

An Empirical Effect of Grit on Task Performance: Mediating by Transformational Leadership and Job Involvement

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Abstrak. This study explores the empirical effect of grit on task performance: Mediating by transformational leadership and job involvement. The research data was collected by a questionnaire through the survey method. The sample of this research is 245 lecturers selected by purposive sampling. Data analysis uses path analysis supported by descriptive statistics and correlational. The results show that grit has a positive and significant direct effect on task performance, both direct and indirect effect by mediating transformational leadership and job involvement. Thus, the lecturer's task performance can be improved through grit, transformational leadership, and job involvement. A fit research model about the effect of grit on task performance mediating by transformational leadership and job involvement was found. This model can be discussed as a reference by researchers and practitioners in developing models of task performance in the future and any context.

Keywords: Grit, Transformational leadership, Job involvement, Task performance.

I. INTRODUCTION

The development of private higher education in Indonesia has not shown maximum results. As an illustration, based on the ranking of the Ministry of Research, Technology and Higher Education of The Republic of Indonesia in 2019, none of the 3940 private higher education in Indonesia were ranked in the top 10. This indicates that the performance of the human resources of private higher education in Indonesia, especially lecturers as the main actors in the teaching and research process of higher education, has not shown optimal performance. As Vosloban (2012) states that employee performance largely determines organizational growth. In the organizational context, "performance as the organization's ability to attain its goals by using resources in an efficient and effective manner" (Daft, 2014:11), or "the end result of an activity" (Robbins & Coulter, 2016:561). Therefore, according to Brumbrach as a quotes Armstrong (2009) that performance means both behaviors and results. Behaviors emanate from the performer and transform performance from abstraction to action. Not just the instruments for results, behaviors are also outcomes in their right-the product of mental and physical effort applied to tasks-and can be judged apart from results.

In perspective human resources management, performance is about behavior or what employees do, or a set of employee work accomplish organizational goals, not about what employees produce or the outcomes of their work (Aguinis, 2013; Ivancevich, Konopaske, & Matteson, 2016). Hence, one aspect of performance who important is task performance, namely the behavior that is directly linked to the completion of the job. Task related behaviors contribute to the technical core of the organization. Behavior in the domain of task performance is usually recognized as a formal requirement of an individuals' job. Job description often explicitly stipulates that the job holders must perform these activities (Borman & Motowidlo, 1993). Further task performance was considered by Organ and Paine (1999: 375) to be a "part and parcel of the workflow that transforms inputs of energy, information, and materials into outputs in the form of goods and services to the external constituency." According to Aguinis (2013), task performance included (1) activities that transform raw materials into the goods and services that are produced by the organization, and (2) activities that help with the transformations process by replenishing the supply of raw materials, distributing its finished products, or providing important planning, coordination, supervising, or staff function that enables the organization to function effectively and efficiently. Based on several research and studies in various countries, industrial, occupational sectors, and organizations, task performance among others influenced grit, transformational leadership, and job involvement.

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. *Grit and Task Performance*

Grit is one of the characteristics to help someone change the perception that the determinant of success or success is not only from intelligence. Grit shows how one can achieve long-term goals by overcoming obstacles and challenges. Grit is also one way to determine where someone can put their efforts to survive in facing life's challenges (Hochanadel & Finamore, 2015). Moreover, grit also demonstrated through hard work in dealing with challenges, sustaining effort and interest over the years despite being faced with failure, resilience, and difficulties in achieving it (Duckworth et al., 2007). More than that grit is a psychological variable based on positive psychology, which prioritized persistence as an indicator of long-term success and associated with achieving high-level goals for a very long time (Von Culin, Tsukayama, & Duckworth, 2014; Duckworth, 2016). Suzuki et al. (2015) also concluded that the gritty people were likely to engage positively in their work. This study identified grit as a strong predictor for work performance. Grit has two indicators, namely: consistency of interests, reflects an individual's tendency to maintain commitment and maintain focus on achieving goals/tasks over a long period time; and persistence of effort, reflects an individual's tendency to pursue long-term goals with sustained efforts despite obstacles and setbacks (Duckworth & Quinn, 2009; Datu et al., 2015) These indicators, in practice if an adequate condition can be realized for developing task performance, included (1) activities to transform raw materials into goods and services, and (2) activities to help the transformation process that allows organizations to function effectively and efficiently. As a show study by Saleh et al. (2019), Jachimowicz et al. (2018), Holdan et al. (2018), Cosgrove, Chen, and Castelli (2018) that grit influences task performance. Based on argues and studies above, the first hypothesis in this study is:

H₁: Grit had a direct effect on task performance.

2.2. *Transformational Leadership and Task Performance*

Transformational leadership is characterized by leader behavior that motivates people to transcend their interests for the good of the group; confidence, need to influence others, and hold a strong attitude that their beliefs and ideas are correct; and able to influence others by using charisma, paying attention, to followers, and stimulating others (Bateman & Snell, 2015; Aamodt, 2013; Ivancevich, Kanopaske, & Matteson, 2016). Other than that, transformational leadership is characterized by the ability of leaders to articulate a shared vision of the future, intellectually stimulate employees, and pay attention to individual differences in employees (Brown & Keeping, 2005). According to Hughes, Ginnet, and Churphy (2015:579), Transformational leadership changes the status quo by attracting followers of higher values, tastes, and goals. While, Bryman as a quote Aamodt (2013:450) states "transformational leaders are confident, need to influence others, and hold a strong attitude that their beliefs and ideas are correct." To measure transformational leadership four indicators are needed: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass & Avolio, 1990). These indicators, in practice, if in good condition can be realized to develop task performance, included (1) activities to transform raw materials into goods and services, and (2) activities to help the transformation process that allows organizations to function effectively and efficiently. As shown in several studies that transformational leadership influences task performance, for example, Bayram and Zoubi (2020), Guterresa, Armanu, and Rofiaty (2020), Hamid et al. (2020), Sawaeana and Ali (2020), Supriyanto, Ekowati, and Maghfuroh (2020), Widodo and Mawarto (2020), Abuzaid et al. (2019), Apoi and Latip (2019), Chandrasekara (2019), Al Khajeh (2018), Chen et al. (2018), Lin and Shiqian (2018), Steffens et al. (2018). Based on argues and studies above, the second hypothesis in this study is:

H₂: Transformational leadership had a direct effect on task performance.

2.3. *Job Involvement dan Task Performance*

A modern organization needs job involvement from all members of the organization, especially to develop task performance. The importance of developing human resources policies and practices, high-performance work systems and high job involvement has been demonstrated in the literature on strategic human resources management (Olivera & Rocha, 2017). Job involvement refers to the positive feelings felt by employees related to the work as well as the motivation and effort they give in the job (Macey & Schneider, 2008). Job involvement is "the degree to which one is cognitively preoccupied with, engaged in, and concerned with one's present job" (Paullay et al., 1994: 225) or "the level/degree in which people are known from their work, participate actively in it, and consider their achievements important for self-esteem" (Robbins & Judge, 2013:91). Job involvement also relates to the cognitive belief that the work meets the needs of the worker. It

represents the degree to which an individual identifies with his or her work, both at work and outside it (Brown, 1996) and how much work can meet the needs of an individual (Christian, Garza, & Slaughter (2011). Besides, job involvement reflects the work-related attitude, which refers to the relative strength of employees' emotional attachment, identification, and involvement with their employing organization (Macinati & Rizzo, 2016). In job involvement, several indicators that can be used to see an employee involved in his work, namely: active participation in work, showing work is the main thing and considers work as important to his self-esteem (Robbins & Judge, 2013). These indicators, in practice, if in good condition potentially to develop task performance, included (1) activities to transform raw materials into goods and services, and (2) activities to help the transformation process that allows organizations to function effectively and efficiently. Several studies also concluded that job involvement affects task performance, including among others conducted by Lunardi, Zonatto, and Nascimento (2018), Widjajani, Nimran, and Utami (2017), Kappagoda (2013), Awadh and Ismail (2012). Based on argues and studies above, the third hypothesis in this study is:

H₃: Job involvement had a direct effect on task performance.

2.4. Grit dan Job Involvement

Job involvement in addition to affecting task performance, but in other conditions also affected by the grit. The indicators of grit, namely the consistency of interests and persistence of effort (Duckworth & Quinn, 2009; Datu et al., 2015) if adequate conditions potentially stimulating active participation in work, showing work is the main thing and considers work as important to his self-esteem (Robbins & Judge, 2013) as indicators of job involvement. The studies carried out by Widodo and Chandrawaty (2020), Arifin et al. (2019) and Jeong et al. (2019) indicate that grit affects job involvement. Based on argues and studies above, the fourth hypothesis in this study is:

H₄: Grit had a direct effect on job involvement.

2.5. Transformational Leadership dan Job Involvement

Job involvement also affected by transformational leadership. The indicators of transformational leadership, included idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass & Avolio, 1990) if in good conditions potentially stimulating active participation in work, showing work is the main thing and considers work as important to his self-esteem (Robbins & Judge, 2013) as indicators of job involvement. The studies carried out by Nazem and Mina (2014), Dwirosanti (2017), and Al Basyir, Madhakomala, and Handura (2019) also reveal that transformational leadership affects job involvement. Based on argues and studies above, the fifth hypothesis in this study is:

H₅: Transformational leadership had a direct effect on job involvement

2.6. Grit and Transformational Leadership

Transformational leadership besides affecting job involvement and task performance, but in other conditions also affected by grit. The indicators of grit, namely the consistency of interests and persistence of effort (Duckworth & Quinn, 2009; Datu et al., 2015) if adequate conditions can be stimulating transformational leadership effectiveness, manifested idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass & Avolio, 1990). Several studies, for example, Caza and Posner (2019), Schimschal and Lomas (2018), and Sudbrink (2016) concluded that grit affects transformational leadership. Based on argues and studies above, the sixth hypothesis in this study is:

H₆: Grit had a direct effect on transformational leadership

III. METHODS

This research uses a quantitative approach with a survey method. The survey involved a research sample of 245 permanent lecturers of private higher education in Indonesia spread across 10 provinces determined by purposive sampling based on certain characteristics (Widodo, 2019), namely permanent lecturers. The number of samples is by following Hair et al. (2010) argue that the suitable sample size is between 200 to 300. If the sample size becomes too large (> 300), the method becomes very sensitive so it is difficult to get good goodness-of-fit measurements. The data was collected by a questionnaire in the form of a Likert scale model with five alternative answers: strongly disagree, disagree, neutral, agree, and strongly agree. The questionnaire

was made by researchers themselves based on the theoretical indicators of the experts. The grit consists of two indicators, namely consistency of interest (CI), and persistence of effort (PE) (Duckworth & Quinn, 2009); transformational leadership consists four indicators, namely: idealized influence (II), inspirational motivation (IM), intellectual stimulation (IS), and individualized consideration (IC) (Bass & Avolio (1990), job involvement consist three indicators, namely: active participation in work (APW), show work is the main thing (SWMT), and consider work as something important for self-esteem (CWIS) (Robbins & Judge, 2013); and task performance consist two indicators, namely activities to transform raw materials into goods and services (ATGS), and activities to help the transformation process that allows organizations to function effectively and efficiently (AHTE) (Aguinis, 2013). The grit questionnaire consists of 8 items with an alpha coefficient = .832, transformational leadership consists of 12 items with an alpha coefficient = .980, job involvement consists of 10 items with an alpha coefficient = .908, and task performance consists of 10 items with alpha coefficients = .893. Data analysis using the path analysis and to test the significance of the path coefficient uses a t-test and Sobel (Z) test supported by correlational and descriptive statistics.

Table 1. Profile of Respondents

Profile	Amount	Percentage
Gender		
1. Male	161	65.71
2. Female	84	34.29
Age		
1. < 26 Year	0	0
2. 26 – 35 Year	87	35.51
3. 36 – 45 Year	53	21.63
4. 46 – 55 Year	61	24.90
5. > 55 Year	44	17.96
Education		
1. Bachelor (S1)	0	0
2. Postgraduate (S2)	181	73.88
3. PhD (S3)	64	26.12
Status		
1. Married	211	86.12
2. Unmarried	34	13.88
Length of Work		
1. < 5 Year	82	33.47
2. 6 – 10 Year	74	30.20
3. 11 – 15 Year	40	16.33
4. > 16 Year	49	20

As shown in Table 1, the majority of gender is male (65.71%), ages 26 - 35 years (35.51%), postgraduate education (73.88%), marital status (86.12%), and length of work <5 years (33.47%).

IV. RESULT

The results of the descriptive statistical analysis for the four research variables are presented as followed in Table 2. As shown in Table 2, the mean values of the four variables from the lowest to the highest in succession are grit (34.31), task performance (41.82), job involvement (44.06), and transformational leadership (47.99).

Table 2. Descriptive Statistics

N	Descriptive Statistics				
	Valid	Grit	Transformational Leadership	Job Involvement	Task Performance
	Missing	0	0	0	0
Mean		34.31	47.99	44.06	41.82
Median		34.00	48.00	45.00	41.00
Mode		32	48	47	40
Std. Deviation		4.201	9.531	4.550	4.608
Variance		17.649	90.848	20.705	21.233
Range		23	48	35	30
Minimum		17	12	15	20
Maximum		40	60	50	50
Sum		8406	11757	10795	10245

Table 3 shown all indicators on each variable have significant relationships with the indicators of the other variables at level $p < .05$. This condition indicates that all the indicators of all variables have a mutual relationship with each other.

Table 3. Correlation matrix of indicators

	1	2	3	4	5	6	7	8	9	10	11
Grit											
1. CI	1.00										
2. PE	.52*	1.00									
Transformational Leadership											
3. II	.30*	.34*	1.00								
4. IM	.31*	.31*	.87*	1.00							
5. IS	.32*	.40*	.82*	.87*	1.00						
6. IC	.25*	.38*	.76*	.76*	.82*	1.00					
Job Involvement											
7. APW	.39*	.33*	.26*	.32*	.31*	.26*	1.00				
8. SWMT	.44*	.45*	.33*	.31*	.35*	.31*	.42*	1.00			
9. CWIS	.42*	.49*	.31*	.34*	.39*	.29*	.34*	.61*	1.00		
Task Performance											
10. TP1	.28*	.30*	.26*	.27*	.36*	.28*	.24*	.27*	.30*	1.00	
11. TP2	.29*	.40*	.33*	.34*	.45*	.40*	.26*	.33*	.39*	.52*	1.00

* $p < .05$

The results of hypothesis testing with path analysis of the effects of grit on task performance by mediating transformational leadership and job involvement are summarized in Table 4 and visualized in Fig 1 and Fig 2. The hypothesis testing results in Table 4 show that all hypothesis were supported (t -value $>$ t -table at $\alpha = .01$). Therefore the result of this study are grit, transformational leadership, and job involvement had a significant direct effect on task performance, grit and transformational leadership had a significant direct effect on job involvement, and grit had a significant direct effect on transformational leadership.

Table 4. Summary of path coefficients and t values

Hypothesis	Path Coefficients	T Value	Hypothesis Testing
H ₁ : Grit (X) on task performance (Y ₃)	.19**	2.70	Supported
H ₂ : Grit (X) on transformational leadership (Y ₁)	.41**	6.90	Supported
H ₃ : Grit (X) on job involvement (Y ₂)	.52**	9.62	Supported
H ₄ : Transformational leadership (Y ₁) on task performance (Y ₃)	.25**	4.07	Supported
H ₅ : Transformational leadership (Y ₁) on job involvement (Y ₂)	.22**	4.01	Supported
H ₆ : Job involvement (Y ₂) on task performance (Y ₃)	.21**	2.94	Supported

** $p < .01$

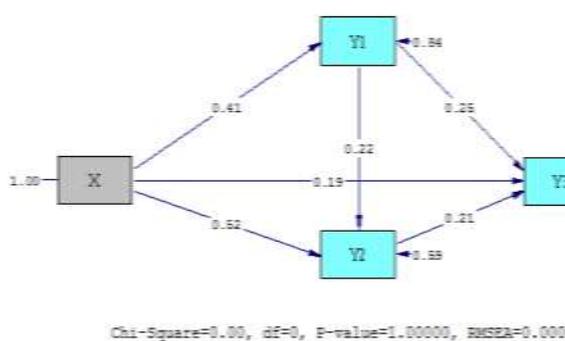


Figure 1. Path Coefficients

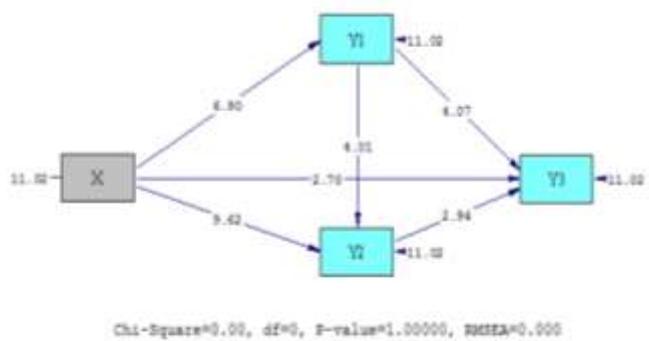


Figure 2. T Values

The results of this study also showed grit had a significant indirect effect on task performance by mediating transformational leadership, with path coefficient = .10** and Z-value = 4.98, grit had a significant indirect effect on task performance by mediating job involvement, with path coefficient = .11** and Z-value = 6.29, grit had a significant indirect effect on job involvement by mediating transformational leadership, with path coefficient = .09** and Z-value = 5.01, and transformational leadership had a significant indirect effect on task performance by mediating job involvement, with path coefficient = .05** and Z-value = 5.18. In Fig 1 and Fig 2, the test results of the model with the goodness of fit statistics show the significant with Chi-Square =

0.000, $df = 0$, $p\text{-value} = 1.00000 > .05$ and $RMSEA = .000 < .08$, so that the model tested is fit. That means the theoretical model being tested is supported by empirical data.

V. DISCUSSION

The results have revealed that grit had a significant effect on task performance, either directly or indirectly by mediating transformational leadership and job involvement. The results of the correlation test between indicators for all variables as a whole show a significant relationship. Finally, the result of a fit model test also shows that the theoretical model was in accordance (fit) with empirical data. This finding confirms that grit, transformational leadership, and job involvement are adequate determinant for task performance. Moreover, transformational leadership and job involvement play a significant role as a mediator of the effect of grit on task performance. These findings were consistent with other results used as a reference to build this research hypothesis.

In reality, lecturers of private higher education who has the consistency of interests reflects an individual's tendency to maintain commitment and focus on achieving goals/tasks over a long period time; and persistence of effort, reflects an individual's tendency to pursue long-term goals with sustained efforts despite obstacles and setbacks tend to have an and task performance consist two indicators, namely activities to transform raw materials into goods and services, and activities to help the transformation process that allows organizations to function effectively and efficiently (Aguinis, 2013). For example, lecturers with high persistence of effort tend to transform raw materials (resources in organizations) into services in education, both teaching, research, and community service. This is consistent with the results of correlational analysis between indicators which confirm that all grit indicators have a significant relationship with all task performance. These findings are consistent with the research results by Saleh et al. (2019), Jachimowicz et al. (2018), Holdan et al. (2018), Cosgrove, Chen, and Castelli (2018) that grit influences task performance who show that grit influences task performance.

Besides, leaders or managers of private higher education that have good transformational, which is characterized by idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass & Avolio, 1990) tend to motivate lecturers to show activities to transform raw materials into goods and services, and activities to help the transformation process that allows organizations to function effectively and efficiently (Aguinis, 2013). For example, leaders or managers who inspirational motivation and intellectual stimulation tend to activities to help the transformation process that allows organizations to function effectively and efficiently. This is consistent with the results of correlational analysis between indicators which show that all transformational leadership indicators have a significant relationship with all task performance indicators. The research results of Bayram and Zoubi (2020), Guterresa, Armanu, and Rofiaty (2020), Hamid et al. (2020), Sawaeana and Ali (2020), Supriyanto, Ekowati, and Maghfuroh (2020), Widodo and Mawarto (2020), Abuzaid et al. (2019), Apoi and Latip (2019), Chandrasekara (2019), Al Khajeh (2018), Chen, et al. (2018), Lin and Shiqian (2018), and Steffens et al. (2018) also prove that transformational leadership affects task performance.

The lecturers of private higher education can manage and develop his job involvement in good condition who manifested in active participation in work, showing work is the main thing and considers work as important to his self-esteem (Robbins & Judge, 2013) also will have great potential to encourage the emergence of activities to transform raw materials into goods and services, and activities to help the transformation process that allows organizations to function effectively and efficiently (Aguinis, 2013) as indicators of task performance. As an illustration, lecturers who active participation in work tend to activities to transform raw materials into goods and services. The lecturers who showing work is the main thing also tend to activities to help the transformation process that allows organizations to function effectively and efficiently. This is consistent with the results of correlational analysis between indicators that prove all job involvement indicators have a significant relationship with all task performance indicators. Studies conducted by Lunardi, Zonatto, and Nascimento (2018), Widjajani, Nimran, and Utami (2017), Kappagoda (2013), Awadh and Ismail (2012) also report that job involvement affects task performance.

Further, the lecturer lecturers of private higher education can maintain their consistency of interests and persistence of effort in good condition can also stimulate active participation in work, showing work is the main thing and considers work as important to his self-esteem of lecturers (Robbins & Judge, 2013). For example, lecturers whose consistent interests tend to active participation in work and showing work is the main thing. As shown by the results of correlational analysis between indicators, all indicators of grit and job involvement are

significant. The results of research by Widodo and Chandrawaty (2020), Arifin et al. (2019) and Jeong et al. (2019) also indicate that grit influences job involvement.

Moreover, leaders or managers of private higher education that have good transformational leadership manifested idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass & Avolio, 1990) tend to motivate lecturers to show active participation in work, showing work is the main thing and considers work as important to his self-esteem of lecturers as indicators of job involvement (Robbins & Judge, 2013). For example, leaders or managers whose inspirational motivation tend to active participation in work. This is consistent with the results of correlational analysis between indicators which show that all transformational leadership indicators have a significant relationship with all job involvement indicators. The studies carried out by Nazem and Mina (2014), Dwirosanti (2017), and Al Basyir, Madhakomala, and Handura (2019) also reveal that transformational leadership affects job involvement.

Finally, the lecturer lecturers of private higher education can manage their consistency of interests and persistence of effort in good condition as indicators of grit can also provide flexibility for transformational leadership practices manifested idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass & Avolio, 1990). For example, lecturers whose consistent interests tend to provide flexibility for transformational leadership practice among leaders or managers of private higher education. As shown by the results of correlational analysis between indicators, all indicators of grit and transformational leadership are significant. The results of research by Caza and Posner (2019), Schimschal and Lomas (2018), and Sudbrink (2016) concluded that grit affects transformational leadership.

The results of this study confirm the results of several such studies and find a new empirical model of the effect of grit on task performance mediating by transformational leadership and job involvement based on the data of private higher education lecturers in Indonesia. This model can be discussed as a reference by researchers and practitioners in developing models of task performance in the future and any context.

VI. CONCLUSION

The results reveal that grit has a positive and significant effect on task performance, both direct and indirect effect by mediating transformational leadership and job involvement. Therefore, a fit research model of the effect of grit on task performance mediating by transformational leadership and job involvement with the research setting of the lecturers of private higher education in Indonesia was found. This model can be used as a reference by practitioners and researchers in developing models of task performance based on their actual conditions. For the researchers, the models can be developed and expanded into research, studies, and projects to develop task performance which is more comprehensive and holistic by adding variables, other relevant indicators, other approach analysis, and any context.

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