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Effect of E-Leadership and Social Interaction on Managerial Competency of Junior High School Principals

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ABSTRACT

This study aims to analyze the effect of E-Leadership and social interaction both partially and simultaneously on the managerial competence of junior high school principals in Dumai City. The population of this study were 37 people consisting of 22 State Junior High Schools and 15 Private Junior High Schools in Dumai. The sample of this research was a saturated sample, that is, the entire population were sampled. Data collection techniques were using questionnaires for the variables E-leadership, social interaction, and managerial competence of school principals. The data analysis technique used in this research was descriptive statistical analysis and inferential statistical analysis. The results of this study indicate that there is a significant influence between the variable E-Leadership (X1) and social interaction (X2) on the managerial competence of school principals (Y) SMP in Dumai City 19.4%. This means that the better the E-Leadership and social interaction of the principal, the better the managerial competence of the principal.

1. Introduction

Managerial competence is the process of achieving goals through efficient use of human and material resources by using skills, which must be internalized, and mastered by leaders or managers starting from planning, leading, coordinating, delegating, controlling, evaluating, and budgeting in order to achieve the results of organization he leads in achieving the goals that have been determined by the organization.

Management has a very important function. According to the theory put forward by Faiyol (2020) there are five management functions that must be carried out by managers, namely: (1) designing, (2) organizing, (3) commanding, (4) coordinating, and (5) controlling. Meanwhile, Stone divides management

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functions into four, namely: (1) planning (planning), (2) organizing (organizing), (3) leading (leading), and (4) controlling (controlling).

Based on the attachment to the Regulation of the Minister of National Education, Number 13, Year 2007, dated April 17, 2007, regarding the Standards of Principals, a school principal must have competence or ability with five dimensions of competence, namely: personality competence; managerial competence; entrepreneurial competence; supervisory competence; and social competence.

Managerial competence, principals are increasingly important to be improved in line with the increasingly complex demands of the principal's duties, which require more effective and efficient performance support in (Mulyasa, 2012). In addition, the development of science, technology, art, and culture that is applied in educational activities in schools also tends to move forward more rapidly so that it demands professional mastery. The development is increasingly rapid, creating changes in the needs of students and the community.

Technological developments have penetrated into all lines of life, including in the world of education. Therefore, the Minister of Research, Technology and Higher Education (2018) stated that in facing the era of the industrial revolution, several things must be prepared including: a) preparation of a more innovative learning system. to produce graduates who are competitive and skilled, especially in the aspects of data literacy, technological literacy and human literacy. b) Reconstruction of higher education institutional policies that are adaptive and responsive to the industrial revolution in developing the required transdisciplinary sciences and study programs. c) Preparation of responsive, adaptive and reliable human resources to face the industrial revolution. d) Rejuvenation of infrastructure and development of education, research and innovation infrastructure also needs to be carried out to support the quality of education, research, and innovation.

Leadership was first coined in the middle of the century and it refers to the process of social influence mediated by the latest information technology to bring about changes in attitudes, feelings, thoughts, and behaviors or performance with individuals, groups or organizations (Avolio, 2001). E-Leadership is influenced by time, distance, and cultural considerations in how they actively shape the views of their team members (Avolio, 20014)

In accordance with developments in the 4.0 revolution era, everything has changed and education is one of the ones that is affected by global changes, namely learning, providing information, and the process of transferring knowledge via the internet. This requires school leadership to also follow developments by leading electronically (E-Leadership) using social interactions that can be understood by everyone.

Therefore, E-Leadership and social interaction are two related aspects in leading an educational institution. This is due to the reciprocal relationship and

communication between leaders and teachers in schools both face-to-face and using media in the internet network. This affects the managerial competence of principals in leading educational institutions (Ningsih et al., 2020; Hidayati et al., 2021; Efriza et al., 2020).

The Principal Duties of the Principal according to Permendikbud Number 6 of 2014 CHAPTER VI article 15 are as follows: the workload of the Principal as referred to in paragraph (1) which reads "The principal's workload is entirely to carry out the main managerial tasks, entrepreneurship development, and supervision of teachers. and education personnel aim to develop schools and improve school quality based on 8 (eight) national education standards."

Managerial competence is the process of achieving goals through efficient use of human and material resources by using skills, which must be internalized, and mastered by leaders or managers starting from planning, leading, coordinating, delegating, controlling, evaluating, and budgeting in order to achieve the results of organization he leads in achieving the goals that have been determined by the organization.

The principal's managerial competence is the principal's ability to manage and organize planning; organizational development; optimizing school resources; manage change and development of effective learning; create a conducive and innovative climate; empowerment of infrastructure facilities; managing community and school community relations; curriculum development; accountable financial management; and the use of information and communication technology (ICT).

In general, leadership is defined as the executor of authority and decision makers and can also be in the form of an initiative to act that produces a consistent pattern in order to find a solution to a common problem (Thoha, 2019). E-Leadership is defined as the process of social influence mediated by AIT to produce changes in attitudes, feelings, thoughts, behaviors, and/or performance with individuals, groups, and/or organizations. E-Leadership can occur at all hierarchical levels within an organization and can involve one-to-one and one-to-many interactions within and across large units and organizations. It may be related to one individual or shared by several individuals as the focus changes over time (B.J, Avolio et al., 2000).

E-leadership can be defined as online leadership, namely leadership in cyberspace. Organizations in cyberspace are known as virtual organization VOs (VOs). Teams in virtual organizations (VTs) are known as Virtual Teams (VTs). It exists in two forms, in the present form which is a blend of traditional leadership and E-Leadership called E-leadership 1.0, while the form which is entirely in cyberspace is called E-leadership 2.0 (D.C Misra, 2009).

E-leadership leadership combines leadership factors with the ability to take advantage of technological advances. E-leadership tries to take advantage of technological developments in influencing subordinates according to the values

adopted by school principals. Based on the results of Wildahlia's research, (2015) that E-leadership has a positive effect on the management process. E-leadership is a very important factor in relation to efforts to improve good management processes. The results of this study indicate that between the two constructs studied the effect on the process, the construct that has the greatest influence is E-leadership.

The social process is a dynamic aspect of people's lives. Where in it there is a process of relationship between humans and other humans. Humans are social creatures, therefore in their daily life humans will definitely need the help of others. It was clear that humans would not be able to live in this world alone without the help of others. According to Suryana (2020), the Leadership Functions include: 1) Planning function, the working concept of E-Leadership in planning is a concept of making and using information technology that can support the formulation and planning of a manager. The way it works is by creating a planning system that runs on a computer as a sub-system of E-Leadership using time-series models, causal models, and qualitative models.

Social interaction is a dynamic social relationship concerning the relationship between individuals, between groups of individuals, as well as individuals with groups and social interaction will occur if there is social contact and internal communication (Soekanto, 2012). Social interaction is a dynamic interplay of forces in contact between individuals and groups that results in changes in participants' attitudes and behavior according to (Suhertland, 2017). Meanwhile, Setyabudi (2020) regarding social interaction is a dynamic social relationship concerning the relationship between individuals, between groups of individuals, as well as individuals with groups and social interaction will occur if there is social contact and communication.

The principal as a leader must have effective human skills. Effective human skills are the skills to work effectively with people to lead, motivate, and influence others to work together to achieve goals (Hardjana, 2019). Therefore, leaders must be able to communicate effectively, act together, trust each other, be open to achieve the vision that has been proclaimed. According to Priansa, (2018) states that three managerial competencies are important for leaders to have, namely: a) conceptual competence, b), interpersonal communication competence, and c) technical competence. Interpersonal competence is related to the social interaction and communication of the leader. Based on the description above, this study aims to analyze the effect of E-Leadership and social interaction either partially or simultaneously on the managerial competence of junior high school principals in Dumai.

2. Methodology

This type of research is quantitative research. The sampling technique used a saturated sample. The number of samples in this study were 37 principals of junior high schools in Dumai City. The data collection technique was using a

questionnaire for each variable which was distributed via a link to the MKKS management. The data analysis technique used descriptive statistics and inferential statistics. Techniques to analyze the influence that exists between the variables that have been selected as shown below.

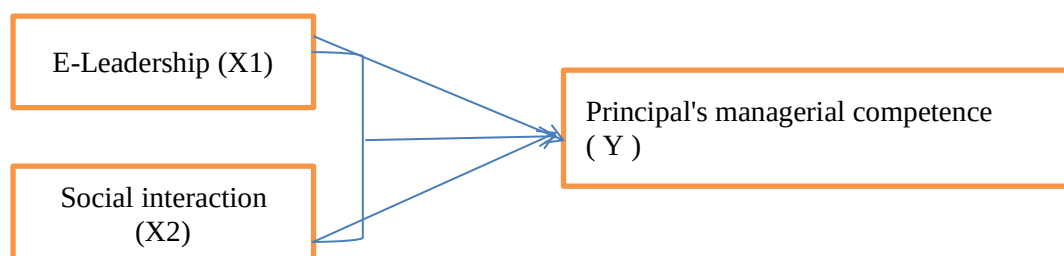


Figure 1 Research Constellation

The indicators in this study can be seen from the table below:

Table 1. Research variables and indicators

Variabel	Indikator	Source
Managerial Competence	1. Develop school plans for various levels of planning. 2. Develop school organization according to need. 3. Leading schools in the context of optimal utilization of school resources. 4. Creating a conducive and innovative school culture and climate for student learning. 5. Manage school finances in accordance with the principles of accountable, transparent, and efficient management. 6. Utilizing advances in information technology to improve learning and school/madrasah management	Peraturan Menteri Pendidikan Nasional Nomor 13 Tahun 2007
E- Leadership	1. Visionary 2. Converner 3. Team sponsors 4. Manager 5. Innovators 6. Mentor	Awang, Anwaruddin. 2009
Social interaction	1. Conversation 2. Cooperate 3. Positive thoughts 4. Mutual understanding	Sugiyo ,2005

The data analysis technique used the normality requirement test, linearity test. After that, test the hypothesis with simple and multiple regression tests, test significance, test the coefficient of determination.

3. Results and Discussion

Respondents in this study were 37 principals of junior high schools in Dumai City. Characteristics of respondents based on gender, age, and years of service. The results of the study can be seen in table 2.

Table 2. Characteristics of Respondents from Middle School Principals in Dumai City

No	Characteristics of Respondents		Persentase
1	Gender	Women	72,98%
2	Age range	50 – 60 years	51,35%
3	Years of service	0 – 1 years	48,65%

Judging from the frequency distribution of each variable, it was found that the managerial competence variable of SMP principals in Dumai City was in the high category with an achievement percentage of 86.49%, for the E-Leadership variable was in the medium category with a presentation of 48.65%, while the social interaction variable is at the moderate level with a percentage of 59.46%.

Based on the analytical requirements testing using the normality test and linearity test, it was found that: the normality test using Shafiro Wilk and the significance level = 0.05. Based on the data analysis, it is stated that the data is normally distributed because the significance value is 0.075. The results obtained that the significance of the principal managerial competence variable (Y) is normally distributed, because the sig value is greater than the alpha value ($0.75 > 0.05$), the E-leadership variable (X1) is normally distributed because sig is greater than the alpha value ($0.307 > 0.05$), and the social interaction variable (X2) is also normally distributed, because the sig value is greater than the alpha value ($0.219 > 0.05$). The significance value of each of these variables is > 0.05 which means that H_0 is accepted or the data from each variable is normally distributed. Thus, the requirements of the regression analysis are met.

The linearity test aims to determine whether two variables have a linear relationship or not significantly. This test is usually used as a prerequisite in correlation analysis or linear regression. Testing on SPSS using the Test of Linearity with a significance level of 0.05 based on SPSS version 23 data processing. The results of the linearity test based on the data using the ANOVA test show that the line is linear or H_0 is accepted because the significance value (Sig) at the linearity value is $0.020 < 0,05$. So it can be concluded that between the variables of the principal's managerial competence (Y) on E-leadership (X1) there is a linear influence.

Hypothesis testing in accordance with the statements that have been formulated, namely (1) There is a significant effect of E-Leadership (X1) on the managerial competence of the principal (Y), (2) There is a significant effect of Social Interaction (X2) on the managerial competence of the principal (Y), (3) There is a significant effect of E-Leadership (X1) and (social interaction (X2) together on the managerial competence of the principal (Y).

Based on the strength of the relationship between E-Leadership (X1) and the principal's managerial competence (Y) with a correlation coefficient = 0.400 and a determination coefficient = 0.160. This means that the value of R. Square (coefficient of determination) between X1 and Y has a contribution value of 0.160

= 16% and the rest is influenced by other factors. This effect is illustrated that for every increase of one unit of E-Leadership, it will also be followed by an increase in managerial competence of 0.262 one unit. From the results of the study it was concluded that, there was a significant influence between E-Leadership on the managerial competence of junior high school principals in Dumai City. This means that the principal's managerial ability can be determined by the principal's E-Leadership process.

This research is reinforced by the opinion (Kompri, 2017) which states that E-leadership is a general description of generalization and specialization leadership of a job by using self-efficacy on verbal information so that it has an influence on the managerial competence of the principal. other than that other research that supports this research is research (Blau, 2013) which states that E-leadership in school management is able to change school culture in this case many things are facilitated in its implementation such as in data-based decision making, monitoring the teaching and learning process, reporting process learning, school financial reporting and various other matters in improving school quality.

However, in my research, the E-Leadership of junior high school principals in Dumai City is in the medium category, while the results of the analysis of each indicator are in the high category. Therefore, it is necessary to further improve the E-Leadership of junior high school principals in Dumai City on the indicator of the sponsor team by having a school team to work together in improving the quality of schools both in real and virtual. Along with the development of E-Leadership technology, it will have a major influence on the principal's managerial process in achieving the vision and mission that has been planned for the achievement of national education goals.

Based on the strength of the relationship between social interaction (X2) on the managerial competence of the principal (Y) with a correlation coefficient = 0.348 and a determination coefficient = 0.121. This means that the value of R. Square (coefficient of determination) between X1 and Y has a contribution value of 0.121 = 12.1% and the rest is influenced by other factors. This effect is illustrated that for every increase in one unit of social interaction, it will also be followed by an increase in managerial competence of 0.269 one unit.

From the results of the study, it was found that, there was a significant influence between social interaction (X2) on the managerial competence of junior high school principals in Dumai City. This means that the principal's managerial competence can be influenced by the process of the principal's social interaction with educators and education staff. The results of this study are relevant to the opinion that the principal as a leader in carrying out managerial duties in schools needs to carry out social interactions by building harmonious interpersonal relationships and cooperation with educators and internal education (Hardjana, 2019). Another corroborating research is research which states that internal communication in an organization or school has a full or partial influence on the leadership of the principal according to (Kusuma, 2017).

In this study, the social interaction of junior high school principals in Dumai City was in the medium category, while the results of the analysis of each indicator were in the high category. Therefore, it is necessary to maintain the principal's social interaction in each indicator. Social interaction is a relationship between the principal and education and education staff that must be maintained properly so that the principal can work together in carrying out his managerial duties.

Based on the strength of the relationship between E-Leadership (X1) and social interaction (X2) on the managerial competence of the principal (Y) with a correlation coefficient = 0.441 and a determination coefficient = 0.194. This means that the value of R. Square (coefficient of determination) between X1 and Y has a contribution value of $0.194 = 19.4\%$ and the rest is influenced by other factors. This effect is illustrated that the regression coefficient (a) is 0.199 and the regression coefficient (b) is 0.352, meaning that every increase in one unit of social interaction is 0.199 and one unit of E-Leadership is 0.352, it will also be followed by an increase in managerial competence.

From the results of the study, it was found that, there was a significant influence between E-Leadership and social interaction on the managerial competence of junior high school principals in Dumai City. From the results of this study, E-leadership has an influence of 16% on managerial competence, social interaction has an effect of 12.1% on the managerial competence of principals, while 19.4% of the influence that is jointly given by E-Leadership and social interaction on principal's managerial competence. The rest is influenced by other factors outside of rigorous variables such as: strategic thinking, problem solving ability, information seeking, planning and organizing, concern for order, achievement orientation, customer service orientation, cooperation, flexibility, integrity, organizational culture, and others.

The results of this study are supported by previous research conducted by (Savolainen, 2014) which states that leadership in the digital world with the help of technology helps in the managerial process of school principals, so that daily leadership work is a social skill that interacts with educators and education staff. The need to build trust as the main asset for cooperation within the organization. It can be concluded that digital leadership and social interaction help principals in the managerial process in schools.

Another study by stating that the pattern of interaction in organizations or institutions is mediated through digital media. So that the leadership process carried out makes E-Leadership with the new organizational managerial process a virtual system. Leaders carry out managerial processes that include skills, attitudes, knowledge and professionals digitally and change interaction patterns from traditional to social interactions mediated by information technology in the modern era (Mohammad, 2009).

The implications of E-leadership and social interaction in this digital age are very important to be applied by principals in the managerial process. Planning school work plans, school budget work plans and financial reports are very easy to make

using internet applications. In the current implementation of leadership and monitoring, it can be done virtually without being bound by time and place, only social interactions such as communication and collaboration between educators and education are needed. In the future, principals are expected to master technology more in order to facilitate the principal's duties as managers in schools that follow technological developments. Technological developments have indirectly changed the previous conventional leadership pattern to digital leadership.

4. Conclusion

The managerial competence of principals in this digital era in carrying out their duties, functions and roles is determined by many factors. The principal's ability factor in utilizing E-leadership turned out to have a significant effect on the principal's managerial competence, meaning that the better and more effective the principal's mastery in E-leadership is, the better the principal's managerial competence, and vice versa. The social interaction factor of the principal with educators and education staff has a significant influence on the managerial competence of the principal. This means that the better the principal's social interaction relationship, the better the principal's managerial competence, and vice versa. In addition to the E-Leadership factor and the principal's social interaction, there are other factors that influence the principal's managerial competence, such as: 1) strategic thinking, 2) problem solving ability, 3) information seeking, 4) planning and organizing, 5) concern for order, 6) achievement orientation, 7) customer service orientation, 8) cooperation, 9) flexibility, and 10) integrity.

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