Adiati, R.P., Handoyo, S., Wicaksono, D.A., Purba, H.P., & Syarifah, D. (2021). Organizational health structure and measurement of higher education in Indonesia. *Indigenous: Jurnal Ilmiah Psikologi*, 6(1). 1-15 doi: http://dx.doi.org/10.23917/indigenous.v6i1.11147

Organizational Health Structure and Measurement of Higher Education in Indonesia

Rosatyani Puspita Adiati¹, Seger Handoyo², Dimas Aryo Wicaksono³, Herison Pandapotan Purba⁴, Dewi Syarifah⁵

Departemen Psikologi Industri dan Organisasi, Universitas Airlangga^{1,2,3,4,5} rosatyani.adiati@psikologi.unair.ac.id¹, seger.handoyo@psikologi.unair.ac.id², aryo.wicaksono@psikologi.unair.ac.id³, herison.purba@psikologi.unair.ac.id⁴, dewi.syarifah@psikologi.unair.ac.id⁵

Submitted: 13 June 2020 Accepted: 3 November 2020 Published: 31 March 2021

Abstract. The changing of governance and the increasing target of university challenge organization to maintain organizational health to support university member to achieve optimal performance. This study consisted two steps. First study was held to undertand the structure of organizational health factor, spesifically in public university setting, and involving 204 lecturers and staffs from 3 public universities. We used exploratory factor analysis for reducting dimensions of organizational health. It revealed that organizational health consists of four factors, which are positive leadership, organizational virtue, positive relationship, and resource support. Second study aimed to identify organizational health condition in those public universities in Indonesia using the 4 factor of organizational health that were generated in study 1. We asked 398 lecturers and staffs from 6 state universities to participate in study 2. We found that organizational health conditions were quite good. Data collection at this study used convenience sampling technique by questionnaire. Further data analysis showed required improvement is needed, related to the aspects of Organizational Virtue, which indicates the ability of the organization to maintain their core activity and value, face pressure from outside and also internal people. Furthermore, Resource Support factor is also found as a factor with lowest result, it indicates there were some deficiency in facility to support organization objective.

Keywords: higher education; organizational health; positive leadership; organizational virtue; positive relationship; resource support

INTRODUCTION

Currently, the situation of higher education in Indonesia is being dominated by the internationalization of higher education. Higher education as a research institution is expected to be able to provide support through the improvement of the quality of education and research, which in turn will produce quality graduates as well as scientific works with global quality. The Indonesian government, especially the Ministry of Research and Higher Education, attempts to encourage the internationalization of higher education through various programs such as the extension and facilitation of various scholarships for students in master and doctoral programs, as well as increasing targets and international publications through journals. Besides, higher education

is encouraged to collaborate with other countries in terms of research and teaching to improve the quality of higher education graduates to compete in the global arena, which has shown subtle improvement (Tilley & Pellini, 2017). Recently, the effort to increase the performance of higher education institutions has also been added up by the latest issue that foreign lecturers will be paid with international standards (Awaliyah, 2018).

The drive for change encourages universities to reform their governance, particularly lecturers. The future implication of this government program is that universities must foster numbers of research and publication, actively improve the competence and capacity of their human resources, and participate in global forums to be involved in international cooperation.

In the context of organizational theory using a psychological perspective, organizations are perceived as dynamic organisms alike humans (Morgan, 2006 in Digha, 2014). Therefore, understanding organizational health will be very useful for formulating performance strategies. Organizational health is a state in which the organization functions effectively, adapts appropriately, and grow and develop to face increasingly complex challenges (Stanford, 2013). The urge to identify organizational health conditions is also suggested by Xenidis and Theocharous (2014) that the concept of organizational health will assist organizations to determine the steps taken in solving malfunctions in organizational processes, comparing organizational progress over time, and juxtaposing health conditions of various organizations.

With respect to the general condition of higher education in Indonesia along with the changes being carried out, it is necessary to understand the condition of organizational health. Mapping of organizational health conditions in higher educations was also carried out in Singapore (Ho, 2000) showing that universities identified as healthy displayed a positive influence on university performance. In support of the previous statement, Smith (2002) in Zahed-Babelan and Moenikia (2010) stating that organizational health is a framework that can be used to explain climate in school organizations.

Furthermore, Aguirre et al. (2005) mention interesting findings of organizational health that healthy organizations evidently have a greater advantage on average. Unhealthy organizations tend to make blunt decisions, besides that job description given to the employees is less in unhealthy organizations. Aguirre et al. (2005) also state that companies that earn more income are classified as healthy compared to those with small sizes and profits. Thus, the identification of organizational health in higher education is important to understand to what extent the government policies affecting the management of the organization have benefited or impacted the universities and society.

Research on organizational health in the context of Indonesian society is very limited, especially in educational settings. Several studies on organizational health in various organizations in Indonesia were conducted for several purposes. Franciska and Welly (2013) state that organizational health will create more optimal organizational work performance in the long term, including direction, leadership, culture and climate, accountability, coordination and control, capability, motivation, external orientation, innovation, and learning. The same statement is also expressed by Harjanti and Gustomo (2017) that organizational health consisting of internal alignment, quality of execution, and renewal capacity are determinants of organizational success.

Research on organizational health in the education sector is mostly carried out in middle and high school settings (Farahani et al., 2014; Zahed-Babelan & Moenikia, 2010), but there has been no research on organizational health in higher education yet. Research on organizational health in the secondary and higher education sector has several opinions regarding determinant factors of organizational health. Hoy et al. (1991) in Zahed-Babelan and Moenikia (2010) state

that there are 7 organizational health factors, namely institutional integrity, principal influence, consideration, resource support, morale, and academic emphasis. In contrast, Akbaba (1997) in Zahed-Babelan and Moenikia (2010) states that organizational health in educational settings consists of 5 factors; organizational leadership, organizational integration, organizational identity, organizational product, and organizational environment. Therefore, research on organizational health in higher education is a compelling matter to study because of the fundamental differences between the management of higher education and other education levels.

This article aims to comprehend the condition of organizational health in the scope of state universities, as well as how people in the higher education environment, either lecturers or educational staff, perceive to which extent the institutions they work to have healthy institutional governance and eventually will have an effect on excellent institutional performance.

Therefore, this study attempts to identify the dimensions of organizational health (OH) and map organizational health conditions in the context of higher education in Indonesia. It is expected that this study on OH in the context of higher education in Indonesia will contribute to the formulation of a strategy for higher education in Indonesia in responding to the ongoing challenges of internationalization. The research questions arising in this research are: (1) What is the structure of the organizational health measurement tool in state universities in Indonesia? and (2) How is the condition of organizational health of state universities in Indonesia?

METHOD

This research is a quantitative study comprising two stages; (1) constructing organizational health research instruments and (2) mapping organizational health conditions.

Study 1

The research instrument was constructed from January to April 2015. Data collection for the preparation of organizational health instruments involved 204 subjects of lecturers and educational staff at three state universities in Surabaya (n = 92, 58, and 42). Data were collected using nonprobability sampling method with a convenience sampling technique. Convenience sampling is a data collection technique that highlights the ease of access to participants (Gravetter & Forzano, 2012). Items in the questionnaire were adapted from an Organizational Health scale including 7 (seven) aspects, namely collegial leadership, teacher affiliation, institutional integrity, principal influence, resource support, academic emphasis, and morale. The use of these items is based on research by Hoy et al. (1987) in Farahani et al. (2014) which constructed organizational health for primary, secondary and high school levels. This questionnaire contains demographic data that must be filled in by subjects (name, sex, age, job tenure, work unit, position) and 44 items that measure 7 aspects of the organizational health. The organizational health scale was adapted from research by Hoy and Feldman (1987) In research by Farahani et al. (2014) which showed high reliability (more than 0.70) in each aspect, consisting of institutional integrity (7 items), collegial leadership (5 items), principal influence (5 items), resource support (5 items), teacher affiliation (5 items), academic emphasis (8 items), and morale (9 items).

The data analysis used in constructing the instrument in this study is the exploratory factor analysis using the orthogonal rotation (varimax) method to understand how the structure of organizational health factors was, given that the measuring instrument used previously measured organizational health at educational institutions at different levels. Data analysis was performed using SPSS 22.

Study 2

Organizational health measuring instruments that have been tested in study 1 were distributed to research samples at 6 six state universities in Indonesia from June to November 2015. The subjects of phase two of the research were lecturers and educational staff working in several state universities comprising 1 (one) state university in Bandung, 1 (one) state university in Medan, 3 (three) state universities in Surabaya, and 1 (one) state university in Yogyakarta. Samples involving were 398 subjects from a total of 600 questionnaires distributed, while the remaining 202 questionnaires did not return. The distribution of respondents in this study were 3 state universities in Surabaya with 98, 58, and 82 subjects respectively. Data were collected using nonprobability sampling method with a convenience sampling technique. The weakness of this technique is the lack of control ability of research subjects by researchers so it is prone to bias emergence. Researchers used this technique as it is convenient both in terms of time and resources compared to other sampling techniques. To ensure that the characteristics of the sample match the characteristics of the intended population, the researchers provided straightforward descriptions of the subjects' characteristics and eliminated those who did not meet the requirements of the target sample (Gravetter & Forzano, 2012). From a state university in Yogyakarta, 66 subjects participated. Subjects from one state university in Bandung were 50 subjects and one university in Medan involved 52 subjects. The organizational health questionnaire used was distributed through a paper-based method. Respondents in this study were obtained through the snowball sampling technique, in which research partners at the respective university facilitate the questionnaire distribution in each faculty. The data analysis for this stage 2 used descriptive analysis. In analyzing data in stage one and stage two used SPSS version 22 software.

RESULTS AND DISCUSSION

Study 1. Development of Organizational Health Measurement Tools

Out of 400 questionnaires distributed in the pilot research stage with the purpose of constructing measuring instruments, 204 (two hundred and four) questionnaires were filled in. Of the 204 questionnaires, 192 questionnaires could be analyzed further because 12 questionnaires did not qualify for inclusion in the research data analysis (data filling was incomplete and demographic data were not filled in). Then, 192 data were analyzed using exploratory factor analysis. The results of the demographic data are presented on table 1.

Table 1.

Demographics of Respondents in Preparing OH instrument

0 1	1 1 0	
		N
Location	PTN 1	92
	PTN 2	58
	PTN 3	42
Sex	Male	104
	Female	89
Age	<35	61
	35-50	96
	>50	35
Job Tenure	<5 years	42

	N
5-15 year	89
16-25 years	43
>25 years	18

e-ISSN: 2541-450X

p-ISSN: 0854-2880

KMO and Bartlett test and Anti Image Matrices checks were carried out to determine whether the 44 items were partially suitable for analysis and not excluded in testing. Based on the Anti Image Matrices table, it shows that of the forty-four variables to be analyzed, seven items showed MSA value <0.5, which indicates that these items cannot be analyzed further. MSA (Measures of Sampling Adequacy) is used to measure the adequacy of sampling for each variable. Factor analysis can only be administered if the MSA value is ≥ 0.5 , meaning that the variable remains predictable and analyzable further. On the other hand, MSA with the value of ≤ 0.5 denoted that the variable is unpredictable and unanalyzable further or must be excluded (Hair et al., 2018). After gradual reduction of the items which were not qualified according to the requirements, the KMO value increased to 0.836, which was previously 0.816 with a significance of 0.000 (<0.05), indicating that the data were sufficient for factor analysis and also supported by all items with MSA value of > 0.05. This state ensures that the 37 items are feasible to be analyzed using exploratory factor analysis.

Through exploratory factor analysis using the extraction method of Principal Axis Factoring (varimax), forty-one items were grouped into 7 factors according to the organizational health dimensions suggested by Hoy et al. (1987) in Farahani et al. (2014). After rotation, 4 groups were formed with eigenvalue values above 2. Based on the grouping into 4 factors with a factor loading range of 0.286 - 0.716, the dimensions of organizational health consisting of 4 groups of items are as follows:

Factor 1 is Positive Leadership, consisting of 11 items (Cronbach's alpha = .0.860). In this aspect, openness is defined as the keenness of work unit/organization leaders to be open to the opinions and input from other parties and to be open and fair to improve the performance of faculty. This factor illustrates how faculty and university leaders bring a shared mission into the relationship between staff and subordinates, which is also a form of modern, ideal, and practical leadership (Sahlin & Eriksson-Zetterquist, 2016). Leadership in higher education, both at the faculty and university levels, is a combination of professional and managerial leadership. Leaders in higher education must balance when they have to demonstrate the ability to work collaboratively with colleagues in the same profession and when they have to make decisions with a top-down approach, measure performance objectively, and appoint others in competitive tasks (Geschwind et al., 2019). This leadership factor is considered significant in explaining organizational health because leaders in higher education organizations must adapt to many changes, such as the emergence of global and international partnerships, greater pressure for accountability, increasingly diverse learning targets, the need for new business models, opportunities for innovation with technology, and the change of student demographics (Kezar & Holcombe, 2017).

Factor 2 is Organizational Virtue which consists of 10 items (Cronbach's alpha = .0.789). The ability to face pressure is defined as the ability of a work unit/organization to deal with pressure from outside and also from negative attitudes from internal parties by prioritizing organizational virtue. This organizational virtue must be carried out in harmony, from the top leaders, academics at the faculty to every employee involved in order to ensure optimal quality achievement of educational activities (Kleijnen et al., 2009). This factor is also related to efforts to create organizational virtue that places the university as an educational institution that develops personal and scientific

capacity of an individual, which has become more disintegrated in order to follow market demands (Tomlinson, 2018). The importance of this factor is also stated by Caza (2015) that organizational virtue provides a positive effect in the form of protection in overcoming difficulties and a positive feeling effect when organizational members take actions according to the organizational virtue.

Factor 3 is Positive Relationship which consists of 11 items (Cronbach's alpha = .0.817). Positive relationship is defined as a strong identification and great effort from lecturers and employees in carrying out their functions and duties in harmony to achieve the goals of the work unit/organization. This factor also reinforces the organizational climate, where each element in the organization not only prioritizes personal achievement but also how they harmonize relationships within organizations and groups (Vasyakin et al., 2016). The importance of the relationship between elements in higher education is also promoted by Sargeant (2016) that partnerships in higher education can support the achievement of organizational goals, especially those related to academic success. When members of the organization (both educational staff and lecturers) are expected to build a shared vision, form cohesiveness, and receive required assistance, they also are expected to positively contribute to the desired results of the organization, as revealed in research by Gantasala (2015).

Factor 4 is Resource Support, comprising 5 items (Cronbach's alpha = .0.779). Resource support is defined as the ability of a work unit/organization to provide facilities needed by students, lecturers, and employees. Changes in higher education organizations require support from management in order to achieve a competitive advantage. Resource support from internal organizations can be in the form of institutional support, funding, or financial support that eases the organization in achieving its goals (Ho & Peng, 2016). Resource support from organizations can also be in the form of a service scheme for students that facilitates students to develop their potential by participating in academic activities and receiving optimal learning experiences (Ciobanu, 2013).

Study 2. An Overview of Organizational Health

The second stage in the organizational health mapping study at higher education was conducted at 6 state universities as follows 1) PTN 1 is a State University in Surabaya with the status of PTN-BH (Legal Entity State University), which based on demographics is located in several areas in East Surabaya; 2) PTN 2 is a State University in East Surabaya with the status of PTN-BH; 3) PTN 3 is a State University in the West Surabaya; 4) PTN 4 is a State University with the status of PTN-BH located in West Java and Banten, but in this study, it was represented by respondents on Bandung campus; 5) PTN 5 is a State University in Medan, North Sumatra; 6) PTN 6 is a State University with the status of PTN-BH located in Sleman, Yogyakarta.

Table 2. Demographics of Respondents in OH Identification

		N
Sex	Male	257
	Female	141
Age	<35	147
	35-50	185
	>50	66
Job Tenure	<5 years	43
	<5 years 5-15 years 16-25 years	170
	16-25 years	132

	N
>25 years	53

The results of the analysis were carried out based on population norms obtained from grouping 3 categories (high, medium, low) according to the highest and lowest possible scores as a response to the questionnaire. The results of norm distribution are displayed on table 3 and 4.

Table 3. Organizational Health Norms

Aspect	Low	Medium	High
Positive Leadership	11-25	26-40	41-55
Organizational Virtue	10-23	24-37	38-50
Positive Relationship	11-25	26-40	41-55
Resource Support	5-11	12-19	20-25
General OH	41-95	96-151	152-205

Table 4. Descriptive Statistics

Univeristy	OH Factors		N
PTN 1	General OH	Mean	154.1087
		Standard Deviation	19.91104
	Positive Leadership	Mean	42.0652
		Standard Deviation	6.35196
	Organizational Virtue	Mean	35.2826
		Standard Deviation	6.80066
	Positive Relationship	Mean	42.6087
		Standard Deviation	5.41052
	Resource Support	Mean	18.4457
		Standard Deviation	3.79810
PTN 2	General OH	Mean	157.8793
		Standard Deviation	14.68867
	Positive Leadership	Mean	39.9655
		Standard Deviation	6.64109
	Organizational Virtue	Mean	37.7586
		Standard Deviation	4.29324
	Positive Relationship	Mean	44.9483
		Standard Deviation	3.69648
	Resource Support	Mean	18.3103
		Standard Deviation	3.01579
PTN 3	General OH	Mean	159.2857
		Standard Deviation	17.21923
	Positive Leadership	Mean	42.3571
		Standard Deviation	6.01551
	Organizational Virtue	Mean	37.8095
		Standard Deviation	4.85014

University	OH Factors		N
	Positive Relationship	Mean	44.3810
		Standard Deviation	4.77265
	Resource Support	Mean	18.4762
		Standard Deviation	2.94037
PTN 4	General OH	Mean	146.7000
		Standard Deviation	12.51489
	Positive Leadership	Mean	42.1800
		Standard Deviation	5.78771
	Organizational Virtue	Mean	27.8600
		Standard Deviation	5.59158
	Positive Relationship	Mean	43.6400
		Standard Deviation	5.83711
	Resource Support	Mean	16.9400
		Standard Deviation	2.41939
PTN 5	General OH	Mean	138.4762
		Standard Deviation	16.58396
	Positive Leadership	Mean	39.7778
		Standard Deviation	7.67157
	Organizational Virtue	Mean	27.7778
		Standard Deviation	5.6978
	Positive Relationship	Mean	39.7302
		Standard Deviation	8.68481
	Resource Support	Mean	16.0794
		Standard Deviation	3.48407
PTN 6	General OH	Mean	138.4762
		Standard Deviation	16.58396
	Positive Leadership	Mean	39.7778
		Standard Deviation	7.67157
	Organizational Virtue	Mean	27.7778
		Standard Deviation	5.6978
	Positive Relationship	Mean	39.7302
		Standard Deviation	8.68481
	Resource Support	Mean	16.0794
		Standard Deviation	3.48407

Table 5. Category of Organizational Health Response

	<u> </u>		<u> </u>	
University	OH Factors	High (%)	Med (%)	Low (%)
PTN 1 (n=92)	Positive Leadership	64,13	35,87	0,00
	Organizational Virtue	39,13	55,43	5,43
	Positive Relationship	71,74	28,26	0,00
	Resource Support	46,74	42,39	10,87
	General OH	59,78	40,22	0,00

University	OH Factors	High (%)	Med (%)	Low (%)
PTN 2 (n=58)	Positive Leadership	56,90	41,38	1,72
	Organizational Virtue	44,83	55,17	0,00
	Positive Relationship	89,66	10,34	0,00
	Resource Support	36,21	60,34	3,45
	General OH	67,24	32,76	0,00
PTN 3 (n=82)	Positive Leadership	78,05	19,51	2,44
	Organizational Virtue	56,10	43,90	0,00
	Positive Relationship	78,05	21,95	0,00
	Resource Support	43,90	56,10	0,00
	General OH	70,73	29,27	0,00
PTN 4 (n=50)	Positive Leadership	64,00	34,00	2,00
	Organizational Virtue	4,00	74,00	22,00
	Positive Relationship	78,00	22,00	0,00
	Resource Support	12,00	86,00	2,00
	General OH	44,00	56,00	0,00
PTN 5 (n=50)	Positive Leadership	66,67	25,93	7,41
	Organizational Virtue	1,92	65,38	32,69
	Positive Relationship	57,41	37,04	5,56
	Resource Support	18,87	66,04	15,09
	General OH	29,41	68,63	1,96
PTN 6 (n=66)	Positive Leadership	68,18	31,82	0,00
	Organizational Virtue	4,55	72,73	22,73
	Positive Relationship	77,27	22,73	0,00
	Resource Support	31,82	68,18	0,00
	General OH	36,36	63,64	0,00

In PTN 1, the Organizational Virtue factor assessed by respondents was at the medium level (55.17) and the mean score was the lowest compared to other factors (35.28). It implies that most respondents from PTN 1 responded moderately to items related to how they respond to pressure, both internal and external.

In PTN 2, the factors that need further attention are Resource Support and Organizational Virtue factors. Regarding the resource support, most respondents gave medium category (60.34%) and the remaining factors were in the high and low categories. On the Organizational Virtue factor, most respondents gave medium category (55.17%).

In PTN 3, the Resource Support factor is a factor where the majority of respondents responded in the medium category. It indicates that the majority of respondents perceived that the support resources needed for academic activities such as classrooms, equipment facilities, and the access to perform tasks are included in the medium category.

In PTN 4, the Organizational Virtue and Resource Support factors are the factors that earned the majority of responses at the medium level. The Organizational Virtue factor was responded as medium (74%) and the Resource Support also received a medium response (86%) in the majority.

In PTN 5, similar to other universities in this study, the Organizational Virtue and Resource Support factors are factors that were considered sufficient by most respondents. Organizational Support factor was perceived as medium level as much as 65.38% and 32% at the low level. The

Resource Support factor received a response in the medium category as much as 66.04%.

In PTN 6, the general perception of Organizational Health was at the medium level (63.64%). Meanwhile, in line with the results of other universities, the factors that still need more attention are the Organizational Virtue and Resource Support factors. The Organizational Virtue obtained a medium response (72.73%) to the majority of respondents, meanwhile, the Organizational Support factor earned a medium response as much as 68.18%.

CONCLUSION

From the results of the factor analysis in constructing the measuring instrument stage, it sums that the Organizational Health factors in the scope of higher education in Indonesia consist of 4 factors, each shows fairly high reliability. These factors are Positive Leadership (Cronbach's alpha = 0.860, 11 items), Organizational Virtue (Cronbach's alpha = 0.789, 10 items), Positive Relationship (Cronbach's alpha = 0.819, 11 items) and Resource Support (Cronbach's alpha = 0.779, 5. item). These four factors are considered valid to explain how the structure of higher education organizational health is, especially in Indonesia.

Based on the description results of the organizational health data at 6 higher education institutions as research subjects, it appears that in general, the condition of organizational health is in the Medium-Good category. In general, 2 factors show an interesting pattern, which is Organizational Virtue and Resource Support factors.

Organizational Virtue is an organizational health factor characterized by the leadership's ability to carry out organizational activities by maintaining organizational virtues and policies, protecting organizational members from external pressure, cooperation, and efforts to maintain academic values. This factor is one of the characteristics of a healthy educational organization. Adequate organizational virtues will support organizations in carrying out programs according to values, protect organizational members, and foster the environment per organizational goals. In line with research by Sabanci (2009), there is an integration between the activities carried out by the organization with values that are believed to be valid, which has a positive correlation with the personal achievement of organizational members. The tendency for the low Organizational Virtue in the universities in this study could happen due to inconsistent policies. It is because, in recent years, the higher education management in Indonesia has undergone many changes, for instance, the status change from BHMN (State-Owned Legal Entity), BHP (Educational Legal Entity), to those have been pronounced as PTN BH (Legal Entity State University), as well as changes in higher education management policies that have changed from the Ministry of Education and Culture to Ministry of Research and Higher Education in 2014. Changes in policy and governance that keep occurring may make executives lose focus so they are unable to identify the main values in carrying out their activities. It is in line with the results of research by Sabanci (2009) that psychological conditions such as burnout and role ambiguity influence low organizational health. Given this situation, organizations need to improve organizational virtues to make their members able to identify core virtues in carrying out their activities, for example, through implementing organizational culture instilments, to identify uniqueness and university branding and long-term strategies are efforts to maintain this uniqueness. University management can also make efforts to improve organizational virtues through long-term and comprehensive strategic planning that covers all lines.

Resource Support is an organizational health factor related to how the organization is able to provide the resource support needed by its members in carrying out their tasks, including providing

additional facilities if needed. This factor shows the ability of leaders to manage organizational resources so that they can support the implementation of tasks and display a professional performance. Resource support is one of the basic capital to ensure activities in the organization can run sufficiently. Therefore, it is important to make efforts to manage resources more effectively, which can be done by leaders by identifying areas that require a large number of resources. Resource support can also be increased through collaboration with universities and with external parties.

REFERENCES

- Aguirre, D., Howell, Jr, Lloyd, W., Kteller, D., & Neilson, G. L. (2005, November). *A global checkup: Diagnosing the health of today's organizations.* Strategy+business; Booz & Company. Retrieved from https://www.strategy-business.com/article/rr00026?gko=213b1
- Awaliyah, G. (2018). Kemenristekdikti anggarkan Rp 300 M untuk gaji dosen asing. Replubika.co.id. Retrieved from https://www.republika.co.id/berita/pendidikan/dunia-kampus/18/04/19/p7fa1c428-kemenristekdikti-anggarkan-rp-300-m-untuk-gaji-dosen-asing
- Caza, B.B (2015). An introduction to positive organizational scholarship. In A. J. G. Sison (Ed.), Handbook of virtue ethics in business and management (pp. 1-14). Netherlands: Springer. https://doi.org/10.1007/978-94-007-6729-4
- Ciobanu, A. (2013). The role of student services in the improving of student experience in higher education. *Procedia Social and Behavioral Sciences*, 92, 169–173. https://doi.org/10.1016/j. sbspro.2013.08.654
- Digha, M. N. (2014). Morgan's images of organizations analysis. *The International Journal of Innovative Research and Development*, *3*(13), 201–205. Retrieved from http://internationaljournalcorner.com/index.php/ijird_ojs/article/view/135315
- Farahani, M. F., Mirzamohamadi, M. H., Afsouran, N. R., & Mohammadi, S. saied. (2014). The study of the relationship of organizational health of the schools and that of the student's academic achievement (A case study of high schools of kohkilouie and boierahmad province, Iran 2011). *Procedia Social and Behavioral Sciences*, 109, 628–633. https://doi.org/10.1016/j.sbspro.2013.12.518
- Franciska, V., & Welly, J. (2013). Formulating company health aspiration to achieve organizational excellence by using organizational health index (OHI): Case study at PT Bio Farma (PERSERO). *The Indonesian Journal Of Business Administration*, 2(13), 1570–1579. Retrieved from https://media.neliti.com/media/publications/68648-EN-formulating-company-health-aspiration-to.pdf
- Gantasala, S. B. (2015). Collaborative team work in higher education: A case study. World Academy of Science, Engineering and Technology, 9(2), 636–642. https://doi.org/10.5281/zenodo.1100354
- Geschwind, L., Hansen, H. F., Pinheiro, R., & Pulkkinen, K. (2019). Governing performance in the Nordic Universities: Where are we heading and what have we learned? In Pinheiro, R., Geschwind, L., Hansen, H.F., & Pulkkinen, K. (Eds.), *Reforms, organizational change and performance in higher education: A comparative account from the Nordic countries* (pp. 269-

- 299). London: Palgrave Macmillan. https://doi.org/10.1007/978-3-030-11738-2
- Gravetter, F. J., & Forzano, L. B. (2012). *Research methods for the behavioral sciences* (4th ed.). California: Wadsworth Publishing.
- Hair, J. F., Babin, B. J., Anderson, R. E., & Black, W. C. (2018). *Multivariate data analysis* (8th ed.). Massachusetts, United States: Cengage Learning.
- Harjanti, S. S., & Gustomo, A. (2017). Organizational health index and organizational agility maturity criteria as measurement tool of organizational transformation effectiveness. *Jurnal Manajemen Teknologi*, 16(1), 92–107. https://doi.org/10.12695/jmt.2017.16.1.7
- Ho, J. T. S. (2000). Managing organizational health and performance in junior colleges. *International Journal of Educational Management*, 14(2), 62–73. https://doi.org/10.1108/09513540010315896
- Ho, S. S.H., & Peng, M. Y. P. (2016). Managing resources and relations in higher education institutions: A framework for understanding performance improvement. *Educational Sciences: Theory & Practice*, 16(1), 279–300. https://doi.org/10.12738/estp.2016.1.0185
- Kezar, A. J., & Holcombe, M. (2017). *Shared leadership in higher education*. Washington, D.C., United States: American Council on Education.
- Kleijnen, J., Dolmans, D., Muijtjens, A., Willems, J., & Van Hout, H. (2009). Organisational values in higher education: Perceptions and preferences of staff. *Quality in Higher Education*, 15(3), 233–249. https://doi.org/10.1080/13538320903343123
- Sabanci, A. (2009). The effect of primary school teachers' burnout on organizational health. *Procedia Social and Behavioral Sciences*, 1(1), 195–205. https://doi.org/10.1016/j. sbspro.2009.01.036
- Sahlin, K., & Eriksson-Zetterquist, U. (2016). Collegiality in modern universities the composition of governance ideals and practices. *Nordic Journal of Studies in Educational Policy*, 2016(2–3), 33640. https://doi.org/10.3402/nstep.v2.33640
- Sargeant, A. (2016). Partnerships for success: working together in higher education for student success. *Collaborate: Libraries in Learning Innovation*, *I*(1), 1–5. Retrieved from http://eprints.leedsbeckett.ac.uk/id/eprint/3181/1/Partnerships for Success.pdf
- Stanford, N. (2013). Organizational health: An integrated approach to building optimum performance. London, UK: Kogan Page.
- Tilley, H., & Pellini, A. (2017). Sektor pengetahuan Indonesia mengejar ketinggalan tapi tetap ada ketimpangan. The Conversation. Retrieved from https://theconversation.com/sektor-pengetahuan-indonesia-mengejar-ketinggalan-tapi-tetap-ada-ketimpangan-85184
- Tomlinson, M. (2018). Conceptions of the value of higher education in a measured market. *Higher Education*, 75(4), 711–727. https://doi.org/10.1007/s10734-017-0165-6
- Vasyakin, B. S., Ivleva, M. I., Pozharskaya, Y. L., & Shcherbakova, O. I. (2016). A study of the organizational culture at a higher education institution. *International Journal of Environmental and Science Education*, 11(10), 11215–11528. Retrieved from https://eric.

ed.gov/?id=EJ1121254

Xenidis, Y., & Theocharous, K. (2014). Organizational health: Definition and assessment. Procedia Engineering, 85, 562-570. https://doi.org/10.1016/j.proeng.2014.10.584

Zahed-Babelan, A., & Moenikia, M. (2010). A study of simple and multiple relations between organizational health and faculty trust in female high schools. Procedia - Social and Behavioral Sciences, 2(2), 1532-1536. https://doi.org/10.1016/j.sbspro.2010.03.230

APPENDIX

Rotated Factor Matrix^a

	Item		Fac	tor	
		1	2	3	4
FACTOR 1: POSITIVE LEADERSHIP	Leaders perceive topic from multiple perspectives and acknowledge other options to solve problems occurring in the work unit	.716	.196		.282
	Leaders are open to questions and suggestions from lecturers and educational staff	.714	.193	.318	
	Leaders show a friendly and open attitude	.534	.342	.263	.131
	The recommendations of the leadership are highly considered by colleagues in the organization	.525	.166	.186	
	Leaders pay attention to the welfare of each member in the work unit	.523	.102	.264	.424
	Leaders discuss issues related to teaching with lecturers and educational staff	.487	254	.427	
	Additional materials and resources related to tasks shall be provided by the faculty if lecturers need them	.441		.193	.394
	Leaders show a desire to make changes for the better with other employees	.433	.215	.286	.123
	Leaders treat all lecturers and educational staff fairly and equally	.396	.127	.182	.312
	Leaders convey the expectation of each lecturer and staff at the faculty	.378		.269	.260
	Leaders obtain work results according to requests given to the lecturers and employees	.372	.313		
FACTOR 2: ORGANIZA- TIONAL VIRTUE	Certain communities or groups have a major influence on leadership policies *	.280	.679		
	Some outspoken outsiders regarding faculty programs may change faculty policies *	.153	.677		.217
	Some outspoken internal regarding faculty programs may change faculty policies *		.632		
	Lecturers and staff in faculty get a lot of pressure from the community and the external environment of the faculty *	.160	.593		.125
	Lecturers and staff in faculty appear to work individually / do not care about each other	.205	.582	.145	
	Students seeking academic achievement are usually alienated by their environment *	136	.529	.180	

	Lecturers and staff are indifferent / do not care about each other *	.134	.455		
	Faculty leaders often face problems with the senate and rectorate *	.137	.454		
	Lecturers and staff at faculty are protected from environmental demands and students' guardians who protest without a cause		.313	.176	
	Community demands are always fulfilled, even when those are not in line with educational programs *	177	.303	.165	
	Students often ignore / underestimate academic assignments given by lecturers *	.157	.286	.279	.223
FACTOR 3 : POSITIVE RELATIONSHIP	Organized and serious study environment to support students' academic activities		.154	.517	.235
	Lecturers demonstrate a commitment to teaching students		.201	.512	
	Lecturers and staff help their colleagues voluntarily		.177	.502	
	Lecturers and staff in faculty carry out their duties with great enthusiasm	.186	.117	.468	.277
	The Dean has good cooperation with the rectorate & student organizations	.186	.392	.437	.124
	Lecturers and staff in faculty love and respect each other	.239	.236	.432	.183
	Lecturers and staff show a good and friendly relationship with each other		.278	.418	.102
	Organized and serious study environment to support students' academic activities				
	Lecturers demonstrate a commitment to teaching students				
	Lecturers and staff help their colleagues voluntarily				
	Lecturers and staff in faculty carry out their duties with great enthusiasm				
	The Dean has good cooperation with the rectorate & student organizations	-123	.358	.407	.302
	Lecturers and staff in faculty love and respect each other				
	The lecturers and staff show a good and friendly relationship with each other				
	Faculty/university provides awards for those with academic achievements	123	.358	.407	.302
	Students seek to improve their work over time	.278		.391	.297
	Lecturers and staff in faculty demonstrate the same goals as the faculty's	.192	.110	.390	.104
	The Dean can convince the rectorate and faculty senate to approve the proposal of new programs and activities	.237	.134	.334	.217
FACTOR 4: RESOURCE SUPPORT	Lecturers always get the availability of classrooms and equipment they need			.232	.795
	Lecturers obtain adequate equipment for the teaching process	.172		.112	.699
	This faculty receives a fair and adequate allocation of resources from the rectorate	.222	.137		.595

Item		Fac	tor	
	1	2	3	4
Lecturers and staff have access to materials, facilities, and teaching materials needed in their studies or work	.289	.218	.219	.456

Extraction Method: Principal Axis Factoring. Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 9 iterations.