a positive effect on teacher performance**

Based on the study of existing theories and previous research, the following hypotheses were made:

**Hypothesis 1 (H1) Transactional leadership style has a positive effect on teacher performance**

**Hypothesis 2 (H2) Transformational leadership style has a positive effect on teacher performance**

**Hypothesis 3 (H3) Democratic leadership style has a positive effect on teacher performance**

**Hypothesis 4 (H4) Autocratic leadership style has a positive effect on teacher performance**
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Methods
Quantitative approach is the tool used in this study. The collection of data was achieved via online distribution for all schoolteachers in Tangierang of electronic questionnaires. Five response options were given to all the items of Q / T argument, namely: strongly agree (SS) 5, agree (S) 4, neutral (N) 3, disagree (TS) 2 and strongly agree (STS) 1. Data processing software is PLS and is compliant with SmartPLS Version 3.0. Teachers from five Jakarta primary schools, a total of 282 respondents, participated in this report. A simple, random sampling technique has distributed the questionnaire.

Table 1. Respondent Profil Descriptive Information

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 30 Years</td>
<td>77</td>
<td>25.7%</td>
</tr>
<tr>
<td>30 - 40 Years</td>
<td>123</td>
<td>47.1%</td>
</tr>
<tr>
<td>&gt; 40 Years</td>
<td>82</td>
<td>27.2%</td>
</tr>
<tr>
<td>Work Periode</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5 Years</td>
<td>101</td>
<td>36.3%</td>
</tr>
<tr>
<td>5-10 Years</td>
<td>128</td>
<td>49.3%</td>
</tr>
<tr>
<td>&gt; 10 Years</td>
<td>53</td>
<td>14.4%</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; Master's degree</td>
<td>44</td>
<td>5.8%</td>
</tr>
<tr>
<td>≥ Bachelor's degree</td>
<td>238</td>
<td>94.2%</td>
</tr>
</tbody>
</table>

Fig 1. Research Model

Based on the study of existing theories and previous research, the following hypotheses were made:

Hypothesis 1 (H1) Transactional leadership style affects teacher’s performance
Hypothesis 2 (H2) Transformational leadership style affects teacher’s performance
Hypothesis 3 (H3) Democratic leadership style affects teacher’s performance
Hypothesis 4 (H4) Autocratic leadership style affects teacher’s performance

Result and Discussion
The convergent validity test stage is performed by searching the loading factor from each indicator against the structure. Factor value 0.5 or higher is considered to be strong enough to describe the latent construction of a structure (Chin, 1998; Hair et al., 2010). The value is considered to be strong enough. In this analysis, for each construct’s AVE values 0.5, the minimum limit for the agreed load factor is 0.5 (Ghozali, 2014).
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There are some indicators or objects to be omitted from the model after the study with SmartPLS 3.0, after which all indicator values have a loading factor value above 0.5 or with a VAT value above 0.5. This research model follows the convergent validity principles. Table 2 below shows the importance of loadings, alpha cronbach, composite reliability and AVE for the full structures.

**Table 2. Loadings, Cronbach’s Alpha, Composite Reliability, and Average Variance Extracted (AVE) Testing Result**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Items</th>
<th>Loadings</th>
<th>Cronbach’s Alpha</th>
<th>Composite Reliability</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transactional</td>
<td>X11</td>
<td>0.653</td>
<td>0.845</td>
<td>0.714</td>
<td>0.780</td>
</tr>
<tr>
<td></td>
<td>X12</td>
<td>0.574</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>X13</td>
<td>0.598</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transformational</td>
<td>X21</td>
<td>0.731</td>
<td>0.711</td>
<td>0.763</td>
<td>0.755</td>
</tr>
<tr>
<td></td>
<td>X22</td>
<td>0.651</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>X23</td>
<td>0.618</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Democratic</td>
<td>X31</td>
<td>0.532</td>
<td>0.739</td>
<td>0.871</td>
<td>0.711</td>
</tr>
<tr>
<td></td>
<td>X32</td>
<td>0.528</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>X33</td>
<td>0.652</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autocratic</td>
<td>X41</td>
<td>0.722</td>
<td>0.745</td>
<td>0.755</td>
<td>0.744</td>
</tr>
<tr>
<td></td>
<td>X42</td>
<td>0.635</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>X43</td>
<td>0.781</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Construct reliability can be assessed from the Cronbach’s alpha value and the composite reliability of each construct. The recommended composite reliability and cronbach’s alpha value is more than 0.7 (Ghozali, 2014). The reliability test results in Table 2 above show that all constructs have composite reliability and Cronbach’s alpha values are greater than 0.7 (> 0.7). In conclusion, all constructs have met the required reliability.

**Discriminant Validity Testing**

The validity of each latent variable is discriminating to ensure it varies from other latent variables. The model is of good discrimination where the AVE square value of each exogenous building (diagonal value) exceeds the correlation between that building and another (diagonal value under diagonal value) (Ghozali, 2014). The results of the biassed testing of validity are obtained by using the AVE square meaning, namely the Fornell-Larcker criterion meaning as shown in Table 3.

**Table 3. Discriminant Validity Testing**

<table>
<thead>
<tr>
<th>Variables</th>
<th>X1</th>
<th>X2</th>
<th>X3</th>
<th>X4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transactional</td>
<td>0.936</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transformational</td>
<td>0.542</td>
<td>0.983</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Democratic</td>
<td>0.562</td>
<td>0.532</td>
<td>0.931</td>
<td></td>
</tr>
<tr>
<td>Autocratic</td>
<td>0.512</td>
<td>0.617</td>
<td>0.542</td>
<td>0.955</td>
</tr>
</tbody>
</table>
The results of the discriminating validity test in Table 3 above showed that all management buildings had a square roots value of AVE above the value for correlation with other latent buildings. Also, all the leading items on an indicator have a cross-loading value that is greater than the other indicator items as defined in Table 4, thus concluding that the model has met the discriminatory validity (Fornell & Larcker 1981).

**Hypothesis test**

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Relationship</th>
<th>Beta</th>
<th>SE</th>
<th>T Statistics</th>
<th>P-Values</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>X1 -&gt; TP</td>
<td>0.545</td>
<td>0.022</td>
<td>4.342</td>
<td>0.001</td>
<td>Supported</td>
</tr>
<tr>
<td>H2</td>
<td>X2 -&gt; TP</td>
<td>0.664</td>
<td>0.075</td>
<td>5.231</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>X3 -&gt; TP</td>
<td>0.587</td>
<td>0.043</td>
<td>4.234</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H4</td>
<td>X4 -&gt; TP</td>
<td>0.644</td>
<td>0.024</td>
<td>3.124</td>
<td>0.001</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Based on Table 4 above, the value of R Square teachers performance is 0.921, which means that the variable teacher performance can be explained by the leadership variable by 92.1%, while the remaining 7.9% is explained by other variables not discussed in this study. Meanwhile, Table 5 shows t-statistics and p-values that show the influence between endogenous and exogenous variables.

**DISCUSSION**

**Relationship of Transactional Leadership Style and Teachers Performance**

Based on the results of statistical calculations using SEMPLS in Table 5 above, it was concluded that transactional leadership has a positive and significant effect on teacher's performance. The value of t-statistics 4.342 is greater than 1.96 and the p-value of 0.001 is smaller than 0.05. That is, the first hypothesis (H1) is accepted. These findings are in line with the results of previous studies (Ashari, 2019; Purwanto, et al, 2019; Basuki, et al, 2020; Goestjahjanti, et al, 2020; Budi Santoso, et al, 2020) that transactional leadership has a positive and significant effect on teachers performance, if the transactional leadership style is implemented properly it will encourage an increase in teacher performance and if the transactional leadership style is not implemented properly it will encourage a decrease in teachers performance.

**Relationship of Transformational Leadership Style and Teachers Performance**

Based on the results of statistical calculations using SEMPLS in Table 5 above, it could be concluded that transformational leadership has a positive and significant effect on teacher's performance. The value of t-statistics value of 5.231 is greater than 1.96 and the p-value of 0.000 is smaller than 0.05. That is, the second hypothesis (H2) is accepted. These findings are in line with the results of previous studies (Firdaus, 2019; Indrawan, et al, 2020; Purnamasari, et al, 2020) that transformational leadership has a positive and significant effect on teachers performance, if the transformational leadership style is well executed it will encourage an increase in teachers performance, if the transactional leadership style is not implemented properly it will encourage a decrease of teacher performance.
meaning that if the autocratic leadership style is well executed it will encourage an increase in teacher performance and if the autocratic leadership style is not executed properly it will encourage a decrease in teacher performance.

**DISCUSSION**

The leadership style that is appropriate that the school leaders has a vision and mission to the future, is confident, is able to communicate ideas, can be emulated, has idealism, inspiration, ability to influence and is able to appreciate differences to be transformed into a common strength. Based on the various personalities of the school leaders that have been described, it is a privilege to be a leader who becomes a role model for the nation’s future generations. Important abilities that the school leaders must have are managerial skills, while these abilities include: the school leaders is able to lead the school; compile school program plans, curricula, and various school policies; managing teachers, staff, students, and all school members; maintain good relationships with guardians, school committees, and the community; managing facilities and infrastructure in schools; manage to manage finances in an honest, transparent and reliable manner; and can take advantage of technological advances in schools. In the era of the industrial revolution 4.0, school leaders are required to have entrepreneurial competence, so that they can give birth to various creativity and innovations from teachers and students in schools.

The biggest challenge in the era of the industrial revolution 4.0 is how we can survive this era. School leaders must have special skills in order to survive in the current globalization and advance the schools they lead. The current of globalization and the progress of 21st century learning must be addressed properly. One example is the change in the mindset of children today which is also a challenge for a school school leader and his staff to be able to find the best solution in overcoming them. Seeing various problems in the world of education with the industrial revolution 4.0 and 21st century learning, school leaders are expected to innovate and have brilliant ideas in order to be able to understand about the opportunities that occurred in the industrial revolution so as to come up with the right solution for the school leaders in facing the era of the industrial revolution. It is also hoped that the challenge of the school leaders’ leadership in the industrial revolution era will lead to the right solution for school school leaders in carrying out their duties and functions in the era of industrial revolution 4.0 and 21st century learning.

The school leaders plays an important role in monitoring education, this is in line with the results of research conducted by Fitrah (2017) that the school leaders has an important role in making various efforts to improve the quality of education by monitoring and evaluating programs that are oriented towards the school’s vision and mission. The last competency that the school leaders must have is social competence which can be seen from the collaboration between the school leaders and the community, schools are required to be able to participate in social activities and have social sensitivity in the surrounding environment. Research related to the readiness of school school leaders in the era of the industrial revolution 4.0 has been conducted by Sugianto (2019), the results of the study indicate that there is a need for the professionalism of school leaders, the readiness of school school leaders to face challenges, and the readiness to provide solutions to the challenges of school leaders leadership challenges in the revolutionary era. Industry 4.0. Ideal leadership is leadership that follows the demands of the 4.0 industrial revolution, leaders who follow technological developments to be able to influence, encourage, guide, direct and mobilize others to carry out and develop education and teaching in the era of industrial revolution 4.0 (Wulandari, Febriansyah, Salwa, & Sulaiman, 2019).

**CONCLUSION**

This study concludes by transactional leadership having a positive and important impact on the performance of teachers, transformational leadership has a fair and significant effect on teacher performance, democratic leadership has a positive and significant impact on teacher performance, autocratic leadership has a positive and important impact on teacher performance, leadership Several recent studies have shown that the leadership capacities of school leaders are strongly linked to the success of the school. In reality, school leaders will be sure to build successful schools with appropriate skills and leadership strategies. However, schools are not effective as educational forums, due to constraints in the understanding and implementation of leadership strategies at schools. Thus, there must be an appropriate leadership strategy that can be implemented by the school leaders when managing schools so that they are effective and achieve educational goals. Becoming a school school leader must go through various stages of selection, from administrative selection, academic selection, to having to pass training and training for prospective school school leaders. In the current era of the industrial revolution 4.0, a strategic problem that has received a lot of attention is the importance of improving the quality of graduates to be able to compete in the world of work. Although at first glance this is identical to the SMK level, but in policy terms, the implementation of the 2013 curriculum which replaces the 2006 curriculum aims to improve the quality of education as well as the competitiveness of graduates at each level. The era of the industrial revolution 4.0 is an era where a lot of work has been done digitally. This study provides a basis for primary school teacher leadership in the education 4.0 era and can be a reference for further research and can also be developed at other school levels and elsewhere.

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Develop Model of Transactional, Transformational, Democratic and Authentic Leadership Style for Indonesian School Performance in Education 4.0 Era


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