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The Competency of the Head of the District Health Services (DHS) and the Development of District Public Health Performance

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This study aims to confirm the relationship between the competency of the Head of the District Health Services (DHS) and the District Public Health Development Performance in North Sumatra Province. In Indonesia, the district autonomy policy came into force in 2000, and since then each region has been given authority by the central government to carry out the development in its area for all sectors including the health sector. This research is a quantitative survey research with a purposive sampling technique. The results showed that there was a correlation between the competency of the Head of the DHS and the District Public Health Development Performance in North Sumatra Province. Therefore, to improve the performance of public health development in the regions, more serious attention needs to be paid to one's competency since recruitment, coaching, and even on the fit and proper test of someone who holds the position of Head of the DHS.

Key words: *Competency, Head of DHS, performance.*

Introduction

Achieving optimal health status is carried out with a variety of approaches, which are promotive, preventive, curative, and rehabilitative approaches. The previous health development paradigm oriented "health for survival" experienced a shift to "health for human development". Therefore, health performance indicators are no longer limited to various indicators of medical services, but also various indicators of public health services such as

behaviour, infectious diseases, and environmental health. This shows that health efforts are carried out with various approaches that are multi-dimensional, multi-sector and multi-disciplinary in a comprehensive manner. This approach is referred to as the approach to public health development which implies that the subject and object of health development are no longer individuals but people in public as a whole.

The performance of health development with the paradigm approach "health for human development" is expected to experience a significant increase if health leadership is carried out through the public health approach and is no longer limited to the medical or medical approach. Therefore, the competency of the Head of the District Health Services (DHS) is the main determining factor for the success of health development in the district.

The term competency in the work field first appeared around the early 1970s when a US scientist published an article entitled "Testing for competence rather than intelligence". The first competency test was conducted by the United States Department of Foreign Affairs in selecting prospective employees in the Foreign Information Officer (FSIO). According to Spencer and Spencer (1993), the selection method that was previously based on intelligence and academic achievement testing was not able to provide a precise estimate of the success of FSIO at work so that it was eventually replaced by competency testing.

The performance of health development in the current era of regional autonomy is not only a cumulative result of the performance of district or city development but also highly dependent on the extent of the performance of the DHS. The position of Head of the DHS as the leader of the DHS is very strategic in determining the success of health development in the districts in particular and in national health development in general. Therefore, the competency of the Head of the DHS is an important and decisive component in health development efforts.

The competency of the Head of the DHS can be interpreted as the capabilities and characteristics possessed by the Head of the Health Organisation in the form of knowledge, skills or expertise, and the attitude of behaviour required in carrying out the duties and functions of his office so that it can be carried out properly.

Conducting a study of the relationship between the competency of the Head of the DHS and the District Public Health Development Performance is certainly an urgent activity in line with the rapid development of various health determinants. One model of health determinant areas is developed by Newberry and Taylor (2005), which form the conceptual framework for developing the Public Health Development Index (PHDI).

PHDI is a collection of health indicators that can describe health problems. This set of health indicators both directly and indirectly plays a role in improving long and healthy life expectancy. The PHDI, which was compiled in 2007, uses 24 (twenty-four) indicators and has a significant correlation with life expectancy of 0.512 (Ministry of Health of the Republic of Indonesia / MHRI 2010). The 2007 PHDI was then developed in 2013 to become 30 (thirty) indicators known as PHDI 2013 and PHDI 2018. The development of this indicator is aimed at enriching indicator information that supports the basis of health sector development policymakers in the regions. The results of the 2013 data analysis using the 2007 model and the 2013 model have a statistical correlation value of 0.93, and the model can explain 0.86 or 86%. The meaning of this value is that if it approaches the value of 1 then the two models have almost the same meaning. Using the new model shows the same conditions as the old model but can provide more indicator information (MHRI, 2010).

North Sumatra Province, based on the 2007 PHDI, in 2010, ranked 10th out of 33 provinces in Indonesia and ranked 15th in 2013. Based on the 2013 PHDI, it ranks 10th out of 33 Provinces in Indonesia in 2013 and ranks 5th 20 in 2018. This shows that the North Sumatra Province's PHDI compared to other provinces in Indonesia is still far from what was expected and has even decreased.

In addition to the still low health development achievements in North Sumatra Province, another challenge is the gap in the success of public health development between a district in North Sumatra Province so that it requires serious attention. This gap can be seen in the PHDI indicator. The district rank in North Sumatra Province in 2010 was 57th to 482nd based on the 2007 PHDI indicator, 12th to 486th based on the 2013 PHDI indicator and in 2018 34th to 490th out of 497 regencies or cities in Indonesia.

This gap is also a challenge in achieving the various targets set in the Sustainable Development Goals (SDGs). The success of the SDGs cannot be separated from the role of the District Government because it is closer to its citizens, has authority and funds, can make various innovations, and is the spearhead of health service providers and various health policies and programs. This gap is also, of course, an indication of the variability in the competency of the Head of the DHS.

This study aimed to explain the relationship between the competency of the Head of the DHS to the Health Development Performance in North Sumatra Province, as a follow-up study from previous research (Dakhi et Al., 2018).

Literature Review and Hypotheses

As a manager, the Head of the DHS, according to Chadwick et al. (2015), Chirico et al. (2013), requires continuous new knowledge from a dynamic environment and uses it to accumulate an asset portfolio, to develop capabilities, and to leverage those assets and capabilities in order to create value and maximising performance of health development in the district. To carry out these activities, the Head of the DHS develop their dynamic managerial capabilities which are defined as competencies used to build, integrate, and reconfigure the organisation of assets and capabilities (Kor and Mesko 2013) to respond to the changing environment.

Competency is a characteristic that is observed in the form of applied knowledge or actual behaviour which in one way or another, contributes to the success of functioning in a specific or functional role (Van Beirendonck, 2009). Spencer and Spencer (1993) state that competency can be measured through: achievements and actions (achievement orientation, concern to order, initiative, information seeking, planning, budgeting, organising, quality-oriented and initiative), helping and human services (interpersonal understanding, customer service orientation, and responsiveness), leadership (impact and influence, organisational awareness, and relationship building), managerial (developing others, directiveness, teamwork, and team leadership), cognitive (analytical thinking, conceptual thinking, and expertise), personal effectiveness (integrity, self-control, self-confidence, flexibility, and organisational commitment), local specific leadership (understanding of main value of the local cultural understanding values and local customs understanding). Research by Dakhi et al. (2018) shows that local specific leadership is an indicator of competency measurement. Local specific leadership is a managerial social capital that helps obtain important resources and critical information for decision-making (Hodgkinson and Healey 2011). This relates to managerial cognition, which consists of belief systems and mental processes that managers use for decision-making (Helfat and Peteraf 2014). Previously, the results of Harris and Bleakley's research (1991) showed that leadership, decision-making, and communication are competencies that must be possessed in a high leadership position. This is in line with the results of Griffith's (1997) research, which shows that leadership competencies include technical competencies, interpersonal competencies, and strategic competencies. Zhanming and Peter's research (2010) also indicates that competencies have a causal relationship with different levels of management, health services, and health service contexts.
Therefore, the research hypotheses are as follows:

H1: There is a relationship between achievements and actions competence of the Head of the District Health Services with the development of district public health performance.

H2: There is a relationship between the helping and human services competence of the Head of the District Health Services with the development of district public health performance.
H3: There is a relationship between the leadership competence of the Head of the District Health Services with the development of district public health performance.
H4: There is a relationship between the managerial competence of the Head of the District Health Services with the development of district public health performance.
H5: There is a relationship between the cognitive competence of the Head of the District Health Services with the development of district public health performance.
H6: There is a relationship between the personal effectiveness competence of the Head of the District Health Services with the development of district public health performance.
H7: There is a relationship between the local specific leadership competence of the Head of the District Health Services with the development of district public health performance.

Method

This research is quantitative survey research. The study was conducted from 33 (thirty-three) districts in the area of North Sumatra Province which is an area with high heterogeneity so that it can be used as a representative of Indonesia with demographical diversity such as ethnicities, religions, and regional characteristics. Data collection was carried out in January - June 2019. The research sample was determined by purposive sampling with a minimum number of 100 respondents for descriptive research (Fraenkel, 2012). Public health performance data is secondary data sourced from the Public Health Development Index (PHDI) published by the Kementerian Kesehatan RI (2019), while health care competency data is primary data collected through a questionnaire distributed to the Regional Head (superiors of the Head of the DHS), the Head of the Regional Development Planning Agency, the Head of the Education Service, the Head of the Division at the DHS and all Heads of the Puskesmas/Public Health Centre (subordinate to the Head of DHS). The competency questionnaire is used as a research instrument which includes achievements and actions, helping and human services, leadership, managerial, cognitive, personal effectiveness, and local specific leadership.The questionnaire measures these variables on the aspects of importance on a Likert scale, namely: 1 = not important; 2 = less important; 3 = quite important; 4 = important; and 5 = very important. Space is provided for respondents who want to add competency variables or indicators that are considered important but are not yet available in the questionnaire. The validity test of the research instrument showed r count> 0.3, demonstrating the validity, and the reliability test showed r count> 0.6, demonstrating the reliability (Hair et al., 1998). Hypotheses are tested using statistical tests.

Results

Table 1 presents descriptive statistics.

Table 1: Univariate analysis

Variable	**n**	**%**
Independent Variables		
Achievement and Action		
No Good	18	54.5
Good	15	45.5
Helping and Human Service		
No Good	15	45.5
Good	18	54.5
Leadership		
No Good	21	63.6
Good	12	36.4
Managerial		
No Good	13	39.4
Good	20	60.6
Cognitive		
No Good	17	51.5
Good	16	48.5
Personal Effectiveness		
No Good	21	63.6
Good	12	36.4
Local Specific Leadership		
No Good	16	48.5
Good	17	51.5
Dependent Variables		
Performance		
Low	17	51.5
High	16	48.5

Based on Table 1, it can be seen that proportionally the competency of the Head of the DHS in North Sumatra Province with indicators of achievement orientation, concern for order, initiative, information seeking, interpersonal understanding, customer service orientation, impact and influence, organisational awareness, relationship building, developing others, directiveness, teamwork, team leadership, analytical thinking, conceptual thinking, expertise, self-control, self-confidence, organisational flexibility, commitment, and local specific leadership vary with competencies in both categories ranging from 36.4% - 60.6 % and

competencies that are categorised as not good range between 39.4% - 63.6%. On the other hand, the performance of inter-regional public health development in the Province of North Sumatra was 48.5%, including the high category and the rest was a low category.

Table 2: Bivariate analysis

	Performance		**Total**	**p-value** *)	**Asymp. Sig. (2-tailed)** **)
	Low	**High**			
Achievement and Action					
No Good	13	5	18	0.011	0.037
Good	4	11	15		
Helping and Human Service					
No Good	11	4	15	0.025	0.035
Good	6	12	18		
Leadership					
No Good	14	7	21	0.025	0.012
Good	3	9	12		
Managerial					
No Good	10	3	13	0.022	0.023
Good	7	13	20		
Cognitive					
No Good	12	5	17	0.027	0.031
Good	5	11	16		
Personal Effectiveness					
No Good	14	7	21	0.025	0.012
Good	3	9	12		
Local Specific Leadership					
No Good	12	4	16	0.011	0.046
Good	5	12	17		

*) *Chi-Square Tests*

**) *One-Sample Kolmogorov-Smirnov Test*

Table 2 shows that all competency indicators of the Head of the DHS (Achievement and Action, Helping and Human Service, Leadership, Managerial, Cognitive, Personal Effectiveness, and Local Specific Leadership) reviewed in this study have a relationship with the performance of the district public health development ($p < 0.05$) with normal data distribution.

Table 3: Multivariate analysis

Variable	p-value	Category
Achievement and Action	0.012	Good
Helping and Human Service	0.027	Good
Leadership	0.027	Good
Managerial	0.024	Good
Cognitive	0.028	Good
Personal Effectiveness	0.027	Good
Local Specific Leadership	0.012	Good

Table 3 shows that all variables were eligible for multivariate analysis ($p < 0.25$), so it is feasible to proceed with multivariate statistical tests.

Table 4: The first multivariate analysis

	B	S.E.	Wald	df	Sig.	Exp(B)
1st Analysis						
Achievement and Action	33.307	11252.511	.000	1	.998	2.919E14
Helping and Human Service	33.149	11252.511	.000	1	.998	2.491E14
Leadership	-17.232	7956.740	.000	1	.998	.000
Managerial	1.721	1.744	.974	1	.324	5.591
Cognitive	2.014	1.479	1.856	1	.173	7.496
Personal Effectiveness	-15.782	7956.740	.000	1	.998	.000
Local Specific Leadership	3.120	1.689	3.412	1	.065	22.646
Constant	-77.850	25161.398	.000	1	.998	.000
2nd Analysis						
Local Specific Leadership	2.602	1.081	5.798	1	.016	13.495
Managerial	2.085	1.086	3.685	1	.055	8.046
Cognitive	1.792	.998	3.227	1	.072	6.002
Constant	-10.197	3.717	7.527	1	.006	.000
3rd Analysis						
Local Specific Leadership	2.277	.930	5.993	1	.014	9.747
Managerial	2.158	.970	4.944	1	.026	8.652
Constant	-7.037	2.526	7.757	1	.005	.001
The End Analysis						
Local Specific Leadership	1.974	.785	6.319	1	.012	7.200
Constant	-3.073	1.271	5.840	1	.016	.046

Based on the data in Table 4, it can be seen that after going through several stages of selection, the competency indicator of the Head of the DHS that has the most influence on the

performance of public health development is local specific leadership. However, before ascertaining whether these variables are indeed the most influential, a study of changes in the value of Odds Ratio (OR) of the variables that passed the selection, namely local specific leadership, managerial, and cognitive.

Table 5: The Change in Odds Ratio (OR)

Variable	**Change in OR Value**		
Local Specific Leadership	13.495	9.747	7.200
Managerial	8.046	8.652	
Cognitive	6.002		

The results of the analysis in Table 5 show that a change in the value of Odds Ratio (OR)> 10%, which indicates that more analysis is needed by involving the three variables.

Table 6: The second multivariate analysis

	B	S.E.	Wald	df	Sig.	Exp(B)
Local Specific Leadership	-2.602	1.081	5.798	1	.016	.074
Managerial	-2.085	1.086	3.685	1	.055	.124
Cognitive	-1.792	.998	3.227	1	.072	.167
Constant	2.762	1.051	6.904	1	.009	15.838

The results of multivariate analysis in Table 6 show that the local specific leadership variable has the highest OR so that it affects the dependent variable the most, which means that in this study the indicator local specific leadership in the competency of the Head of the DHS has the greatest influence on the development of ppublic health performance.

Discussion

District Health Services (DHS) is one of the regional government organisations that help regional heads, especially in the health sector. The competency of the Head of the DHS is an instrument of the ability of the Hhead of the DHS in managing government in the fields of health, healthy development, and health services for the community. Competency is also a synergy to the qualifications of the head of the DHS.

This study found that there is a relationship between the competency of the head of the DHS (achievements and actions, helping and human services, leadership, managerial, cognitive, personal effectiveness, and local specific leadership) with the development of district public health performance. The results of this study are in line with the theory of Spencer and Spencer (1993) and support the results of previous studies (Dakhi et al., 2018).

Moreover, in this study, the indicator local specific leadership in the competence of the head of the DHS has the greatest influence on the development of public health performance. These results are consistent with the context of the multi-ethnic North Sumatra Province and are representative of the Indonesian people. The Tapanuli region which is dominated by the Batak sub-ethnic group, the Karo area which is dominated by the Karo sub-ethnic group, the Tanjung Balai area which is predominantly Malay, and the Nias area which is dominated by the Nias ethnic group certainly need someone in the post of the DHS head who understands and respects the main value of the local cultural understanding values and local custom understanding. Ahead of the DHS is expected to think globally, be contextualised, and act locally. This expectation is also following one of the principles of regional autonomy, namely the empowerment of local wisdom, including in the field of public health development. Therefore, in conducting recruitment in the position of head of the DHS, it is time to prioritise those who understand and appreciate the main values of the local cultural understanding and local custom understanding in the area.

The empowerment of local wisdom is one indicator of the success of regional autonomy. The head of the DHS in carrying out its duties must understand the main values of culture, recognise and appreciate the main values of culture, as well as develop and utilise the main values of local culture, as well as customs in the local area. North Sumatera Province which has a diversity of cultural values and customs is a challenge and at the same time an opportunity for the head of the DHS in implementing various health development programs in areas based on local wisdom. It is time for several health programs in the regions to be carried out through the approach of local cultural values and customs.

Conclusion

This study shows that there is a relationship between the competency of the head of the DHS and the performance of regional public health development in North Sumatra Province. The competency indicators consist of achievement orientation, concern for order, initiative, information seeking, interpersonal understanding, customer service orientation, impact and influence, organisational awareness, relationship building, developing others, directivity, teamwork, team leadership, analytical thinking, conceptual thinking, expertise, self-control), self-confidence, organisational flexibility, commitment and local specific leadership. Therefore, to improve the performance of public health development, it requires more serious attention to various competency indicators both in terms of recruitment, coaching, and even fit and proper test of someone in the position of head of the DHS.

Limitation

The results of this study have proven several competency dimensions and indicators related to the district public health performance. However, it still requires the development in the form of software programs that can be used to assess the competence of someone occupying the position of head of the DHS. In addition, the limitations of the results of this study also provide opportunities for conducting research on the competency of DHS's head position, which is more directed towards the behaviour of someone who holds a position as the head of the DHS in performing their main duties and functions as the leader of the DHS organisation.

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