PalArch's Journal of Archaeology of Egypt / Egyptology

THE EFFECT OF INTELLECTUAL CAPITAL ON SUSTAINABLE UNIVERSITY THROUGH ORGANIZATIONAL CITIZENSHIP BEHAVIOR FOR THE ENVIRONMENT AT UNIVERSITY

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Yunata Kandhias Akbar, Megawati, Reni Ayi Heryani. <Title>-- Palarch's Journal Of Archaeology Of Egypt/Egyptology 17(5), 968-983. ISSN 1567-214x

Keywords: Intellectual Capital, Human Capital, Structural Capital, Relational Capital, Sustainable University, Organizational Citizenship Behavior for the Environment.

ABSTRACT

Sustainable universities are intended to make universities implement broad environmental responsibilities and/ or policy sustainability. This research aimed to determine and analyze the effect of intellectual capital consisting of human capital, structural capital, and relational capital on sustainable university mediated by organizational citizenship behavior for the environment at Mercu Buana University, Jakarta. This research used a quantitative approach by involving 170 employees as the sample. Data were collected using questionnaires with a five-level Likert scale and then analyzed using Smart PLS (Partial Least Square) Version 3.2.8. This research revealed that intellectual capital consisting of human capital, structural capital, and relational capital mediated by organizational citizenship behavior for the environment has a positive and significant impact on sustainable universities.

Keyword: Intellectual Capital, Human Capital, Structural Capital, Relational Capital, Sustainable University, Organizational Citizenship Behavior for the Environment.

INTRODUCTION

Today, we are facing global competition demanding countries in the world to adapt massively in the globalization era or what is commonly referred to as the 4.0 Industrial era. Various demands are being felt by countries in the world, starting from the demands in making changes/ innovations related to all aspects of education, economy, technology, health, infrastructure, and social life. If these aspects cannot be met and developed, the country automatically will lose its existence. Indonesia is currently focusing on developing the infrastructure aspect as we can find out from the performance of the governance era of President Joko Widodo.This is certainly needed for competition in the 4.0 Industrial era, balanced with efforts to improve human resource quality and management.

Efforts to improve human resource quality and management are certainly closely related to the education aspect whose emphasis is reflected from the quality of universities (higher educational institutions) in Indonesia currently leading to international standardization in order to meet the requirement of becoming a sustainable university. In this case, universities in Indonesia must three aspects to realize a sustainable university, namely a) economic sustainability, b) environmental sustainability, and c) social sustainability. These three aspects can be obtained through the development of sustainable development of university, manifested in the implementation of all the Three Pillars (*Tri Dharma*)of Higher Education (Education, Research and Community Services) supported by Intellectual Capital (Human Capital, Structural Capital and Relational Capital) and awareness of environmentally friendly behavior shared by all civitas academica.

Measurement of sustainable university from data obtained at Mercu Buana University showed two main concerns in the economic sustainability aspect, namely a decrease in student admissions in the last three years (2016 = 7,880 people; 2017 = 5,808 people; 2018 = 5,008) and an increase in the budget absorption for office stationery in the form of HVS paper and plastic maps in the last three years. In the second aspect (environmental sustainability), two things that were of concern included the use of HVS paper and plastic maps which tend to increase every year as well as the amount of realization of cooperations with domestic agencies in the form of community services which tend to show a decreasing amount if compared tothe number of cooperations that have been done. As for the third aspect (social sustainability), two things being noticed were the implementation of applied research and community services based on environment in the last three years that instead of showing a significant increase, indicates a decrease seen from the percentage as well as the CSR program on master scholarship program for teachers increasingly declining from year to year. These things indicate that improvement is still needed to be done by Mercu Buana University to achieve the target of becoming a sustainable university.

THEORETICAL REVIEW

Intellectual capital

Intellectual capital is initially only a difference between corporate values (corporate businesses) and book values of corporate assets. Intellectual capital is a group of knowledge assets constituting organizational attributes and significantly contributing to the competitive position by adding values to interested parties (Marr and Schiuma, 2001 in Solikhah *et al.*, 2010).

Intellectual capital has been defined in many ways by a large number of researchers, mostly as a combination of intangible resources and activities that "enable organizations to change resources in a system that is able to create stakeholder values" and act as "a combination of resources and Human, Relational, and Organizational activities" (European Commission, 2006).
Based on scientific literature, there are various ways to operationalize intellectual capital. Various researchers have come to the definition of intellectual capital which is generally accepted through three variables: human capital, structural capital, and relational capital.

Human Capital

N. Bontis, N. C. Dragonetti, K. Jacobsen a. Roos (2011) defined human capital as a human factor in organizations; a combination of intelligence, skills and expertise that provides trademarks to the organization. Human elements of the organization are those who can learn, change, innovate, and provide creative encouragement, as well as ensure the long-term survival of the organization when they are well-motivated.

Human capital consists of knowledge, skills, and abilities of people employed in an organization. As explained by Wright and McMahan (2011:101). Characteristics of human capital in universities include the number of professor's full time, number and type of research, number of permanent lecturers, number of non-permanent lecturers (non-permanent lecturers, contract lecturers, expert lecturers). Lecturer achievement (awards, grants, program funding), qualifications (number of positions) for academic lecturers, academic lecturer competencies (number of lecturers with bachelor, master, and doctoral degrees), number of non-academic staff (librarians, laboratory assistants, technicians).

Structural Capital

Structural capital is the institutionalized knowledge possessed by an organization stored in databases, manuals, etc. (Youndt, 2014). It is often called 'structural capital', but the term 'organizational capital' is preferred by Youndt because, in his opinion, it is the real knowledge that organizations have.

Structural capital including management relations, organizational structures, development and capital of relationships refers to marketing relationships and is very important for any organization. Creating knowledge management in universities is very important, as in other organizations in other fields (Kermally, 2002: 50).

The characteristics of structural capital in universities are divided into four parts, namely structural capital, organizational culture, learning and teaching systems, and final project guidance systems.

Relational Capital

Relational capital is based on the idea that companies are considered not an isolated system but a system which mostly depends on their relationship with the environment (Hormiga *et al.,* 2011) and can be organized into various levels. Based on the model for the measurement and management of “intellectual capital” (CIC, 2012), the first level refers to knowledge and its management of the relationships that an organization can maintain with agents who are a closer part of the environment.

The concept of relational capital in universities refers to intangible resources that can create values when linked to internal and external relations of universities (Paoloni and Demartini, 2018). Relational capital covers the university’s relations with public and private partners, its position and image in (social) networks, its involvement in training activities, its network with scholars and academics, international student exchanges, its international recognition, its attractiveness and so on. Characteristics of relational capital in universities include four parts, namely research and publication, knowledge transfer to the public, student relations, and alumni relations.

A. Organizational citizenship Behavior for The Environment (OCBE)

OCBE has been defined as "individual social behavior and discretion which are not explicitly recognized by the formal reward system and which contribute to the more effective environmental management by organizations" (Paille and Boiral, 2013: 431). This 'individual behavior and discretion' includes various types of initiatives, such as sharing knowledge to prevent pollution in the workplace, suggesting solutions aimed at reducing waste, representing organizations at environmental conferences and working with environmental departments to implement green technology. Individually, these behaviors may appear secondary and mediocre. However, their promotions throughout the organization can have a significant impact and contribute to increasing environmental performance.

According to Daily *et al.* (2009: 246), OCBE reflects the willingness of employees to collaborate with their organization and other members to enforce the behaviors above and other behaviors outside their work roles which are beneficial for the natural environment.

B. Sustainable University

Sustainable university can be defined as:

"A higher education institution that discusses, engages and promotes, minimizes negative environmental, economic, social and health impacts in the use of their resources [in] the main functions of education, research, outreach and partnerships, and stewardship to [help] communities make the transition to a sustainable lifestyle (Velazquez Contreras, 2012).

This causes universities to adopt broad environmental responsibilities and/ or sustainability policies. The emphasis is consistent with the "triple-bottom-line" framework on sustainability (social, economic, and environmental) for sustainable development.

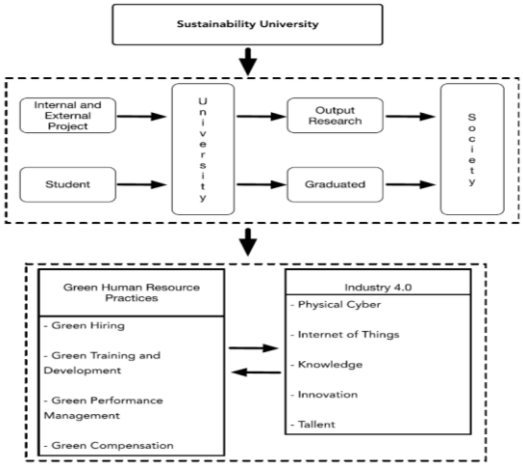

Figure 1. Strategic Framework on Human Resource Management at Universities for Business Sustainability

Related to university sustainability, universities in Indonesia must meet three aspects in realizing the achievement of sustainable universities (Lenny and Ahmad, 2019), namely:

a) Economic sustainability:
   (1) Number of student admission
   (2) Budget absorption for ATKs in the form of HVS paper and plastic folders.

b) Environmental sustainability
   (1) Total use of HVS paper and plastic ties
   (2) Total realization of cooperation with domestic institutions in the form of service program communities
c) Social Sustainability
   (1) Implementation of applied research and community services based on the environment
   (2) CSR programs in the master scholarship program for teachers.

These three aspects can be obtained through the sustainable development of tertiary institutions, manifested in the implementation of all the Three Pillars (*Tri Dharma*)of Higher Education (Education, Research and Community Services).

C. Thinking Framework

Research conducted by Puji S. (2017) stated that there is a positive and significant correlation between human capital in the form of competence and OCB. A study conducted by Ziyong *et al.* (2019) revealed that structural capital in the form of responsible leadership has a positive and significant effect on OCBE. Sigit and Iis (2017) found that relational capital has a positive and significant effect on OCB. Meanwhile, Oliver *et al.* (2012) discovered that organizational citizenship behavior for the environment (OCBE) has a positive and significant effect on sustainable universities.

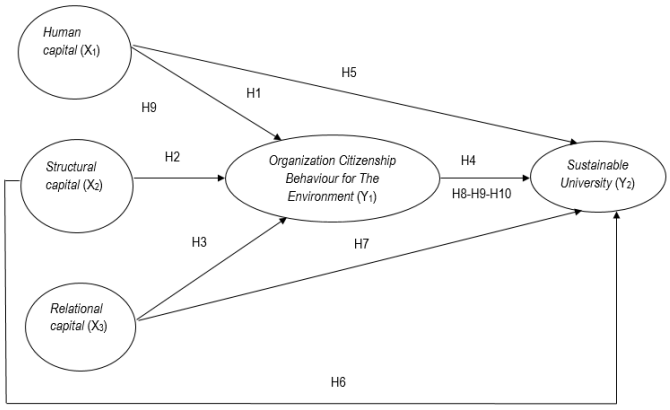

Figure 2. Thinking Framework

RESEARCH METHODOLOGY

The type of research is descriptive statistics, aiming to describe accurately the characteristics of an individual, circumstances, and symptoms of certain groups or to determine the frequency or spread of a symptom frequency of a certain relationship between one to another symptom in society (Ulber Silalahi, 2012: 28). This variable, in turn, can be measured using instruments, so that total data can be analyzed using statistical procedures. Here are operational definitions of the variables used in this study:

Table 1. Operational Definitions of Variables

No	Variable	Dimension	Indicator
1.	*Human capital* (Stewart, T.A. in Nicholas Brealey 2011:67)	a. *Knowledge*	a. Lecturers with doctoral and professor degrees. b. Qualifications of non-academic education staff (librarians, laboratory assistants, and technicians).
		b. *Experience*	a. Years of work

No	Variable	Dimension	Indicator
			b. Knowledge of the work given
		c. *Creativity*	a. Work in a team b. Innovation in carrying out and creating a job
		d. *Cultural values*	a. Knowledge of university cultures b. Implementation of university cultures in daily activities at work.
		e. *Attitudes*	a. How to behave in serving students b. How to behave to colleagues and its impact on the university.
2.	*Structural Capital* (Bontis, 2011)	a. *Management relationship*	a. Right of access to data b. The involvement of civitas academica in the learning process
		b. *Organization structure*	a. Knowledge of job description b. Preparation of work result report
		c. *Development*	a. The university's way of delivering information related to university development b. Use of information technology
3.	*Relational Capital* (Hormiga et al., 2011)	*Association network*possessed by the company with its partners	a. Collaboration with cooperation partners in developing the processes of education, research and community services. b. Relations with cooperation partners c. The results of cooperation that can affect the environment
4.	*Organizational Citizenship Behavior for The Environment* (OCBE) (MenurutBoiral dan Paillé (2013)	a. *Eco-initiative*	a. Inviting colleagues to reduce paper usage in the office b. Turning off the lights and air conditioning in the office before leaving work. c. Explaining and inviting new employees to be environmentally friendly.
		b. *Eco-helping*	a. Inviting colleagues to participate in training or forums concerning environment maintenance.
		c. *Eco-civic engagement*	a. Participating in making environmentally friendly policies b. Participating in preparing reports on sustainability
5.	*Sustainable university* (Velazquez Contreras, 2012:155)	a. *Economic sustainable*	a. Promotional innovation to maintain the sustainability of new student recruitment b. The involvement of universities in advancing the economy in Indonesia c. The role of universities in developing the economic sector in the environment around the campus.
		b. *Environmental sustainable*	a. University policies for environmentally friendly activities b. Facilities and infrastructure internationally standardized in terms of Healthy, Safe, and

No	Variable	Dimension	Indicator
			Environment (HSE) c. The university's concern for the prevention and management of natural disasters.
		c. *Social sustainable*	a. The university's role in providing scholarship programs for underprivileged children and education staff in schools (teachers) b. Collaboration activities with partners in the form of social activities. c. The involvement of alumni in programs generating wide-ranging impacts on the public.

Population and Sample

Population in this research was 1,493 Mercu Buana University's employees consisting of 1,150 permanent lecturers and 343 education staff. Therefore, the author decided to count the number of samples by the following method (Hair *et al.*, 1995 in Kiswati, 2010):

∑Sample = the number of indicators x 5
= 34 x 5
= 170 people

From the above calculation, the minimum sample to be used obtained 170 respondents.

Analysis Method

This research used an analysis method using Structural Equation Modelling (SEM) with an instrument testing using Partial Least Square (PLS).

RESULTS AND DISCUSSIONS

Measurement Model Evaluation (outer model) is used to evaluate the relationship between constructs and indicators, divided into two namely Validity and Reliability testings. The first stage of validity testing is used to identify whether unobserved variables can be measured using each construct of the observed variable through Confirmatory Factor Analysis (CFA) or commonly referred to as 'factor analysis'. According to Ghozali, an indicator is considered to have a high level of validity if it has a loading factor value of > 0.70. Based on the results of data processing of the five variables, the loading factor values obtained (> 0.70) can be depicted as follows:

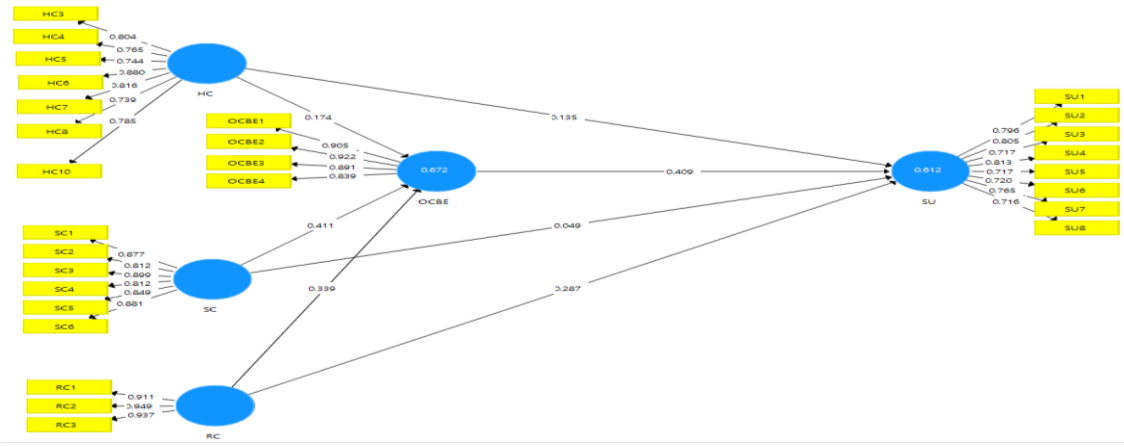

Figure 3. Outer Model Results

After conducting the discriminant validity testing, the researchers then determined the Average Variance Extracted (AVE) value. The AVE value is said to be good if it is greater than 0.05. As shown in the following table, the AVE of all variables in this research was above 0.5.

Table 2. *Average Variance Extracted* (AVE) of Research Mode

Variable	***AVE Value***
Human Capital	0.627
Structural Capital	0.733
Relational Capital	0.870
Organizational Citizenship Behavior for the Environment	0.792
Sustainable University	0.573

Meanwhile, in the reliability testing, a construct is said to reliable if it is greater than 0.7. The next stage of reliability testing is Cronbach's alpha value testing. A construct is said reliable if it has a Cronbach's alpha of> 0.6. The output results of the outer model are described as follows:

Table 4. Composite Reliability Value of the Research Model

Variable	***Composite Reliability***	***Cronbach's Alpha***	**Description**
Human Capital	0.921	0.900	**Reliable**
Structural Capital	0.943	0.927	**Reliable**
Relational Capital	0.952	0.925	**Reliable**
Organizational Citizenship Behavior for the Environment	0.938	0.912	**Reliable**
Sustainable University	0.915	0.893	**Reliable**

The table above suggests that each variable had a reliability composite value of > 0.7 and a Cronbach's alpha value of > 0.6, concluding that the research model meets the value of composite reliability.

Furthermore, the researchers determined the R-Square values. R-Square values of 0.75, 0.50, and 0.25 respectively indicate strong, moderate, and weak models. Here are the results of the R^2 value that can be seen in the table below:

Table 6. R-*square* (R^2) Valuesof the Research Model

Construct	**R-Square**
Organizational Citizenship Behavior for the Environment	0.672
Sustainable University	0.612

These results showed that67.2% of the Organizational citizenship Behavior for the Environment (OCBE) variable (Y1) was influenced by the Human Capital variable (X1), the Structural Capital variable (X2) and the Relational Capital variable (X3).

Meanwhile, 61.2% of the Sustainable University variable (Y2) was influenced by the Human Capital (X1), the Structural Capital variable (X2), the Relational Capital variable (X3), and the Organizational citizenship Behavior for the Environment (OCBE) variable (Y1). The Q2 value can be calculated using this following formula:

$Q2 = 1 – ((1 – R12)(1 – R22)…(1 – Rx2)) = 0.657$

Based on the calculation results above, it can be seen that the Q2 value was > 0. In other words, the model had a predictive relevance value, meaning that the observation value resulted by the model and the parameter estimation is good/ relevant.

GoF Index $= \sqrt{AVE} \times R2 = 0.544$

Based on the calculation results above, the GoF can be said to be large since the value was more than 0.36. This indicates that overall, the model is appropriate.

Calculation of the following hypothesis testing regarding the effect of exogenous variables (human capital (X1), structural capital (X2), and relational capital (X3)) on endogenous variables (organizational citizenship behavior for the environment (Y1) and sustainable university (Y2)) both partially and through the mediation of organizational citizenship behavior for the environment (Y1).

Table 6. Hypothesis Testing Results

Relationship between Construct	Original Sample (O)	T Statistics (|O/STDEV|)	P Values
HC -> OCBE	0.174	2.913	**0.004**
HC -> SU	0.135	1.852	**0.065**
OCBE -> SU	0.409	3.746	**0.000**
RC -> OCBE	0.339	3.576	**0.000**
RC -> SU	0.287	2.568	**0.011**
SC -> OCBE	0.411	4.451	**0.000**
SC -> SU	0.049	0.622	**0.534**
HC -> OCBE -> SU	0.071	2.459	**0.014**
SC -> OCBE -> SU	0.168	2.773	**0.006**
RC -> OCBE -> SU	0.139	2.540	**0.011**

The results of the hypothesis testing in this research can be described as follows: *(1)* "Human Capital (X1) has a significant effect on the Organizational citizenship Behavior for the Environment (Y1)" (H0 was rejected because the t-statistics was 2.913, greater than the t-table of 1.974 with a P-value of<0.004). *(2)* "Structural Capital (X2) has a significant effect on the Organizational citizenship Behavior for the Environment (Y1)" (H0 was rejected because the t-statistics was 4.451, greater than the t-table of 1.974 with a P-value of < 0.000). *(3)* "Relational Capital (X3) has a significant effect on the Organizational citizenship Behavior for the Environment (Y1)" (H0 was accepted because the t-statistics was 3.576, greater than the t-table of 1.974 with a P-value < 0.000). *(4)* "Organizational citizenship Behavior for the Environment (Y1) has a significant effect on the Sustainable University variable (Y2)" (H0 was accepted because the t-statistics was 3.746, greater than the t-table of 1.974 with a P-value of < 0.000). *(5)* "Human Capital (X1) has no significant effect on the Sustainable University variable (Y2)" (H0 was accepted because the t-statistics

was 1.852, smaller than the t-table of 1.974 with a P-value of > 0.065). *(6)* "Structural Capital (X2) has no significant effect on the Sustainable University (Y2)" (H0 was accepted because the t-statistics was 0.622, smaller than the t-table of 1.974 with a P-value of > 0.534). *(7)* "Relational Capital (X3) has a significant effect on the Sustainable University variable (Y2)" (H0 was rejected because the t-statistics was 2.568, greater than the t-table of 1.974 with a P-value of < 0.011). *(8)* "Human Capital (X1) has a significant effect on the Sustainable University (Y2) through Organizational citizenship Behavior for the Environment (Y1)" (H0 was rejected because the t-statistics was 2.459, greater than the t-table of 1.974 with a P-value of < 0.014). *(9)* "Structural Capital (X1) has a significant effect on the Sustainable University (Y2) through Organizational citizenship Behavior for the Environment (Y1)" (H0 was rejected because the t-statistics was 2.773, greater the t-table of 1.974 with a P-value of <0.006). *(10)* "Relational Capital (X3) has a significant effect on the Sustainable University (Y2) through Organizational citizenship Behavior for the Environment (Y1)" (H0 was rejected because the t-statistics was 2.540, greater than the t-table of 1.974 with a P-value of < 0.011).

DISCUSSION

The Effect of Human Capital on Organizational citizenship Behavior for the Environment

The research results suggest that human capital significantly influences organizational citizenship behavior for the environment. The correlation between human capital and organizational citizenship behavior for the environment is also shown by the previous study conducted by Puji S. (2017).

Human capital is the knowledge, skills and abilities of people employed in an organization. Based on the loading factor value of the human capital variable, the HC6 indicator on innovation in doing and creating a job has the highest loading factor. Employee innovation in doing and creating a job can lead to environmentally friendly behaviors or initiatives in the workplace.

The management of Mercu Buana University is expected to provide employees with more freedom of innovation as long as the creativity or innovation is not excessive and able to support the duties and responsibilities of both lecturers and education staff so that they can do activities leading to environmentally friendly performance.

The Effect of Structural Capital on Organizational citizenship Behavior for the Environment

The research results indicate that structural capital significantly influences organizational citizenship behavior for the environment. Consistent with these results, Ziyong *et al.* (2019) also found the correlation between structural capital and organizational citizenship behavior for the environment.

Structural capital is management relations, organizational structures within a company and employee knowledge of the institution. Based on the loading factor value of the structural capital variable, the SC3 indicator on employee knowledge of job description has the highest loading factor value. Both employee knowledge and understanding of job description can enhance environmentally friendly behaviors in the workplace.

A harmonious relationship between leaders and employees can foster initiative and persuasive behaviors of employees in improving behaviors of creating a green environment that can lead to good performance. Besides, university leaders can share information about matters related to university development.

The Effect of Relational Capital on Organizational citizenship Behavior for the Environment

The research results indicate that relational capital significantly influences organizational citizenship behavior for the environment. This is also supported by Sigit and Iis (2017) finding the correlation between the two variables.

Relational capital in universities refers to intangible resources that can create values when linked to internal and external relations of universities. Based on the loading factor value of the relational capital variable, the RC2 indicator on relations with cooperation partners has the highest loading factor.

Relations with cooperation partners can improve employee behavior of environmental stewardship. The cooperation or collaboration is certainly related to the Three Pillars (*Tri Dharma*)of Higher Education (Education, Research and Community Services). The impact of the collaborative activities on the community and the surrounding environment, especially in the field of applied research and community services, can be directly felt.

The Effect of Organizational citizenship Behavior for the Environment on Sustainable University

The research results show that organizational citizenship behavior for the environment significantly influences sustainable university. Similarly, Oliver *et al.* (2012) and Suharno *et al.* (2016) found the correlation between organizational citizenship behavior for the environment and sustainable university. These studies suggest that an environmentally friendly culture can improve employee performance to support the institutional performance that leads to organizational sustainability.

Organizational citizenship behavior for the environment is individual behavior based ontheir awareness of environmental caring initiatives. Based on the loading factor value of the organizational citizenship behavior for the environment variable, the indicator with the highest loading factor value is OCBE2 with the statement of initiating to turning off lights and air conditioners in the workspace before leaving works.

The university's efforts in fostering this behavior can be done through internalizing the work cultures of Mercu Buana University and also other environmentally friendly-related activities. Besides, the university leader can maximize employee contributions in terms of policymaking to create a sustainable university.

The Effect of Human Capital on Sustainable University

The research results indicate that human capital has no significant effect on the sustainable university. These results are contrary to a previous study conducted by Ivo and Garry (2011) finding that human capital has a positive and significant effect on the sustainable university.

The results mentioned that human capital is not the only determinant of an organization's sustainability. The condition of human capital in Mercu Buana University is included in the good category because the competencies possessed by each employee both lecturers and education staff are considered adequate when viewed from the educational background. However, in this case, the educational background itself is not enough to produce a sustainable university. The most important factor is individual awareness related to the importance of protecting the environment both inside and outside the office. Mercu Buana University has now promoted the importance of Healthy, Safety and Environment (HSE) which fosters awareness of a clean and safe environment. It is also a key indicator of the creation of long-term sustainability for universities by referring to international standards as a benchmark.

The Effect of Structural Capital on Sustainable University

The results show that structural capital has no significant effect on the sustainable university. This is supported by Ali and Suhaila (2015) discovering that there is a positive and significant correlation between structural capital and sustainable university.

In Ali and Suhaila (2015), the results obtained suggest that structural capital has indeed a positive and significant effect on sustainable university, but the results also indicate that in structural capital, a harmonious relationship between education (teaching) and internal processes such as the relationship between students and parents and also financial performance is needed. The Mercu Buana University's current condition in establishing relationships with student parents have been handled by study program structural officials. However,the delivery of problems or obstacles experienced by student parents has not been maximally carried out by the study program to lecturers and education staff in the study program environment so that the results of the improvement and follow-up processes conducted have not been maximal. The information is needed by employees both lecturers and education staff so that they can maximize performance and improve their main performance in teaching,

The Effect of Relational Capital on Sustainable University

The research results indicate relational capital has a significant effect on the sustainable university. The correlation between relational capital and the sustainable university is also supported by a previous study conducted by Patricia and Ignacio (2013).

Based on the loading factor value of the relational capital variable, the RC2 indicator (relations with cooperation partners) has the highest loading factor value Relations with cooperation partners can improve employee behavior regarding environmental stewardship. The cooperation or collaboration is certainly related to The Three Pillars (*Tri Dharma*)of Higher Education (Education, Research and Community Services). The impact of the collaborative activities on the community and the surrounding environment, especially in the field of applied research and community services, can be directly felt.

The Effect of Human Capital on Sustainable University through the Mediation of Organizational citizenship Behavior for the Environment

The research results show that human capital has a significant effect on the sustainable university through organizational citizenship behavior for the environment. These results are in line with the study of Puji S. (2017), mentioning the mediating effect of OCB on human capital in the form of competence on performance.

Mercu Buana University can work on this by internalizing its work vision, mission, and cultures. Efforts to strengthen the internal foundations of the university such as understanding and implementing the work vision, mission and cultures, in addition to generating employee behavior and initiative on the environment, can also lead to a sustainable university which is defined as a higher education institution discussing, involving and promoting, minimizing negative environmental, economic, social, and health impacts in the use of their resources (in) the main functions of education, research, outreach and partnership, and stewardship to (help) the community make the transition to sustainable lifestyle (Velazquez Contreras, 2012).

The Effect of Structural Capital on Sustainable University through Organizational citizenship Behavior for the Environment

The research results indicate that structural capital has a significant effect on the sustainable university through organizational citizenship behavior for the environment. These results are supported by Naif *et al.* (2016) finding that the OCBE in the form of the natural environment and the involvement and innovation mediates the effect of structural capital in the form of management knowledge on the sustainable university.

Similar to the condition of Mercua Buana University, this research views structural capital possessed as management relations, organizational structures within the university, and employee knowledge of the institution. Besides, in universities, there are four parts, namely organizational structure, teaching and learning systems, and final assignment guidance systems. If the structural capital runs well accompanied with behaviors and initiatives of both lecturers and education staff regarding environmental stewardship, such as participating in preparing reports on university development and sustainability, a sustainable university will be realized.

The Effect of Relational Capital on Sustainable University through Organizational citizenship Behavior for the Environment

The research results indicate that relational capital has a significant effect on the sustainable university through organizational citizenship behavior for the environment. These results are consistent with the previous study conducted by the University of Virginia (2017) finding that OCBE in the form of Corporate Social Responsibility (CSR) mediates the relationship between relational capital and sustainable corporates.

From the findings of this research, it can be learned that relational capital possessed by Mercu Buana University in the form of association network with its partners can affect the sustainability of the university if it is supported by behaviors and initiatives of both lecturers and education staff regarding environmental stewardship. Currently, Mercu Buana University is not only collaborating with other universities but also

science associations, companies, and the government. The importance of OCBE, in this case, is that it can make the university's reputation to cooperation partners increases. Also, both the university and cooperation partners are expected to benefit more from the collaboration.

CONCLUSION

Based on the research results and discussion mentioned above, the effect of intellectual capital on organizational citizenship behavior for the environment along with its implication on the sustainable university at Mercu Buana University, Jakarta can be concluded as follows:

The variables of human capital, structural capital, relational capital, and organizational citizenship behavior for the environment have a positive and significant effect on the sustainable university variable at Mercu Buana University. The variables of human capital and structural capital have no significant effect on the sustainable university variable at Mercu Buana University.

The variables of human capital, structural capital, and relational capital have a significant effect on the sustainable university variable mediated by the variable of organizational citizenship behavior for the environment at Mercu Buana University.

SUGGESTIONS

Suggestion for Mercu Buana University

In the human capital variable, the highest contribution comes from the indicator of the implementation of Mercu Buana University's work cultures in daily activities in the workplace. Therefore, the leaders or management of Mercu Buana University is expected to internalize the university's values and cultures even more intensively through activities such as training activities on Healthy, Safety and Environment (HSE) to employees, work culture socialization through national seminars and international conference.

In the structural capital variable, the highest contribution is obtained from the indicator of the university's way of delivering information about university development. Therefore, in addition to providing information through announcements, Mercu Buana University is also expected to increase the involvement of both lecturers and education staff to contribute directly or indirectly in university development, such as through internal meetings of units and faculties to support national and international accreditation activities.

In the relational capital variable, the highest contribution derives from the indicator of Mercu Buana University's good relations with cooperation partners. Therefore, Mercu Buana University is expected to maintain harmonious relations with cooperation partners through the sustainability of programs that have been mutually agreed continuously, such as through joined research, guest lectures, and visiting lecturers both inbound and outbound programs.

In the variable of organizational citizenship behavior for the environment, the highest contribution is obtained from the indicator of employee participation in making environmentally friendly regulations and policies inside and outside Mercu Buana University. Therefore, Mercu Buana University is expected to more improve work

programs that can support environmentally friendly behavior by conducting disaster response seminars, training on Healthy, Safety, and Environment (HSE), and promoting green campus programs.

In the sustainable university variable, the highest contribution is obtained from the indicator of providing scholarship for underprivileged children and education staff in schools (teachers). Therefore, Mercu Buana University is expected to expand the reach of teacher scholarship programs which are currently only limited to *JABODETABEK*. Mercu Buana University should facilitate such programs for teachers, especially those in schools outside of Java that require the development of human resources such as Papua, Sulawesi, and so on.

Suggestion for Future Researchers

Future researchers are expected to add other variables that may have a correlation and effect on sustainability, such as organizational cultures, Corporate Social Responsibility (CSR), and green human resource management. Other approaches such as a qualitative approach are also recommended to use as an alternative to the same research theme to directly involve employees and management.

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