Model of Human Capital Intelligence and Work Performance

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Abstract – This paper explain a model of human capital intelligence and work performance. The importance of human resource as an asset that having a uniqueness have known. Using data questionnaire the study test and analysis relationship between human capital namely, intellectual, emotional and spiritual intelligence. In addition ability of individual manage work stress is relevant to study toward work performance. Data was analysis using regression and shown that all hypothesis are accepted. The results finding and discussion session will presented in discussion session.

Keywords: human assets, human capital, work stress, work performance, lecturer

1. Introduction

As an educational institution, universities have an important role in building the quality of education in Indonesia. The higher institution plays an important role in providing and educating the young generation in mastering knowledge of applied science and technology. In addition, the higher institution also becomes the right significant place to create young future leaders. To achieve this goal, thus the quality of lecturer must be improved. According to Hamalik (2003), achieving quality human resources needs to be supported by the quality of lecturers. The main duties of the lecturers is provide and carry out good education process which is reflected in three of Duties called Tri Dharma, namely teaching, doing research and serving the community.

In order to produce qualified graduates, thus it becomes responsibilities of lecturers have good work performance and achievement. The work performance of lecturer understood as level of work achievement in both quality and quantity of outcomes (Mangkunegara, 2010). Therefore, Tri Dharma becomes work guidance and indicators work performance that need to achieved by the lecturers. Some previous research shown that there is a relationship that good lecturer performance results toward institutional successful itself (Yuniningsih, 2002). There is many internal and external factors influenced lecturers’ performance. More specifically from the internal factors, having an appropriate of knowledge, skill and ability as well as positive mindset is a must for a lecturer. On the other side, the external factors such as physical work environment, work climate and environment as well as the attitude of peers and supervisors are important to consider influence of work performance (Gitosudarmo and Sudita, 2000). Furthermore, the human capital of the lecturers to lead success of higher institution needs more support from the institution for

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achieving of organization's goals. In order to deliver Tri Dharma servings, thus issue and measurement of human capital of lecturers such as intellectual intelligence (IQ), emotional intelligence (EQ), and spiritual intelligence (SQ) are significant to study.

Being a lecturer is mean that people working in a relatively high stress workplace because of heavy work demands/duties, 24/7 hour of workplace and varieties of work challenges (Jehangir et.al., 2011). Work stress become such phenomenon among Indonesian lecturers as based new rules from Indonesian government especially from Ministry of Education Department, research productivity becomes major suggestion and priorities. Thus, work stress among lecturers able come from pressures instructional commando from the higher institution. This paper aims to analysis relationship between variables of human capital of lecturers such as intellectual intelligence, emotional intelligence, and spiritual intelligence to work achievement, and to explain the relationship between work stresses to work achievement.

1.1. Work Performance
Work performance is a concept of work behavior that lead certain level of goal. According to Simanjuntak (2005), work performance is understand as the level of achievement and labor results in achieving the corporate goals. Sumamur (2001) added the measurement of work performance that work results possible to measure in quantity and quality approach. In line, Robbins (2006) and Madgopes in Natapriatna (2001), mentioned that work measurement includes quantity, quality, timeliness, initiation, and self-motivation. Furthermore, Rivai (2004) stated that work performance is a real behavior, not only intention and motive for working, that displayed through some real actions.

While discussing about university's performance, it will be in line with their lecturer's performance. As the main component of operation in this sector, the quality and performance of lecturer become achievement indicator of the university performance. Intensity and teaching method used by lecturer become one indicators in teaching process. In addition, participation and engagement in specific research activity will improve and set research academic community among the lecturers. Moreover, this media will provide academic networking widespread and will strengthen research reputation of those lecturers. Community serve is a part of applied academics activities toward the community through social activities. Especially the activities expected able to increase existence of community academics to educate and to empower of the community. This program will become such a charity and social institutional responsibility activity toward the community.

1.2. Human capital: Intellectual Intelligence
As human resource of the university lecturers is asset of university. As the asset, human own capability which able to divide into three categories and measured namely, intellectual intelligence (IQ), emotional intelligence (EQ), and spiritual intelligence (SQ). According to Novanianto (2013), intellectual intelligence represents of ability of human resource to make analysis and find problem solving using intellectual abilities, analytical analysis, logic, and rational. Intellectual intelligence measure in what extent individuals have the ability to receive, store, and process information into facts (Novanianto, 2013). In addition IQ also directs individuals to act in a directed manner, think rationally, and deal with the environment effectively.

Raven in Fabiola (2005) defined intellectual as an individual's general capacity that appears in the ability of individuals to deal with the demands of life rationally. Intellectuals are more focused on the ability to analysis. Global intellectual ability
possessed by individuals so that they can act in a meaningful and meaningful way and can interact with the environment efficiently. Some ability for measuring intellectual intelligence according to Robbins (2008) able to be measured such as numerical intelligence, verbal ability, inductive ability, deductive ability, and visualization of space.

1.3. Human capital: Emotional Intelligence
Emotional intelligence is the ability to receive, feel and build emotions well, have good knowledge and understanding about emotions and able to enhance emotional and intellectual development (Salovey and Mayer, 1999 in the handbook Emotional Intelligence training, prime consulting, p. 11). Individuals who have good emotional intelligence is likely to succeed in their life because ability to control the mind will drive more productivity (Widagdo, 2001). Meanwhile, Goleman (2004) and Goleman (2003), state that emotional intelligence is more ability possessed by individual (e.g. lecturer) in motivating themselves, resilience in the face of failure, controlling emotions, and delaying satisfaction, and regulating the state of the mind and soul. Individuals with high emotional intelligence able to place and control out their emotions on the right portion

1.4. Human capital: Spiritual Intelligence
Spiritual intelligence is an internal ability includes the brain intelligence and human soul to understand the core meaning of the universe, which then allows the brain to find and give the meanings for problem solving (Zohar and Marshall, 2001). Moreover, give the meaning is aim for worship activity. Every single behavior and activity through natural thinking towards a whole person and only because of God reason (Agustin, 2006). Thus, individuals with high spiritual intelligence have better capability in recognizing, finding inner meaning, and solving existential, spiritual, and practical problems by gaining inspiration from one’s spiritual abilities (Nasel, 2004). The role of spiritual intelligence is the foundation needed to effectively function intellectual and emotional intelligence. Indicators of spiritual intelligence according to Zohar and Marshall (2007), namely the ability to be flexible (adaptive spontaneously and actively), a high level of awareness, the ability to adapt and utilize suffering, the ability to face and transcend pain, the tendency to see the interrelationships between various things (a holistic view).

1.5. Job Stress
Stress is an unpleasant condition with high pressure, tension or disturbance that comes from inside and/or outside of individual. Work stress is understand as excessive work demands that exceed the ability of the workers so that it can cause pain, discomfort or feeling tense because of the situation at work (Behr and Newman in Rice, 1999 ) Whereas according to Spears (2008) stated that work stress is a reaction of excessive pressure at work that cause detrimental physical and psychological effect. Seyle in Riggio (2003) adds that job stress is a lack of conformity between the ability and expertise of the workers with the demands of the work and the environment in the workplace. Some indicators of work stress are the demands of the task, the demands of the role, the demands of the interpersonal, and the organizational structure (Robbins, 2006). The hypothesis model proposes of this study based on literature review are:

H1: There is a positive relationship between intellectual intelligence and work performance.
H2: There is a positive relationship between emotional intelligence and work performance.
H3: There is a positive relationship between spiritual intelligence and work performance.
H4: There is a negative relationship between work stress and work performance.

2. Research method
This study using 82 lecturers who work as full time employment. Convenient non-random sampling approach was use to select the sample study. Data collection used questionnaire which measurement of each variable used 5 Likert scale from strongly agree to strongly disagree (5 to 1). Data was analysis used regression with SPPS tool, and the model is (Ghozali, 2001)

\[ Y = \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e \]

\( X_1, X_2, X_3, X_4 \) = independent variables (intellectual intelligence, intellectual emotional, intellectual spiritual, and work stress).

\( Y \) = independent variable (work performance)

\( \beta_{1,2,3,4} \) = regression coefficient

Variable and indicator shows in the table 1 below.

<table>
<thead>
<tr>
<th>No</th>
<th>Variables</th>
<th>Indicators</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Achievement and output which able to reach of</td>
<td>2.      Quality</td>
<td>(1,2,3,)</td>
</tr>
<tr>
<td></td>
<td>lecturers in certain time.</td>
<td>3.      Timeliness</td>
<td>Madgopes in Natapriatna</td>
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<tr>
<td></td>
<td></td>
<td>4.      Initiative</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>5.      Motivation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ability for a rational thinking and analysis</td>
<td>2.      Verbal ability</td>
<td></td>
</tr>
<tr>
<td></td>
<td>in finding solution.</td>
<td>3.      Inductive reasoning</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>4.      Deductive reasoning</td>
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<td></td>
<td></td>
<td>5.      Space visualization</td>
<td></td>
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<tr>
<td></td>
<td>Ability for self-awareness, self-motivate and</td>
<td>2.      Self-regulating</td>
<td></td>
</tr>
<tr>
<td></td>
<td>self-control of emotion toward others.</td>
<td>3.      Empathy</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.      Self-motivation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.      Social skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ability for solve the problems of life based</td>
<td>2.      High awareness</td>
<td></td>
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<tr>
<td></td>
<td>on faith on God.</td>
<td>3.      Survival in sacrifice</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>4.      Quality of life</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>5.      Holistic view</td>
<td></td>
</tr>
</tbody>
</table>
5. Work Stress: Work pressure of workers while serving their tasks and unpleasant workplace.

1. Work demand
2. Role demand
3. Inter-role demand
4. Organizational structure

Robbins (2006)

3. Results and Discussion

Amount of respondents is 82 full time lecturers. About 53% they are male and they are average 40 years old. The highest level of education among the respondents is doctor (20%) but majority they are magister graduated (80%). Work tenure is average 20-30 years.

Reliability and validity test was used and the results shows that all data is reliable and valid. Moreover normality and heteroscedastic analysis also shown that data is relative normal and meet requirement of heteroscedastic analysis.

Test of hypothesis using regression shows in table 2 below.

<table>
<thead>
<tr>
<th>Model</th>
<th>Variable Dependent</th>
<th>Variable Independent</th>
<th>B</th>
<th>t count</th>
<th>Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>Work performance</td>
<td>(Constanta)</td>
<td>13,277</td>
<td>0,000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Intellectual I.</td>
<td>0,180</td>
<td>2,555</td>
<td>0,013</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emotional I.</td>
<td>0,240</td>
<td>3,474</td>
<td>0,001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spiritual I.</td>
<td>0,098</td>
<td>1,052</td>
<td>0,296</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Work Stress</td>
<td>-0,252</td>
<td>-3,271</td>
<td>0,002</td>
<td></td>
</tr>
</tbody>
</table>

Thus the equation model of human asset is:

\[ Y = 0, 180 \text{ Intellectual I} + 0,240 \text{ Emotional I} + 0,098 \text{ Spiritual I} - 0,252 \text{ Work Stress} \]

The results of this study showed that intellectual intelligence has a positive effect on the performance of lecturers, and hypothesis 1 is supported. This means that higher the intellectual intelligence owned by lectures, then it will improve the performance of lecturers. It means that respondents who have numerical ability, those more work and learn accurately. Moreover, for those who have verbal communication better will lead their ability in understanding the conversation and able to make good conclusions from the conversation. Deductive ability is being able to use logic when having problems in carrying out tasks. Furthermore, the indicator of space visualization is able to draw an object well so that the lecturer will have high memory. Therefore, lecturers who have intellectual intelligence will improve the performance of lecturers in quantity and quantity in accordance with the goals set by the university. This study supports the statement of Hasibuan, (2002) which shows that individual success determined by owned high IQ is in realizing its success in the world of work.

This study support of hypothesis 2, it means that emotional intelligence has a positive effect on the performance of lecturers. Ability of individuals in manage their emotional and mood lead to positive effect on work performance. Empathy and self-motivation part of indicator of emotional intelligence become significant asset for lecturer while doing their jobs with supervisor, colleagues and students. This intelligence also have impact successful in social life. The study supports
previous studies conducted by Boyatzis (1999) which shows that an individual who has high emotional intelligence will produce good performance work.

This study also support hypothesis 3, that is spiritual intelligence has a positive effect on work performance of lecturers. Flexibility and self-awareness able to deal with and utilize suffering. Spiritual intelligence lead to quality of life and have a holistic perspective. In this study, spiritual intelligence interpreted as the ability to deal with life problem based on belief in God. As the respondents of this study, coming from university with Islamic background, thus it allegedly in defining spiritual intelligence more focus on faith to God.

Hypothesis 4 also supported in this study. The study found that work stress have negative impacts to the lecturers' performance. This means that the lower level of stress experienced by lecturers, thus it will affect to the higher performance. This study found that stress perceived lower by the respondents, because of the assignment and work demands are not being their physic and psychological burden. Moreover, work environment and climate also support and maintenance the atmosphere is working-friendly and peaceful among lecturers and colleagues. The result of the study support Goswami (2015) that work stress negatively affects performance so that the lecturer is able to overcome the pressure that arises when carrying out the task.

4. Conclusion

Human capital plays important role in build of work performance. However, among three types of intelligence, emotional intelligence found has higher significantly impact toward work performance. In order to increase the performance every single individual should have an inductive ability, have good empathy with others, has high self-motivate as well as have a holistic outlook. People with high stress lead to lower performances. Thus, improving workplace conditions both in physical and non-physical is suggestion to make a working friendly workplace.

References

Salovey and Mayer, John D. 1990.“Emotional Intellegence”. Imaginaion, Cognition, and Personality
Zohar, D. & Marshall, I. 2007.“SQ: Spiritual Intelligence The Ultimate Intelligence". Ahli Bahasa Rahmani