Exploring Personality, Grit and Organizational Citizenship Behavior at Higher Education: The Mediating Roles Of Job Involvement

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Abstract. This study investigates whether personality and grit affect the Organizational Citizenship Behavior (OCB) and if so, whether this relationship is mediated by job involvement or not. This study was a survey at the Industrial Vocational Higher Education of the Ministry of Industry in Indonesia in 2018, with a sample of 217 teachers. Data collected by using the questionnaire and analyzed by PLS Model with single-mediator. This research reveals that personality and grit have a positive direct effect on the organizational citizenship behavior. The influence of personality on organizational citizenship behavior is partially mediated by job involvement, but job involvement does not mediate the influence of grit on organizational citizenship behavior. Theoretically, the study extends the current theory by exploring grit as an important predictor that influences organizational citizenship behavior and this relationship is not mediated by job involvement.

Keywords. Organizational Citizenship Behavior, Personality, Grit, Job Involvement

1. Introduction
The problem about "link and match" between labor markets and universities in many countries dominated by the issue about the lack of responsiveness of universities to the needs of the labor market and it is the main reason why a large number of highly educated people remain unemployed [1], [2]. It is due to not only because there is no existence of the link and match between the labor market and college as a supplier of these candidates, but also it comes from inoptimal conditions of the internal management of university. One interesting issue about the university's internal process is the extra role behavior of lecturers. The concept of extra role behavior is reflected in what is called Organizational Citizenship Behavior (OCB), which is defined as anything that employees choose to do, spontaneously and of their own accord, which often lies in their specified contractual obligations[3] or known as prosocial behavior[4]. This behavior tends to see a lecturer as a social being or as a member of an organization, rather than as a selfish one. Although the regulations in many countries clearly have set a number of indicators for measuring the lecturer's performance, these rules only regulate the in-role behavior, not the extra-role behavior.

The main debate in achieving the target of OCB is the difficulty of optimizing the dimensions of OCB, especially among lecturers. There is no reward and no punishment for lecturers who do not apply it in the institution, although OCB contribute in creating effectiveness and the efficiency in the institution. Some literatures and previous studies showed the important factors that become determinants in OCB’s
achievement, but two important things that characterize the behavior of individuals are personality and grit. Personality is a component of behavior that characterizes different identities between one person and another. So that, it can reflects the differences of extra-role behavior of lecturers. Personality refers to a dynamic and coordinated dynamic, physical, mental, moral and social quality, showed in a unique and stable way of thinking, feeling and acting that characterizes one's reaction to the life situation[5]. Its reflected in the terms of consciousness, extraversion, agreeableness, emotional stability, and openness to experience. Some empirical studies have analyzed the relationship between personality and OCB [6]–[8], but these studies were not focus to the relationship between personality and OCB of the lecturer. Furthermore, one more research concluded that dimensions of personality consisting of consciousness, agreeability and openness were strong predictors of OCB among the staff of Tehran University[9]. This study recommended a challenge to test more further the influence of personality in predicting OCB in an educational institution.

This paper contributes in exploring the relationship between personality and grit to OCB by placing job involvement as a mediating variable. The empirical previous researchs have not quantified clearly the job involvement as a mediating variable in these relationship. However, some previous studies showed the relationship between personality and job involvement[10], [11], and the other previous studies also predicted the relationship between job involvement and OCB[12]–[15]. Thus, there is an opportunity for this study to try to elaborate further about the role of job involvement as a mediating variables in the relationship between personality and OCB.

The concept of "grit", which is one of the psychological aspects, proposed as a new predictor for OCB. This concept introduced as the consistency of interest and the perseverance of effort[16]. This is done as an effort to complete the personality that are considered insufficient for this case. One of the non-cognitive aspects that have a positive influence on the job performance is grit. Lecturers who have a "gritty" character, with the characteristics of persistence and having a high resitency in facing all challenges, will be able to encourage extra role in their work. Grit was a strong predictor for job involvement[17] and this study concluded the importance of grit in achieving professional goals including in the academic world.

The debate over the study of grit, whether as a dimension of personality or a new approach in the study of positive psychology[18], [19], provided a space to elaborate the relationship between grit and OCB. Although in previous studies, the concept of grit is more popular applied to the case of students, this study predicts that grit is also an important element in the achievement of OCB among lecturers and become the determining factor of their job involvement. This study attempts to elaborate further on the application of OCB in universities with personality and grit as predictors and also job involvement as a mediating variable. Although in previous studies this theme was more discussed in business institutions, the decision to choose vocational higher education as a unit of analysis remained supported by theories and empirical studies.

2. Literature Review

2.1 Personality and OCB

Personality contains physical, mental, moral and social qualities of individuals. These qualities are dynamic and integrated, which can be observed by others in everyday life[5]. Previous studies concluded that values for achievement, agreeableness, and conscientiousness were predicted five types of OCB[7], and the conscientiousness and extraversion were found to be positively correlated with all the five dimensions of OCB[8]. Several other propositions have also tried to uncover the causal relationship between personality and extra role, such as[20]that described emotional stability as key dispositional determinant of social behavior and [6]that also concluded the importance of the attitude of openness to experience, perseverance, and emotional stability towards the achievement of OCB. Based on previous studies and the propositions, the hypotheses in this study is:

H_1 : Personality is positively associated with OCB
2.2 Grit and OCB
Grit as a tendency to pursue long-term goals[21] and identified in the two main dimensions which consisting of consistency of interest and perseverance of effort[16]. Although grit was identified as an appropriate predictor in the study of extra roles in higher education, there were very limited studies analyzing the importance of grit among lecturers in universities and its influence on OCB. Although etiologically, grit is a dimension that is similar to personality, this variable is considered different in terms of "timescale", because it takes a long period of time to shape it in the individual. The initiator of the concept of grit, viewed the importance of grit in achieving professional goals[16] including the academic world[22]. People with higher grit levels tend to have better performance than those with lower grit. The placement of grit in this model is based on the opinion of some researchers who have concluded that the indicators of grit have a similar tendency to personality. The concept of grit which grit which contains the consistency of interest and perseverance of effort, is very similar to personality dimensions in the "Five Factor Model" or personality measurement of "Hogan Personality Inventory", especially in the aspect of conscientiousness[18], [23]. The model in this research separated grit from the personality, to avoid overlapping in the measurement of these indicators. Based on the previous studies and the propositions, a hypothesis built as follows:

H₂ : Grit is positively associated with OCB

2.3 Job Involvement and OCB
Job involvement is the degree to which a person is identified as psychologically with his work, or the importance of work in his total self-image (Lodahl and Kejner, 1965). Job Involvement is the internalization of values about the goodness of work or the importance of work for one's worth. Individuals who have a higher level of job involvement dedicate themselves to their work and regard their work as a very important thing in their lives. Previous studies showed the influence of job involvement on OCB[12], [13]. Furthermore, a research which analyzed 131 professors and clerical workers at private universities in Japan concluded that job involvement had a positive and significant effect on OCB[14]. Based on these previous studies this study expects the following hypothesis:

H₃ : Job involvement is positively associated with OCB

2.4 Job Involvement, Personality, Grit and OCB
To provide a more realistic causal relationship in the model and to strengthen the influence of antecedents on OCB, this study places job involvement as a mediating variable in the model of a causal relationship between personality and grit to OCB. The placement of job involvement as a mediator in the model of a causal relationship is based on some previous empirical findings and some propositions about the relationship between personality and job involvement[9]–[11]and the relationship between job involvement and OCB (F Gheisari, Sheikhy, & Salajeghe, 2014; Nwibere, 2014). Thus, the hypothesis of this causal relationship is as follows:

H₄ Job Involvement mediated the relationship between personality and OCB

The position of job involvement as a mediator in a causal relationship between grit and OCB was also based on previous studies which showed that grit had an effect on job involvement[17] and a predictions that grit is a predictor of OCB[16], [22] Thus, the hypothesis is constructed as follows:

H₅ Job Involvement mediated the relationship between Grit and OCB

3. Method
The population of this study was the lecturer at eight unit of industrial polytechnic under the management of the Ministry of Industry of the Republic of Indonesia in 2018, with total population of 475 lecturers. Considering for not all of the lecturers were active at the same time, the sample in this study is 217 lecturers. The sampling technique used was stratified random sampling and data was collected by using the questionnaire. The endogenous variable in this research is Organizational Citizenship Behavior (OCB) and the exogenous variables are personality and grit. Job involvement was placed as a mediating variable in this research as a theoretical extension of causality model.

Organizational Citizenship Behavior, was measured by indicators adopted from Podsakoff, Mackenzie, Moorman and Fetter (1990), consisting of altruism, conscientiousness, civic virtue, courtesy and
sportsmanship. To measure this variable, respondents are asked for their opinions using 5-point likert-type scale, ranging from strongly disagree to strongly agree on thirty questions.

Personality is a way of thinking, a way of feeling and a different way of acting, which lasts a long time, and characterizes a person's response to a life situation. Reflective indicators for this variable consist of conscientiousness, extraversion, agreeableness, emotional stability, openness to experience [25]. To measure this variable, to respondents were asked about their level of agreement using a 5-point Likert-type scale, ranging from strongly disagree to strongly agree on the twenty-two questions about these indicators. Grit is a variable based on the positive psychology, which prioritizes the persistence as an indicator of long-term success. Furthermore, to measure this variable, this research also gave twelve questions about the respondent's level of agreement using a 5-point Likert-type scale, ranging from strongly disagree to strongly agree. Instrument items used to measure grit are standard instruments that have been adjusted for this research case.

Job Involvement as a mediating variable, was measured by indicators which consist of: participating in their work, showing that their work was the main thing and assuming that their work was important for self-esteem [24], [26]. To measure these three indicators, for respondents were also asked about their level of agreement using a 5-point Likert-type scale, ranging from strongly disagree to strongly agree, in seventeen instrument items.

Figure 1. shows the empirical model that will be tested in the study with its variables and indicators.

4. Result and Discussion
This finding showed that the main indicators of model fit have been fulfilled statistically. Average Path Coefficient (APC) which showed the average influence of exogenous latent variables on endogenous latent variable was 0.287 (p<0.001). Average R-squared (ARS) which showed the average value of R-squared in each path was 0.385, (p<0.001). Average Path Coefficient (APC) and Average R-squared (ARS) were categorized in low level if the research aimed to assess the contribution of each exogenous latent variable to its endogenous latent variable. However, this study did not focus on the magnitude of the contribution but on testing the hypothesis of the relationship between latent variables.

Furthermore, indications of collinearity in PLS models can be observed from the result of Average Block VIF (AVIF) and Average full collinearity VIF (AFVIF). PLS output showed the value for these indicators were 1.369 and 1.665. The ideal level recommended for these two indicators were small or equal to 3.3. Thus, the model was free of collinearity problems. Based on the results of the model fit of indicator analysis, it can be seen that the performance of the model was quite good and fulfilled the statistical criteria, and the evaluation of the Partial Least Squared-Structural Equation Model (PLS-SEM) model can be continued to evaluate the measurement model and the evaluation of the structural model.

4.1 Measurement Model Analysis
The measurement model is used to evaluate the relationship between indicators and constructs by assessing reliability and validity. Table 1 showed the results of composite reliability, cronbach's alpha and average variance extracted (AVE). The output showed the composite reliability and cronbach's alpha for each construct were greater than 0.7 and average variance extracted (AVE) for all constructs
were greater than 0.50. These result were fulfilled statistically based on [27] that required composite reliability and cronbach's alpha must be above 0.7 for reliability and AVE must have criteria above 0.5. Because of the large number of question for each latent variables, the loading factor not displayed in this result. To get a fit model, some indicators in each construct that were smaller than 0.4 had been dropped from the model. For some cases if loading conditions above 0.70 cannot be achieved, especially for newly developed questionnaires, loading factor between 0.4 - 0.7 must still be considered[28]. Thus, this study retained some indicators by loading between 0.4 - 0.7. The impact of removal of some indicators with loading below 0.4 can increase the value of average variance extracted (AVE) and composite reliability above the threshold.

Table 1. Composite Reliability, Cronbach’s Alpha and Average Variance Extracted

| Latent Variables             | Composite Reliability | Cronbach’s Alpha Coefficient | Average Variance Extracted (AVE) |
|------------------------------|-----------------------|------------------------------|---------------------------------|
| Organizational Citizenship Behavior | 0.976                 | 0.973                        | 0.639                           |
| Job Involvement              | 0.945                 | 0.938                        | 0.519                           |
| Personality                  | 0.952                 | 0.947                        | 0.542                           |
| Grit                         | 0.973                 | 0.967                        | 0.786                           |

4.2 Structural Model Analysis

For conducting the structural model testing, a step-wise approach is carried out(Baron & Kenny, 1986). First, Estimate the direct effect of personality and grit to OCB. Second, doing the PLS estimation by entering the job involvement as a mediating variable in the causality model between personality and grit to OCB. The result of these two stages is shown in table 2.

Table 2. PLS Results for Direct Effect and The Mediating Effect Model

Part A: Direct Effect

| Variable     | Path to OCB | Path to Job Involvement |
|--------------|-------------|-------------------------|
| Personality  | 0.440***    |                         |
| Grit         | 0.243***    |                         |
| R²           | 0.350       |                         |

Part B: The Mediating Effect of Job Involvement

| Variable     | Path to Job Involvement | Path to OCB |
|--------------|--------------------------|-------------|
| Personality  | 0.516***                 | 0.170***    |
| Grit         | 0.110**                  | 0.180***    |
| Job Involvement | 0.460***               |             |
| R²           | 0.330                    | 0.443       |

***Significant at p<0.01.**Significant at p<0.05.*Significant at p<0.10.

Based on table 2 part A, it was observed that the direct effects of personality to OCB was 0.440 (p<0.01) and the direct effect between grit to OCB was 0.243 (p<0.01). Thus, the hypothesis H1: Personality is positively associated with OCB and the hypothesis H2: Grit is positively associated with OCB, all are supported by the model and all the hypotheses were accepted. R2 for this path was 0.350, and it was quite good for direct effect model. To analyze the mediating effect of job involvement in the structural model, the next step is examining the effect of job involvement as a mediating variable. Table 2 Part B showed the calculation of the mediating effects of job involvement in the relationship between personality and grit on OCB. For the path between personality to OCB through job involvement (Personality-Job Involvement-OCB), it can be seen that the positive influence of personality on job involvement is 0.516 (p<0.01) and job involvement also has a positive influence on OCB (path coefficient = 0.460; p<0.01). Under condition of a mediating effect of job involvement, the direct relationship between personality and OCB remained significant (path coefficient = 0.170; p<0.01). The coefficient of this direct relationship decreased from 0.440 to 0.170. It meant job involvement partially mediated the relationship between personality and OCB. Furthermore, for the path between grit to OCB
through job involvement (Grit - Job Involvement - OCB), it was observed the positive influence of grit on job involvement (path coefficient = 0.110; p<0.05) and also observed the positive influence of job involvement on OCB (path coefficient = 0.460; p<0.01). In mediating model, the direct relationship between grit and OCB was also observed to be significant (path coefficient = 0.180; p<0.01), although this result decreased from 0.243 to 0.180, if compared with the output in the direct effect model.

Based on the results of calculations in table 3, it can be concluded that job involvement was partially mediated the relationship between personality and grit to OCB. To ensure the level of mediation, we need to complete the analysis of indirect effect in mediation analysis of the SEM-PLS model with the Variance Accounted For (VAF). This method will recommend the level of mediation. Literature recommended this level of mediation into three categories including VAF is above 80% as full mediation, VAF is between 20% -80% as partial mediation and for VAF less than 20% as no mediating effect[28].

Table 3 showed the calculations of indirect, direct and total effect by using the Variance Accounted For (VAF). It was observed that the indirect effect for path of Personality-Job Involvement-OCB was 0.273, the direct effect for the path of personality and OCB was 0.440 and the total effect was 0.713. Thus, the VAF for path of Personality-Job Involvement-OCB was 0.383 (p<0.01), which meant job involvement was a partial mediator for the relationship between personality with OCB.

Based on the table 3, it was also observed the indirect effect for the path of grit-job involvement-OCB was 0.051 and the direct effect for the path of grit to OCB was 0.243. Then, the total effect for the path of grit-job involvement-OCB was 0.294. Thus, the VAF for this path was 0.173 (p<0.05). Because of this VAF for this path was less than 20%, it meant job involvement did not mediate the relationship between grit and OCB.

| Path of Personality-Job Involvement-OCB | Indirect Effect | Direct Effect | Total Effect |
|----------------------------------------|----------------|---------------|--------------|
| Personality - Job Involvement - OCB    | 0.273***       | 0.440***      | 0.713***     |
| Personality - OCB                     |                |               |              |
| VAF = Indirect Effect/Total Effect     | 0.383***       |               |              |

| Path of Grit - Job Involvement – OCB  |
|--------------------------------------|
| Indirect Effect                      |
| Grit - Job Involvement - OCB         | 0.051**        |
| Direct Effect                        |
| Grit - OCB                           | 0.243***       |
| Total Effect                         |
| VAF = Indirect Effect/Total Effect   | 0.173**        |

***Significant at p<0.01. **Significant at p<0.05. *Significant at p<0.10.

Finally, this finding revealed that there was a partial mediating effect of job involvement in the relationship between personality and OCB with the indirect effect was 27.3%. However, there was no mediating effect of job involvement on the relationship between grit to OCB. Thus, this finding proved that job involvement played an important role in efforts to improve OCB through strengthening the potential of the personality of the lecturers. As for grit, this variable was a strong predictor of OCB. Grit had a direct effect on variations in the ups and downs of OCB`c lecturers and job involvement did not mediate this relationship. The increasing of grit will cause a direct increase in the performance of OCB. Without having to show it with job involvement, the “gritty lecturers” will increasingly show the extra role in their workplace.

Based on the result, it can be concluded that there was direct influence between personality and grit on OCB. It was found that job involvement partially mediated the relationship between the personality and
organizational citizenship behavior, but job involvement did not mediate the relationship between grit and organizational citizenship behavior. These findings reinforced the previous studies about the relationship between personality and OCB [6]–[8], [20] and previous studies about the relationship between personality and job involvement[9]–[11].

In contrast to previous studies that have not quantified the relationship between grit, job involvement and OCB[17], [22], this research empirically proved the relationship between grit and OCB. Grit was a strong predictor for OCB. Grit had a direct effect on variations in the ups and downs of OCB’s lecturers and job involvement did not mediate this relationship. This finding answered the previous proposition about the importance of grit in influencing the lecturer’s extra role, without having to go through the role of job involvement. In a practical perspective, this study had tried to apply the concept of grit which was initiated by [16], [29], [29], especially for the cases of lecturers, the person who need the grit in their work.

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