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# **PARTIAL LEAST SQUARES FOR PERFORMANCE ASSESSMENT OF TEACHING WORKLOADS BY MODERATING MOTIVATION OF EMOTIONAL INTELLIGENCE**

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## **ABSTRACT**

*Educations at higher education institutions need support in particular of human resources to adequate so that the educational process can run well. Lecturer highly affects the quality of the lecture and the output generated by the higher education institution. To achieve this, the lecturer is desirable social sensitivity and academic competence in transforming the existing science to his students. The purpose of this study was to determine the effect of Organizational Citizenship Behavior on lecturer's performance through workload and involves motivation as a moderating variable on emotional intelligence. The results of the study with partial least square (PLS) approach showed that the moderating motivation on emotional intelligence is fit model based on the value of  $R^2$  and  $Q^2$ . Motivation as a moderating variable emotional intelligence dominant influence on the performance of lecturers. Emotional intelligence is influenced by the Organizational Citizenship Behavior, and further affect the workload and performance of lecturers. Organizational Citizenship Behavior significant and positive impact on the workload, and the workload of significant and positive impact on Performance Lecturer.*

**Keywords:** Motivation, Emotional Intelligence, OCB, Workload, Performance, Moderating, PLS.

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## 1. INTRODUCTION

Lecturers are professional educators and scientists with the main task of transforming, developing and disseminating science, technology, and art through education, research, and community service. Referring to the second meaning of the legal basis so it is important for a teacher to have optimal performance in order to transform their knowledge to students. The educational background of lecturers as well as the good performance of the lecturers will greatly influence the quality of the lecture and the quality of the output generated by the higher education institution. To achieve this, the lecturer is desirable social sensitivity, academic competence, and emotional intelligence in transforming the existing science to his students (Muzenda, 2013).

The transformation of science through education provided by the lecturer is the process can be, that person becomes their own identity according to their talents, character, ability, and conscience in full accordance with the disciplines studied by students and in accordance with the depth of knowledge provided by the lecturer which related. Dynamics campus life requires not only endurance lecturer physically but also requires endurance and readiness of lecturers both in the provision of course materials as well as in the management of student behavior dynamics amid emotions (Maina, 2013). It is also due to the transformation of education is directed to the formation of a superior personality with emphasis on the quality of the maturation process logic, heart, character,

Owens (1985) stated that the ability and skill are factors that influence the behavior and performance of individual work directly. Variable personal and demographic backgrounds have an indirect influence. Demographic variables show the influence of the environment, one of which is the motivation to work in the implementation of faculty performance. Wilson (2010) states that lecturers must also ensure its role as a leader in the learning process to students with the ability to position itself as: educator, manager, administrator, supervisor, leader, innovator and motivator can run. Lecturers are expected to manage and empower students to increase their learning ability. Nasir et.al. (2017), to obtain performance conditions in supporting lecturer the stimulus is needed to motivate lecturers to be able to carry out their duties properly (Bryman, 2007). Work motivation lecturer also shows: 1) the lack of contribution of lecturers in professional organizations, 2) faculty tended to perform tasks with sober profession, 3) lecturers rarely provide feedback to the leader. Meanwhile, in terms of emotional intelligence lecturers still visible phenomena, namely: 1) The lecturer is still less give awards to students in an effort to carry out his duties, for example, for students who excel, 2) lecturer less than optimal in new innovations in the execution of their duties; and 3) the presence of lecturers still arbitrary and inconsistent with the timeliness expected.

Methods associated with latent variables namely Confirmatory Factor Analysis (CFA) (Brown, 2006) and SEM (Mulaik 2009; Raykov & Marcoulides, 2006; Hair et al, 2006; Bollen, 1989). Some studies relating SEM, namely Setiadi, et.al. (2017), work ethic with indicators as actualization (78.8%), call (74.2%) and religious (72.6%) was influenced by the work climate and discipline, while labor productivity seen from measurements found that working with the academic ability and motor skill development (efficacy) 82.2%, which works with the principle of effectiveness of 76.5% and that works using the principle of efficient 84.0% influenced by working climate, work discipline and work ethic. The work ethic provides indirect effect on the working climate on work productivity. Rusdi N, et al. (2015, 2014), Satisfaction taxpayer hotel business sectors affected by the quality of taxpayer services, the level of satisfaction of the taxpayer, the taxpayer attitudes. Local tax regulations do not affect the attitude of the taxpayer in the field of hotel business. The level of satisfaction of the taxpayer provides the greatest direct effect on the quality of taxpayer services on tax

compliance in the field of hotel business. Bryman, (2007), to obtain conditions to adequate faculty performance, so it needed a stimulus to motivate lecturers to be able to carry out their duties properly. Black (2015) who conduct quantitative research on higher education institutions, that the work environment, interpersonal relationships between teachers, and reward or appreciation of the institution is a stimulus that can improve the performance of lecturers.

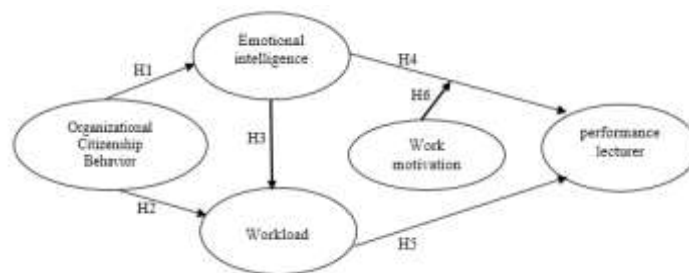
The above phenomenon, the overall performance of a lecturer at the University of Batam showed less than optimal in performing its duties is possible because of the perception of organizational citizenship behavior, workload, emotional intelligence, and motivation. This study examines the indicators and variables that affect the performance of lecturers and involves motivation as a moderating variable, as well as the impact theoretically, which is then compiled into a theoretical model which will be evidenced by empirical data. This study is expected to provide information about performance enhancement lecturer in higher education institutions, particularly the University of Batam.

## 2. METHODOLOGY

The data in this study using primary data at the University BATAM, obtained from the questionnaires to the faculty (Levy & Stanley, 1999). Samples of respondent were collected in analogous with empirical experiment (Mangkoedihardjo, 2006, 2007; Santoso and Mangkoedihardjo, 2013; Sedayu and Mangkoedihardjo, 2018). Further analysis with the CFA and SEM methods PLS. CFA is part of Structural Equation Modeling (Brown, 2006). Moderating SEM is done by using Partial Least Square (PLS) has an analysis step as follows:

1. Outer Model, including the validity of the test is seen from the loading factor, and reliability test views of the value of Composite reliability. Indicator is valid if it has a value loading factor > 0.5, and is said to be reliable if the reliability of composite values > 0.6.
2. Inner Model, this test may be the result of inner value of weight which examine the research hypothesis through bootstrap samples t test and goodness of fit model. The model can be declared to have the goodness of fit if it has a value of R-Square > 0 and the value  $Q^2 = 1 - (1 - R_1^2)(1 - R_2^2)(1 - R_3^2) > 0.35$  giving high accuracy.

Conceptual study is presented as follows.



**Figure 1** Conceptual Model OCB, Emotional Intelligence, Workload, Lecturer performance and motivation as a moderating

### 2.1. The hypothesis in this study

H1: Organizational Citizenship Behavior significant effect on Emotional Intelligence

H2: Organizational Citizenship Behavior significant effect on Workload

H3: Emotional Intelligence significant effect on Workload

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H4: Emotional Intelligence Lecturer significant effect on performance

H5: Workload Lecturer significant effect on performance

H6: Motivation moderate positive effect on emotional intelligence (strengthen) the performance of lecturers

Modeling moderating with the methods of interaction, there are two steps, first, proved that the moderating variables have a significant effect on the performance of the lecturers, while the second, if proved influential, then the variable is suspected as a moderating variable, and then performed the modeling PLS involving moderating variables and interactions moderating variables with variable moderated (emotional intelligence) on the performance of lecturers.

### 3. RESULTS AND DISCUSSION

Validity test is done using confirmatory factor analysis on each of the latent variables is Organizational Citizenship Behavior (X), Emotional Intelligence (Y1), Workload (Y2), Lecturer Performance (Y3), and Motivation (Z) as the moderating effects. Reliability test used composite reliability with a minimum cut-off value is 0.7. Results of testing the complete model with the AMOS program can be seen in the following table:

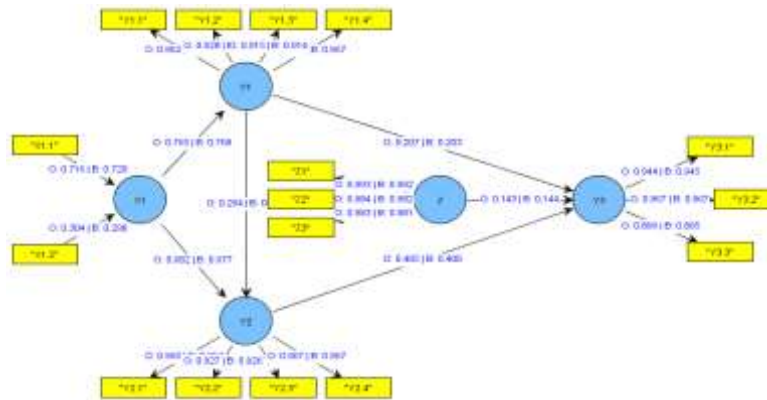
**Table 1** Results Statistics Convergent Validity and Reliability Indicators Reflective On Research Variables

variables	Indicator	Convergent validity			composite Reliability
		Loading Factor	Standard deviation	T-Statistic	
Organizational Citizenship Behavior (X)	aspects of participation (X1.1)	0.716	0.066	10.836	-
	compliance aspects (X1.2)	0.304	0.068	4.445	
Emotional Intelligence (Y1)	managing emotions (Y1.1)	0.962	0.007	133.841	0.970
	self-awareness (Y1.2)	0.928	0.017	55.831	
	empaty (Y1.3)	0.915	0.009	100.250	
	social skills (Y1.4)	0.967	0.006	152.224	
Workload (Y2)	Strategy and Management Learning (Y2.1)	0.965	0.005	184.327	0.977
	Teaching (Y2.2)	0.927	0.017	53.220	
	Research and publications (Y2.3)	0.967	0.006	165.253	
	Community service (Y2.4)	0.967	0.004	220.635	
Lecturer Performance (Y3)	Work performance on the teaching qualification (Y3.1)	0.944	0.003	310.924	0.991
	Pedagogic Competence, Professional, Social and Personality (Y3.2)	0.967	0.005	200.228	
	Engagement activities Research & Community Service (Y3.3)	0.896	0.004	264.252	
Motivation (Z)	Trying Doing Something New Ways and Creative (Z11)	0.993	0.010	97.647	0.955
	Looking for Feedback about deeds (Z2)	0.984	0.008	122.405	
	Taking Personal Responsibility on Deeds (Z3)	0.983	0.024	36.564	

Table 1, shows all the individual indicators latent variable has a value above the loading factor of 0.5 to T-Statistic is greater than t-table = 1.96, then it is valid and significant indicators. Furthermore, it also provides Composite value reliability above its cut-off value of 0.7, so it can be said of all latent variables is reliable. Indicators Organizational Citizenship Behavior (OCB) (X) is formative, it means that the Organizational Citizenship Behavior (OCB) (X) is influenced by aspects of participation (0.716) and compliance aspects (0.304). Emotional intelligence (Y1) is formed by the indicators of social skills (Y1.4) (0.967), and

managing emotions (Y1.1) (0.962). Workload (Y2) dominant indicator research and publications (Y2.3) (0.967), public service (Y2.4) (0.967) and strategies and learning management (Y2.1) (0.965), Performance dominant Lecturer and Pedagogic Competence, Professional, Social and Personality (Y3.2) (0.967) and performance qualification Work on teaching (Y3.1) (0.944). Motivation (Y2) with the dominant indicator Trying Doing Something New Ways and Creative (Z1) (0.849), look for feedback about the action (Z2) (0.984), and take personal responsibility for the actions of Java (Z3) (0.983).

The results of the original estimate and the estimation of the bootstrap, B = 200 moderating PLS (MPLS) stages - first presented in the following figure.



**Figure 2** OCB relationship, Emotional Intelligence, Workload, Lecturer performance and motivation as a moderating (MPLS) Stage - 1

Testing the path coefficients in Figure 2 and equation above in detail is presented in the following table:

**Table 2** Testing Results Coefficient of Performance Against OCB Model Line Lecturer (MPLS) Stage - 1

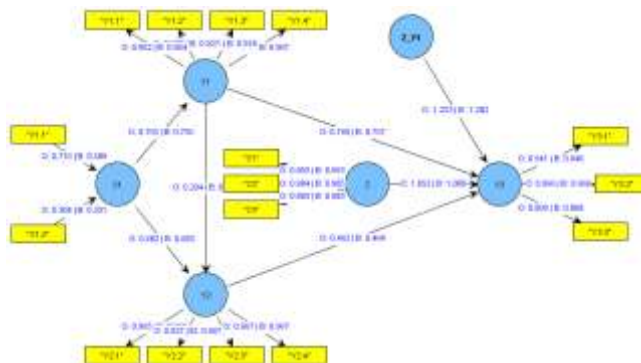
variables	Coefficient	Standard deviation	T-Statistic	Information
Organizational Citizenship Behavior (X1)→ Emotional Intelligence (Y1)	0.765	0.033	22.936	Significant
Organizational Citizenship Behavior (X1)→ Workload (Y2)	0.682	0.049	13.915	Significant
Emotional Intelligence (Y1) → Workload (Y2)	0.294	0.048	6.141	Significant
Emotional Intelligence (Y1) → Lecturer Performance (Y3)	0.207	0.060	3.467	Significant
Workload (Y2)→ Lecturer Performance (Y3)	0.405	0.063	6.420	Significant
Motivation (Z)→ Lecturer Performance (Y3)	0.143	0.042	3.392	Significant

Source: Data processed

Based on Table 3, it can be interpreted directly influence research hypothesis moderating variables (motivation) on the performance of lecturers. Motivation (Z) positive and significant impact on the Performance of Lecturer (Y3). It is seen from the path marked positive coefficient of 0.143 with T-Statistic a value of 3.392 larger than t-table = 1.96. Thus the motivations (Z) directly affect the performance Lecturer (Y3) of 0.143, which means that every increase in motivation (Z) will raise Lecturer Performance (Y3) of 0.143. This shows thatalleged motivation as a moderating variable that is strengthening the influence of emotional intelligence on the performance of lecturers. Moderating model of partial least

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squares (MPLS) at stage 2. That involves interaction with emotional intelligence motivation variable with bootstrap to test the research hypothesis through t test, and bootstrap stop if the original estimate and the estimation of the bootstrap has a value approaching. The results of the original estimate and the estimation of the bootstrap, B = 200, in Phase 2 are presented in the following figure.



**Figure 3** OCB relationship, Emotional Intelligence, Workload, Lecturer performance and motivation as a moderating (MPLS) Stage - 2

The test results can be seen from the complete model R-square value that describes the goodness-of-fit of the model. R-square value recommended is greater than zero. R-square value are presented in Table 3 below:

**Table 3** Goodness of Fit of R-Square Moderating Partial Least Square (MPLS) Stage - 2

Exogenous variables → Endogenous variables	R-Square
Organizational Citizenship Behavior (OCB) (X) → Emotional Intelligence (Y1)	0.585
Organizational Citizenship Behavior (OCB) (X), Emotional Intelligence (Y1) → Workload (Y2)	0.859
Emotional Intelligence (Y1), Workload (Y2), Motivation (Z), Motivation * Emotional Intelligence (Z_Y1) → Lecturer Performance (Y3)	0.904

Table 3 explains that:

- Donations or the proportion of variable Organizational Citizenship Behavior (OCB) (X) in explaining the variation around the variable EQ (Y1) of 0.585.
- Donations or the proportion of variable Organizational Citizenship Behavior (OCB) (X), Emotional Intelligence (Y1) in explaining the variation around the variable Workload (Y2) of 0.859.
- Donations or the proportion of variable EQ (Y1), Workload (Y2), Motivation (Z), Motivation \* Emotional Intelligence (Z\_Y1) in explaining the variation around Lecturer Performance variables (Y3) of 0.904.

The results of all the R-square value indicates that all of the R-square value is greater than zero, it means that our model already meets the required Goodness of Fit. Value  $Q^2 = 0.994$ , which means moderating the model has high accuracy of faculty performance.

Of the appropriate model, can be interpreted in each path coefficient. The coefficients of these pathways is hypothesized in this study, which can be presented in the following structural equation:

$$Y1 = 0.765 X1$$

$$Y2 = 0.682 X1 + 0.294 Y1$$

$$Y3 = 0.769 Y1 + 0.462 Y2 + 1.052 Z + 1.253 Z\_Y1$$

Where:

X : OCB

Y1 : Emotional Intelligence

Y2 : Workload

Y3 : Performance Lecturer

Z : Motivation

Testing the path coefficients in Figure 3 and the above equation in detail presented in the following table:

**Table 4** Coefficient Test Results Model Line OCB Lecturer on Performance through Workload and Motivation

variables	Coefficient	Standard deviation	T-Statistic	Information
Organizational Citizenship Behavior (X1)→ Emotional Intelligence (Y1)	0.765	0.038	20.203	Significant
Organizational Citizenship Behavior (X1)→ Workload (Y2)	0.682	0.043	15.695	Significant
Emotional Intelligence (Y1) → Workload (Y2)	0.294	0.044	6.657	Significant
Emotional Intelligence (Y1) → Lecturer Performance (Y3)	0.769	0.101	7.640	Significant
Workload (Y2)→ Lecturer Performance (Y3)	0.462	0.075	6.191	Significant
Motivation (Z)→ Lecturer Performance (Y3)	1.052	0.154	6.831	Significant
Motivation * Emotional Intelligence (Z_Y1) → Lecturer performance	1.253	0.165	7.570	Significant

Source: Data processed

Based on Table 4, it can be interpreted each hypothesis of the study, as follows:

- Organizational Citizenship Behavior (X) positive and significant impact on emotional intelligence (Y1). It is seen from the path marked positive coefficient of 0.765 with T-Statistic a value of 20.203 larger than t-table = 1.96. Thus Organizational Citizenship Behavior (X) direct effect on emotional intelligence (Y1) of 0.765, which means that every increase in Organizational Citizenship Behavior (X) will increase emotional intelligence (Y1) of 0.765.
- Organizational Citizenship Behavior (X) positive and significant impact on Workload (Y2). It is seen from the path marked positive coefficient at 0.682 with T-Statistic a value of 15.695 larger than t-table = 1.96. Thus Organizational Citizenship Behavior (X) has an effect directly on the Workload (Y2) of 0.682, which means that every increase in Organizational Citizenship Behavior (X) will raise Workload (Y2) at 0.682.
- Emotional intelligence (Y1) positive and significant impact on Workload (Y2). It is seen from the path marked positive coefficient of 0.294 with T-Statistic a value of 6.657 larger than t-table = 1.96. Thus emotional intelligence (Y1) direct impact on Workload (Y2) of 0.294, which means that every increase in emotional intelligence (Y1) will raise Workload (Y2) of 0.294.
- Emotional intelligence (Y1) positive and significant impact on the performance of lecturers (Y3). It is seen from the path marked positive coefficient of 0.769 with T-Statistic a value of 7.640 larger than t-table = 1.96. Thus emotional intelligence

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(Y1) directly affects the performance of lecturers (Y3) of 0.769, which means that every increase in emotional intelligence (Y1) will raise the performance of lecturers (Y3) of 0.769.

- Workload (Y2) positive and significant impact on the performance of lecturers (Y3). It is seen from the path marked positive coefficient of 0.462 with T-Statistic a value of 6.191 larger than t-table = 1.96. Thus Workload (Y2) direct impact on faculty performance (Y3) of 0.462, which means that every increase in labor expenses (Y2) will raise the performance of lecturers (Y3) of 0.462.
- Motivation (Z) positive and significant impact on the Performance of Lecturer (Y3). This is evident from the marked positive path coefficient of 1.052 with T-Statistic a value of 6.831 larger than t-table = 1.96. Therefore, the motivation (Z) directly affect on performance Lecturer (Y3) of 1.052, which means that every increase in motivation (Z) will raise Lecturer Performance (Y3) of 1.052.
- Motivation \* Emotional Intelligence (Z\_Y1) positive and significant impact on the Performance of Lecturer (Y3). This is evident from the marked positive path coefficient of 1.253 with a value of 7.570 T-Statistic larger than t-table = 1.96. Therefore, the motivation \* Emotional Intelligence (Z\_Y1) directly affect on performance Lecturer (Y3) of 1.253, which means that every increase in motivation \* Emotional Intelligence (Z\_Y1) will raise Lecturer Performance (Y3) of 1.253. Or, motivation significant moderating effect of emotional intelligence which is strengthening the performance of lecturers at 1.253.

### 4. CONCLUSION

The conclusion from the data analysis and discussion are:

- Indicators that form latent variables Organizational Citizenship Behavior are the formative is valid and significant, while emotional intelligence, workload, faculty performance, and motivation are reflective is a valid and reliable indicator.
- Organizational Citizenship Behavior is influenced by aspects of indicators of participation; Emotional intelligence is formed by indicators of social skills and managing emotions; Workload is a dominant indicator research and publications, community service and strategies and learning management. Is the dominant faculty performance indicators pedagogical, professional, and social and personality; for motivation formed by indicator try to doing things in new ways and creative, look for feedback about the action, and take personal responsibility for the actions of Java.
- Model performance by moderating motivational lecturer on emotional intelligence is a model that fit criteria  $R^2$  and  $Q^2$ . Motivation as a moderating variable EQ provides Lecturer dominant influence on performance. Emotional intelligence is influenced by the Organizational Citizenship Behavior, and further affect the workload and performance of lecturers. Organizational Citizenship Behavior significant and positive impact on the workload, and the workload of significant and positive impact on Performance Lecturer.



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