

# THE INFLUENCE OF GRIT TOWARDS WORK ENGAGEMENT AND THE MODERATING ROLE OF PERCEIVED ORGANIZATIONAL SUPPORT

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**Abstract:** Grit has been found before as a non-cognitive predictor beyond talent and intelligence, which drives a person to exert the best potential. This study investigates the influence of grit on work engagement, which contains perseverance of effort and consistency of interest. It also investigated the role of perceived organizational support in moderating this influence. The research analysis unit comprised 252 health workers and Medical Laboratory Technicians, with a minimum working period of three years, who were active as employees working in medical laboratories in various institutions, the Special Region of Yogyakarta and Central Java. Data is processed using SEM-PLS with SmartPLS 3.2 software. The study's results revealed a positive influence on the perseverance of efforts, the consistency of interest, and perceived organizational support on work engagement. In its role as moderating, perceived organizational support is found to weaken the influence of perseverance of effort on work engagement and strengthen the influence of consistency of interest on work engagement. These findings are expected to provide direction for organizations to increase support for employee self-development.



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Development in the health sector is not only one of the targets for global Sustainable Development Goals but also a milestone for Indonesia's development. However, the main concern is not only needed on equitable access to health. Improving service quality is one of the main roles which needs to be sup-

ported by the excellent performance of health workers. Appropriate human resource management in the field of health services is essential to realize positive outcomes for patients, staff, and organizations (Shantz et al., 2016). One health worker who needs the proper human resource management is the Medical Laboratory Technician (MLT), who is in charge of medical laboratory examinations to establish the diagnosis by providing laboratory examination data. In human resource management, the performance of health workers can be realized by

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various triggers. Work engagement becomes one of the main constructs of concern, which explains employees' active and positive working conditions, referring to commitment, and enthusiasm, marked by enthusiasm, dedication, and absorption (Schaufeli, 2013).

Work engagement in health services improved performance, productivity, and commitment (Keyko et al., 2016). Several constructs have been revealed to be predictors of work engagement, both internal and external factors. One of the individual constructs as an internal factor that were previously found to affect work engagement is grit. Grit, also called determination, is a combination of perseverance and consistency of interest to achieve long-term goals, regardless of challenges and obstacles (Duckworth, 2016). Besides grit, there are five other factors outside the role of the individual which affect work engagement. Found that nurses who were allowed to develop themselves had lower levels of emotional fatigue and tended to provide energy into work and better quality of care (Schantz et al., 2016). The other factor that becomes one such external factor is perceived organizational support, which is the general perception formed by employees about the extent to which the organization shows concern for employee welfare (Schantz et al., 2016).

Several studies have revealed the role of grit in academic grades, high work performance, employee engagement, and organizational citizenship behavior (Arifin et al., 2019). Hodge et al. (2018) stated a positive relationship exists between Grit on Productivity, and Engagement mediates this effect. Then research by Zheng et al. (2019) stated that Grit mediates the impact of well-being on work engagement. In addition, the study by Chevalier et al. (2018) and Saks (2019) also revealed that work engagement was also affected by perceived organizational support. In addition, perceived organizational support was also found to moderate the influence of personality traits on work engagement (Chalermjiras et al., 2019).

Based on these findings on the research background, it can be seen that several internal factors trigger work engagement. Still, it has never been investigated how grit affects work engagement in

health workers, which is one of the priority areas in current development. Also, external factors were found to have a lot of influence on work engagement but never investigated the relationship with the effect of grit on work engagement. It has not been investigated whether grit directly affects work engagement and whether perceived organizational support moderates this effect. This study will discuss these relationships.

This study aims to address the following problems and answer whether grit (perseverance of effort and the consistency of interest) and perceived organizational support influence work engagement and the moderating effect of perceived organizational support on grit influences. This research will provide insight for organizations about the grit and engagement of TLM in various types of agencies associated with perceived organizational support and is expected to be input for human resource management strategies, especially in the development of the internal side. It is expected to be aligned with other business strategies or policies to improve human resource performance, service quality, and organizational productivity. In the academic field, the findings of this study are expected to be used as a reference for research topics related to grit, work engagement, and perceived organizational support of TLM, other health workers, or even other fields.

## **LITERATURE REVIEW**

### **Work Engagement**

Work engagement is a form of involvement that refers to the employee's relationship with the work. Engagement generally relates to commitment, enthusiasm, absorption, focused effort, passion, dedication, and energy (Schaufeli, 2013). Work engagement as an active and positive affective-cognitive condition of employees related to work is characterized by enthusiasm, dedication, and absorption / in-depth focus (Schaufeli, 2013). Enthusiasm is marked by high energy and mental endurance at work, a willingness to devote effort, and perseverance in the face of difficulties at work. Dedication is marked by sincerity to involve yourself in work, followed by a sense of meaning, enthusiasm, inspiration, pride, and challenges. A fully concentrated

state characterizes absorption and happily enjoying his work so that time passes quickly, and it will be difficult to separate from work (Schaufeli, 2013).

One scale to measure work engagement is from Utrecht, the Utrecht Scale Work Engagement (UWES), which is a self-report based on the definition of work engagement as a combination of enthusiasm, dedication, and absorption (Schaufeli, 2013), with nine items, which measures three aspects of work engagement, namely, enthusiasm, dedication, and absorption, with each dimension consisting of three items (Schaufeli et al., 2006). According to Debruinn and Henn (2013), the presence of three sub-dimensional scores on UWES-9 can be interpreted at two levels, namely at the level of the total scale (work engagement) and at the level of subscales (enthusiasm, dedication, and absorption). However, the interpretation of the total score is recommended rather than the score for the subscales due to the lack of discriminative validity of passion, dedication, and absorption.

### Grit

Besides having a positive influence on several things, work engagement is also influenced by factors that are then categorized into six themes: organizational climate, work resources, professional resources, personal/ personal resources, work demands, and demographic variables (Keyko et al., 2016). One personal resource, which is a construct of positive psychology and is found to affect work engagement, is grit. Duckworth (2016) defines grit as perseverance and a great desire to achieve long-term goals in a long time, despite facing various challenges. Grit consists of two dimensions: perseverance of effort and consistency of interest. Grit is one of the personality traits that give rise to conscientiousness. It is found that it has similar characteristics to one of the five main personalities, conscientiousness, which means caution with sincerity (Rimfeld et al., 2016). Both are considered to contribute positively to success. Although some researchers examine the perseverance of effort and consistency of interests as two separate constructs, most studies present the persistence report with the overall grit score (Credé et al., 2017).

Grit is measured using a Likert scale to answer 12 statements in the overall grit measurement. Six statements measure perseverance or effort, and the other six measure the consistency of interest. These 12 items of self-reporting measurement are called Grit-O (Duckworth et al., 2007). While the measurement scale is shorter but can be used equally well, as revealed by Duckworth and Quinn (2009) in eight statement items, each of which consists of four statements for the dimensions of perseverance of effort and consistency of interest.

### Perceived Organizational Support

Previous research shows that there are also external factors that affect work engagement, one of which is perceived organizational support, which is employee perceptions of support provided by the organization through three forms, namely, procedural justice, support from superiors, and rewards from work-related organizations (Eisenberger and Aselage, 2009). Professional employees tend to compensate for the perceived organizational support through performance. Perceived organizational support positively impacts the engagement and performance of professional workers. Employees who receive financial or non-financial support from the organization feel obliged to pay back with a higher level of work engagement (Dabke and Patole, 2014).

Perceived organizational support can be measured using 17 items by Eisenberger et al. (1986). Rhoades and Eisenberger (2002) measure perceptions of organizational support using eight statement items from Eisenberg et al. (1997), which reveal employee perceptions of organizational appreciation for contributions, responses to complaints, concern for employee welfare, and the pride of the organization towards employees.

### HYPOTHESIS DEVELOPMENT

Attention to work engagement increases with positive psychology, which focuses on scientific studies of optimal human function and factors that enable individuals, organizations, and society to develop (Schaufeli, 2013). Previous studies have revealed the positive role of work engagement in care quality, role performance, and job satisfaction (Zhu et

al., 2015). Furthermore, Bargagliotti (2012) in Keyko et al. (2016) explain the importance of increasing knowledge about work engagement in the treatment room because safe patient care requires nurses to be involved. Also, employees who have high work engagement are more motivated and productive at work and have a negative relationship with turnover (Zheng et al., 2019).

On the other hand, Duckworth’s research revealed that what plays a more significant role in academic success is not talent but determination. Individuals with high grit scores are interested in something, and desires are maintained in the long run, giving rise to consistency (Duckworth et al., 2007). Grit was found to play a role in achieving various successes, such as in academic achievement editions (Reraki et al., 2015), enabling better performance on the first placement, playing a positive role in spelling exercises, playing a role in the success of rigorous military training, and provide predictions of success better than the effects of IQ, hardiness, self-control, and caution (Duckworth et al., 2007). Together with work engagement, grit has been investigated when both together moderate the influence of impoliteness at work and perceived work ability (Kabat-Farr et al., 2017), perseverance is a predictor of work engagement (Zheng et al., 2019), and engagement in general, mediating the effect of constancy on productivity (Hodge et al., 2018).

Through a review of theory and previous research, two hypotheses are arranged:

H1: Perseverance in effort influences work engagement.

H2: Consistency of interest influences work engagement.

According to another research finding before, it is shown that Murthy (2017) found that perceived organizational support was a predictor of employee engagement. This finding is supported by research conducted by Al-Omar et al. (2019), which stated that employees who positively feel organizational support will be bound in their work despite being under competitive and full work pressure. Some of the results of the study support the findings of Eisenberger and Stinglhamber (2011), which revealed that employees with high scores for constructs of organizational support were perceived as more tied to work, committed, satisfied, and with increased performance and low stress.

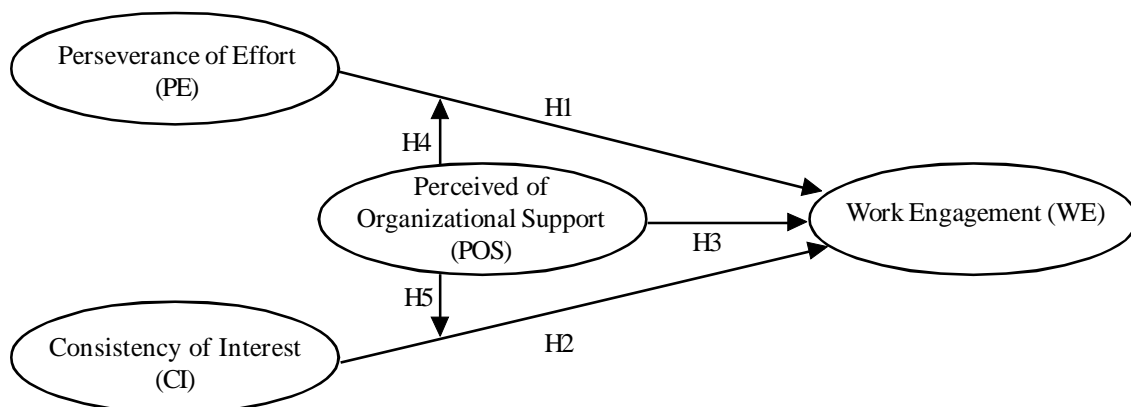
The theory and previous research, followed by these three hypotheses:

H3: Perceived organizational support influences work engagement.

H4: Perceived organizational support moderates the influence of perseverance of effort on work engagement.

H5: Perceived organizational support moderates the influence of the consistency of interest on work engagement.

Research hypotheses were shown in the research model in this picture:



Source: Research Framework (2019)

Figure 1. Research Model

**METHOD**

The study used a quantitative approach, using survey methods. The unit of analysis in this research is individuals with specific characteristics. The sample in this study has criteria, namely: male or female is a Medical Laboratory Technician (MLT), who at the time of this study was working in the same type of medical laboratory for three years or more, in the work area of Special Region of Yogyakarta and Central Java. The total number of samples in this study amounted to 252 respondents. Samples were selected using non-probability sam-

pling techniques, namely purposive and convenience sampling.

Data were collected through a research questionnaire that contained six filter questions to the identification of respondents and 25 statements to measure variables, with eight statements from Duckworth and Quinn (2009) for grit scores, nine statements from Schaufeli et al. (2006) for work engagement scores, and eight statements from Rhoades and Eisenberger (2002) for perceived organizational support scores. Operational definitions of variables are detailed in the following table.

**Table 1. Operational Definitions of Variables**

<b>Construct</b>	<b>Construct Dimensions</b>
Grit - Perseverance of Effort (PE): Duckworth et al., 2007	Finishing what was started Failure doesn't discourage Work hard on duty Diligent on duty
Grit - Consistency of Interest (CI): Duckworth et al., 2007	Chasing other targets while on duty Divert ideas or other activities Obsessed in no time Difficult to maintain focus
Work Engagement (WE): Schaufeli, 2013	Full of energy at work Passionate on duty Want to work immediately when waking up Enthusiastic about work Work inspired Proud of work Enjoy work Forget the time at work Really happy to work
Perceived Organizational Support (POS): Eisenberger et al., 1986	Contribution award Extra effort award Complaint waiver MLT's welfare concern Best effort award Concern for MLT satisfaction Paying attention Achievement pride

Questionnaires were distributed at a specific seminar for MLT, and online using GoogleForm, the distribution of links being managed using WhatsApp and Instagram. The measurement scale of the study

is a Likert scale with a rating of 1 for Strongly Disagree, stratified to a score of 5 with a weighting rating of Strongly Agree. The Cronbach's Alpha and Composite Reliability tests were performed with a

minimum requirement of 0.7 as the reliability limit and 0.5 as the minimum validity limit for the Convergent Validity Test results (Hair et al., 2011). Data analysis started with a descriptive analysis of respondent characteristics and continued with statistical analysis of SEM, with Partial Least Square (PLS). using SmartPLS 3.2 software.

**RESULTS**

Respondents with the characteristics dominated primary data sources of 252 respondents in this study: female gender 180 respondents (71.4%), working area in Yogyakarta Special Region 152 respondents (60.3%), ages between > 20-30 years, 111 respondents (44%), tenure between 3- <10 years 138 respondents (54.8%), and type of institution

where they work are Puskesmas 71 respondents (28.2%), the percentage of which is slightly different from MLT from private hospitals and government hospitals. The PLS path diagram is compiled and tested to evaluate the measurement model and structural model with the following results:

Testing this hypothesis is based on processing research data using SEM-PLS analysis and SmartPLS 3.2 software. To conclude whether the hypothesis is supported or not, p-values are used at three levels of significance, namely 1%, 5%, and 10%. If the p-value <0.1, the hypothesis is supported, and there is an influence up to the third level of significance. Conversely, if the p-value > 0.1, then the hypothesis is not supported. The results of hypothesis testing are summarized as follows:

**Table 2. Evaluation Results of Measurement Models and Structural Models**

<b>Evaluation</b>	<b>Minimum Criteria</b>	<b>EvaluationResult</b>
Loading factor-2	>0,6	0,628 – 0,871
Cronbach’s Alpha	>0,7	0,767 – 0,916
Composite Reliability	>0,6	0,846-0,932
Average Varian Extracted	>0,5	0,581 – 0,637
Cross loading	The biggest one	The biggest one
Inner Variance Inflation Factor)	0,2 – 5,0	1,091 – 1,502

Source: Research Data Processing Results (2019)

**Table 3. Hypothesis Testing Results**

<b>Relations</b>	<b>Original Sample (O)</b>	<b>P value</b>	<b>Significance Level</b>
PE → WE	0,550	0,000	***
CI → WE	0,060	0,089	*
POS → WE	0,269	0,000	***
Moderation POS: PE → CI	-0,093	0,021	**
Moderation POS: PE → CI	0,074	0,024	**

Source: Research Data Processing Results (2019)

Acronyms: PE (perseverance of effort), CI (consistency of interest), POS (perceived organizational support).

\*significant at p value <0,10 \*\*significant at p value <0,05 \*\*\*significant at p value <0,01

Table 4 indicates that all hypotheses in this study are supported, with varying levels of significance, namely smaller than 0.1, smaller than 0.05, to smaller than 0.01. The first and second hypoth-

eses supported in this study prove that the perseverance of effort and the consistency of interest, both dimensions of the construct of grit, positively influence work engagement.

**Table 4. Interpretation of Research Results**

Research Hypothesis	Meaning	Interpretation
H1 Perseverance efforts influence work engagement	Significant <i>tp-value</i> <0,01	Supported
H2 Consistency of interest influence work engagement	Significant <i>tp-value</i> <0,1	Supported
H3 Perceived organizational support influence work engagement	Significant <i>tp-value</i> <0,01	Supported
H4 Perceived organizational support moderates the influence of perseverance of effort on work engagement	Significant <i>tp-value</i> <0,05	Supported
H5 Perceived organizational support moderates the effect of consistency of interest on work engagement	Significant <i>tp-value</i> <0,05	Supported

Source: Research Data Processing Results (2019)

**DISCUSSION**

The role of the individual examined in this research as a Medical Laboratory Technician (MLT) provides self-reports suitable for personality-related research involving awareness factors.

**Perseverance of Effort (PE) and Work Engagement (WE)**

Through the results of this study, it was concluded that when an MLT strives diligently and acts consistently toward his interests or what they are engaged in, they will be bound by their work. These findings support previous studies' results that revealed grit's positive role in academic engagement (Hodge et al., 2018). However, the findings in this research investigated more in the work field, especially for health workers. This research also supports previous research, which revealed that perseverance in efforts positively affected work engagement (Zheng et al., 2019).

**Consistency of Interest (CI) and Work Engagement (WE)**

This research also investigated the consistency of interest as the second construct of grit and found

that when MLT have some interest in their job and are consistent about it, it will enhance their engagement in their work. This finding also supports the previous research, which found that besides the perseverance of effort, the consistency of interest also predicted work engagement after controlling for gender, age, and education qualification (Singh and Chopra, 2018).

**Perceived Organizational Support (POS) and Work Engagement (WE)**

In addition to internal factors that are predictors of work engagement, it was also revealed that external factors could have a positive influence. The organizational support felt by MLT positively influences work engagement in medical laboratories. It shows that individuals who are investigated for their role as MLT in an organization will feel more bound to work in the laboratory when organizations that use the MLT services positively show support which MLT will then feel. These findings align with those revealed in previous studies by Chevalier et al. (2018) and Chalermjirapas et al. (2019), which showed the positive influence of perceived organizational support on work engagement.

### **Moderation Role of Perceived Organizational Support between Perseverance of Effort and Work Engagement**

Furthermore, this research also explores the moderation effect of perceived organizational support, which did not investigate before. Although it has been revealed that all dimensions of the construct of grit and organizational support felt by MLT, each separately can positively influence work engagement, when the two constructs are present together, different relationships can emerge. The results showed that organization moderated the influence of grit on work engagement. Moderation is in the negative direction so that it significantly weakens the effect of perseverance efforts on work engagement. It explains the possibility that organizational support will be given and felt by employees, not by the needs or expectations. It can weaken work engagement that grows from the influence of perseverance efforts. This finding is different from previous research by Chevalier et al. (2018), in which the authors revealed that individuals with a good perception of organizational support will be more satisfied with their work and feel more engaged in the assigned work. The results of this study also do not support research by Chalermjirapas et al. (2019), which revealed that the perception of organizational support, in particular, did not moderate the influence of conscientiousness, which means caution or quality in doing work carefully and appropriately (Chalermjirapas et al., 2019), while perseverance which is a dimension in the construct of positive psychological grit, found to be identical with these dimensions because it is also a significant feature of conscientiousness.

### **Moderation Role of Perceived Organizational Support between Perseverance of Effort and Work Engagement**

This research also found that perceived organizational support strengthens the influence of consistency of interest in work engagement. It can be interpreted that although the influence of the consistency of interest in work engagement in this study

has little value, when given the right organizational support, it will be able to increase that influence.

### **CONCLUSIONS**

The results of the study revealed the conclusion that respondents dominated the primary data source in this study with characteristics: female gender, work area in Yogyakarta Special Region, age between > 20-30 years, tenure between 3- <10 years, and type of agency work is Puskesmas, the percentage of which is slightly different from medical laboratory technician from private hospitals and government hospitals. In a study of 252 respondents, it was found that perseverance of effort, consistency of interest, and perceived organizational support positively influenced work engagement. And perceived organizational support was found to moderate, that is, to weaken the influence of perseverance of effort on work engagement and to strengthen the influence of consistency of interest on work engagement.

### **IMPLICATIONS**

This research provides empirical evidence that one of the internal factors that positively affect work engagement in medical laboratory technicians is the perseverance of interest, which can be strengthened by perceived organizational support, which each organization determines. Perceived organizational support can also weaken the effect of consistency of interest toward work engagement, thus encouraging further evaluation of these findings in each organization.

### **LIMITATIONS**

This research is limited to investigating two internal factors: grit constructs and their effect on work engagement. Future research can analyze other internal factors that affect work engagement or different outputs that can be one of the triggers for an organization's performance. Investigation of external factors other than perceived organizational support is also very open to possibilities, including investigating whether it moderates the influence of



other existing factors. This research is also limited to investigating the relationship between the above constructs among Medical Laboratory Technicians in two provinces in Indonesia, so it is possible to analyze it in other health workers or other work areas, as well as a wider scope.

## RECOMMENDATIONS

Future studies are expected to reveal the findings of respondents with more diverse characteristics, both in terms of age and length of service, because it allows the emergence of different impact assessments for each situation and self-reports. In addition, it is necessary to consider the use of other variables relating to the relationship of the variables that have been tested at this time and consider testing this research model in the context of work or other social groups.

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