

UNVEILING PROACTIVE WORK BEHAVIOR IN MEDIATING THE EFFECT OF GRIT ON EMPLOYEE WORK EFFECTIVENESS

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Abstract: This study explores the association between proactive work behavior (PWB), which is a mediator between employee grit and work effectiveness. Sixty-three employees of the Secretariat General and Directorates within the Directorate General of Transportation of the Indonesian Ministry of Transportation provided data for this research, which was collected through a questionnaire on a Likert scale. Structural equation modeling (SEM) results demonstrated that grit enhanced PWB, which in turn significantly impacted work effectiveness both directly and indirectly. It added to the process by which work effectiveness was impacted by grit. As a result, leaders have to establish the appropriate policies to support employee grit and PWB simultaneously. Therefore, additional research needs to be done in a wider range of sectors and organizations.

Keywords: *grit, proactive work behavior, work effectiveness.*

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1. Introduction

Employee work effectiveness is very important for organizational performance (Apriyani et al., 2023), including employees in public organizations who work in the planning sector. Their work effectiveness is needed because their work output determines the success and survival of the organization, both in the short, medium, and long term. When the work plans they produce are easy to implement, measurable, can be monitored and evaluated, and improved, it helps the process of achieving organizational goals. However, the fact is that quite a few employees who carry out planning activities at the Secretariat General and Directorates within the Directorate General of Transportation of the Indonesian Ministry of Transportation are unable to complete their work on time and meet good planning standards. It is not uncommon for the work produced to be not easy to implement and measure, making it difficult to evaluate and correct when irregularities are found in its implementation. Therefore, studies regarding the work effectiveness of employees who carry out important and urgent planning activities are needed.

According to Satriadi et al. (2023), work effectiveness is the ability to successfully complete tasks within the designated timeframe. For Febryanti and Amirulmukminin (2023), work effectiveness also refers to the capacity of human resources to achieve organizational goals by successfully completing tasks and abiding by specified strategies. Apriyani et al. (2023) describes it as the process by which efficient managerial choices and actions enable the achievement of goals pertaining to output quantity, quality, and timeliness. Work effectiveness

can be measured using a wide range of factors, such as empowerment, efficacy, development potential, cooperation, coordination, integration, compliance, validation, and dependability (Mathis et al., 2017; Mustafa et al., 2017; Alkaf et al., 2021; Meianto et al., 2022).

Grit and PWB have been shown to have an impact on work effectiveness in a number of previous research studies. Liang (2021), for instance, asserted that grit affects effectivity at work. Meanwhile grit affects PWB (Widodo & Chandrawaty, 2021; Hermita et al., 2023; Holl et al., 2023). Moreover, PWB establishes work effectiveness (Smithikrai, 2022; Pratama et al., 2023). It is crucial and necessary to conduct research on this topic because, to far, no studies have been identified that clearly establish the role of PWB in mediating the relationship between grit and work effectiveness. Therefore, this study intends to explore the impact of grit on work effectiveness with PWB mediation.

Grit and Work Effectiveness

Grit became well-known because of its significant impact on people's and organizations' lives. Scholars at the individual level empirically confirmed the significant effect of grit on performance (Faust & Rosendale, 2023) and organizational citizenship behavior (Farroukh et al., 2023; Lee, 2022). Duckworth et al. (2011) define grit as the will to work hard and passionately toward difficult long-term goals, emphasizing that perseverance is essential for long-term success (von Culin et al., 2014; Duckworth, 2016). Grit is defined by Widodo and Gunawan (2021) as the propensity to put in a lot of effort, endure through hardship, and maintain one's resilience over time in the face of setbacks in order to accomplish important life goals. The two indications that make up grit—consistency of interest and perseverance of effort—are essential for achieving high-level goals (Duckworth & Quinn, 2022). Liang (2021) asserts that grit affects productivity. As a result, it generally confirms the first hypothesis:

H₁: Grit directly affects employees' work effectiveness.

Grit and PWB

Not only can grit affect work effectiveness, but it also has the ability to improve PWB. Grit has been linked to innovative behavior and creativity (Widodo & Chandrawaty, 2021; Hermita et al., 2023; Holl et al., 2023). It demonstrated how grit affects invention as a PWB indicator, with improved innovation serving as a stand-in for PWB when persistence of effort and coherence of interests are encouraged. PWB, according to Cai et al. (2019), is when a person starts making good adjustments at work. For Boonyarit (2023), PWB is a complex phenomenon in which workers demonstrated self-initiative, anticipated specific needs, and took proactive actions including speaking out, taking the initiative, independently innovating, and preventing problems. According to Parker and Collins (2010), there are four unique characteristics of proactive behavior: speaking up, taking charge, preventing problems, and showcasing individual innovation. It can be used as a gauge of grit if desire and effort are consistent. For example, when workers exhibit a steady and unwavering level of attention and perseverance, it can foster the development of bravery in taking leadership roles and preventing issues in the workplace. The following formulation of the second hypothesis might be made in light of earlier research and the aforementioned illustration:

H₂: Grit directly affects employees' PWB.

PWB and Work Effectiveness

PWB affects work effectiveness in addition to being impacted by grit. PWB, in its simplest form, represents self-initiated work activities to solve new or routine tasks to best fulfill

organizational and personal goals. This involves taking over assignments from uncooperative coworkers, coming up with original ideas, stopping the emergence of new issues, or coming up with novel ways to solve difficult difficulties. Consequently, PWB determines outcomes associated to the job, like work effectiveness (Smithikrai, 2022; Pratama et al., 2023). It was suggested that PWB may be a predictor of employee work effectiveness, which means that when PWB conditions are constant, people can become more effectivity at work. As a result, the third hypothesis was developed:

H₃: PWB directly affects employees' work effectiveness.

Mediating Role of PWB

As describes above, grit influences PWB (Faust & Rosendale, 2023, Wetzler et al., 2023); while PWB impacts work effectiveness (Smithikrai, 2022; Pratama et al., 2023). This empirical data demonstrates PWB's mediation function in the causal association between grit and work effectiveness. Nevertheless, there isn't any research that focuses on how grit affects work effectiveness when using PWB mediation. Because of this circumstance, more research is required to determine how PWB functions as a mediator in the causal relationship between grit and work effectiveness. Thus, the following is how the fourth hypothesis might be advanced:

H₄: Grit indirectly affected work effectiveness through PWB.

The causal relationship between grit, PBM, and work effectiveness can be formulated into the research conceptual framework shown in Figure 1:

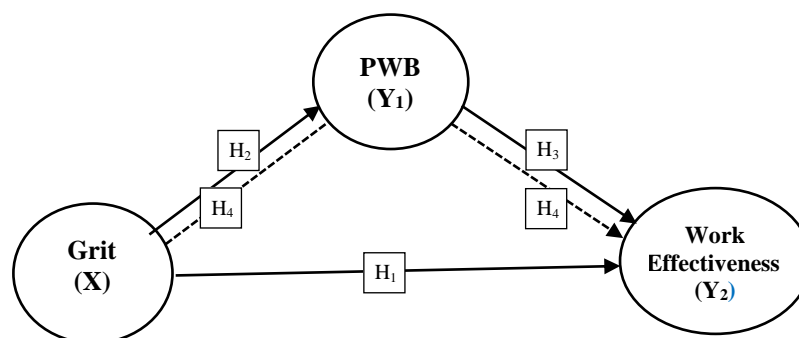


Figure 1. Research Conceptual Framework

2. Research Methods

2.1 Participants

The 63 workers that perform planning tasks for the Ministry of Transportation of the Republic of Indonesia's Secretariat General and Directorates within the Directorate General of Transportation comprised the research sample. Participants willingly completed questionnaires without payment using an incidental sampling technique (Widodo, 2021). The majority of them are male (60.3%), aged 31 to 40 (50.79%), married (80.95%), have undergraduate (S1) education (66.67%), and have between 11 and 15 years of experience (38.10%).

2.2 Procedure and Materials

The survey approach used in this study calls for giving questionnaires to the participants (sample). Likert scale responses are scored from strongly disagree or never (score = 1) to

strongly agree or always (score = 5). Online surveys are conducted with Google Forms, and the findings are disseminated through WhatsApp. Aside from that, the experts' theoretical perspectives drove the questionnaire's construction. Work effectiveness indicators include empowerment (Empo), efficacy (Effi), ability to develop (AD), ability to collaborate (AC), coordination (Coor), integration (Inte), obedience (Obed), validation (Vali), and reliability (Reli); grit indicators include consistency of interest (CI) and persistence of efforts (PE) (Duckworth & Quinn, 2022); PWB indicators are grouped into four aspects: taking charge (TC), voice (Voi), problem prevention (PP), and individual innovation (InIn) (Parker & Collins, 2010).

2.3 Data Analysis

The structural equation model (SEM) analysis of the data gathered from the distribution of the questionnaires was processed using SmartPLS version 4 software. SPSS software version 22, which was created to describe the research variables and clarify their relationships, was utilized to analyze the data using descriptive and correlational statistics.

3. Results and Discussion

3.1 Results

Descriptive and Correlational Analysis

The results of the descriptive and correlation analyses carried out using SPSS are shown in Table 1. The mean values, which typically range from 31.59 to 44.94, are larger than the standard deviation (SD), which varies from 5.05 to 8.63. As such, it offers a respectable summary of the data and is worthy of further research. The results of the correlation analysis between the variables taken combined are significant at $p < .01$, with a correlation coefficient value range of 0.567–0.715. It illustrates the interdependence of every variable on every other variable. Since every correlation coefficient is less than 0.8, multicollinearity is not present.

Table 1. Descriptive and correlation statistics result

Variabel	Mean	SD	1	2	3
Grit	31.59	5.05	1.00		
PWB	44.94	8.63	0.567	1.00	
Work Effectiveness	36.73	5.49	0.667	0.715	1.00

Measurement model

The purpose of the measurement model, also known as the outer model, is to assess and test the connections between indicators and their constructions (latent variables). If a variable's loading factor value is (\geq) 0.7 or higher, it can be considered valid. According to the computation findings, each indicator's loading factor value is greater than ($>$) 0.7. As a result, all indicators are said to be valid and to reflect variables. Additionally, each indicator's correlation value with its own variable is higher than its correlation with other variables, indicating strong discriminant validity, according to the results of the discriminant validity test. Table 2 presents a summary of the findings from tests of construct reliability and validity, which include Cronbach's alpha (CA), composite reliability (CR), and average variance extracted (AVE) from lowest to highest. Every variable has a CA and CR value greater than 0.7, indicating that every variable (construct) is dependable. Similarly, it is legitimate because

each variable's AVE value is higher than 0.5 (Hair et al., 2018). As a result, all the research variables are valid, reliable, and suitable for use and further analysis.

Table 2. Result of the measurement model

Variables	Indicators	Outer Loading	CA	CR	AVE
Grit (X)	X.1	0.994	0.867	0.870	0.882
	X.2	0.935			
PWB (Y ₁)	Y1.1	0.880	0.965	0.927	0.816
	Y1.2	0.899			
	Y1.3	0.938			
	Y1.4	0.896			
Work Effectiveness (Y ₂)	Y2.1	0.760	0.915	0.924	0.596
	Y2.2	0.795			
	Y2.3	0.818			
	Y2.4	0.797			
	Y2.5	0.715			
	Y2.6	0.733			
	Y2.7	0.779			
	Y2.8	0.829			
	Y2.9	0.715			

Goodness of Fit

The Normed Fit Index (NFI) value is one way to determine the model suitability test. The NFI value falls between 0 and 1. The model has a high fit if the value is near 1. The investigation yielded an NFI value of 0.733, as seen in Table 3. The next model fit evaluation is the standardized root mean square (SRMR) residual test. The SRMR value achieved is 0.083 and represents an acceptable fit if the difference between the data correlation matrix and the estimated correlation matrix of the SRMR model is less than 0.10. Chi-square greater than 0.9 is the last test for model fit, and the resultant value is 215.725. This research model is fit since all three goodness of fit (GOF) parameters (cut off) were satisfied. It indicates that the research's theoretical model and the empirical model it created are suitable.

Table 3. Goodness of fit statistics

	Saturated Model	Estimated Model	Cut off	Information
SRMR	0.083	0.083	≤ 1	Fit
Chi-square	215.725	215.725	> 0.9	Fit
NFI	0.733	0.733	0-1	Fit

Hypothesis Testing

The results of hypothesis testing are displayed in Figures 1 and 2 and summarized in Table 5. For α 0.01, all hypotheses (H1 through H4) are supported (significant) with t values greater than t table values. In particular, work effectiveness is influenced by grit with a path coefficient = 0.386 and PWB = 0.567, while PWB influences work effectiveness with a path coefficient = 0.510. Furthermore, grit indirectly impacts work effectiveness through PWB, with a path coefficient = 0.289. Grit's effect on work effectiveness, not PWB, is the smallest path

coefficient that has been found. It showed that grit is less important to work effectiveness than PWB. However, PWB mediates the effects of grit on work effectiveness because of its large effect on work effectiveness.

Table 4. Hypothesis testing result

Hypothesis	Path Coefficient	T Value	Information
H ₁ : Grit on work effectiveness	0.386	3.539**	Supported
H ₂ : Grit on PWB	0.567	6.406**	Supported
H ₃ : PWB on work effectiveness	0.510	4.987**	Supported
H ₄ : Grid on work effectiveness through PWB	0.289	5.037**	Supported

** $p < 0.01$

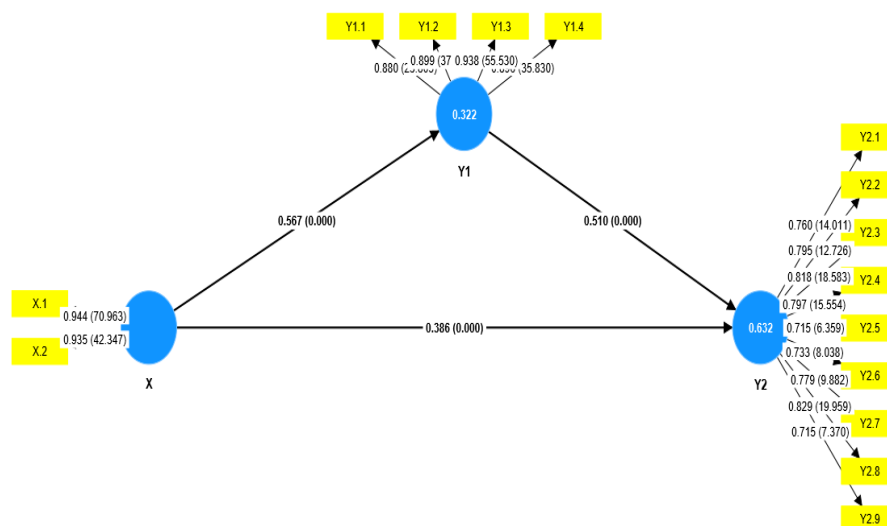


Figure 2. Standardized Structural Model

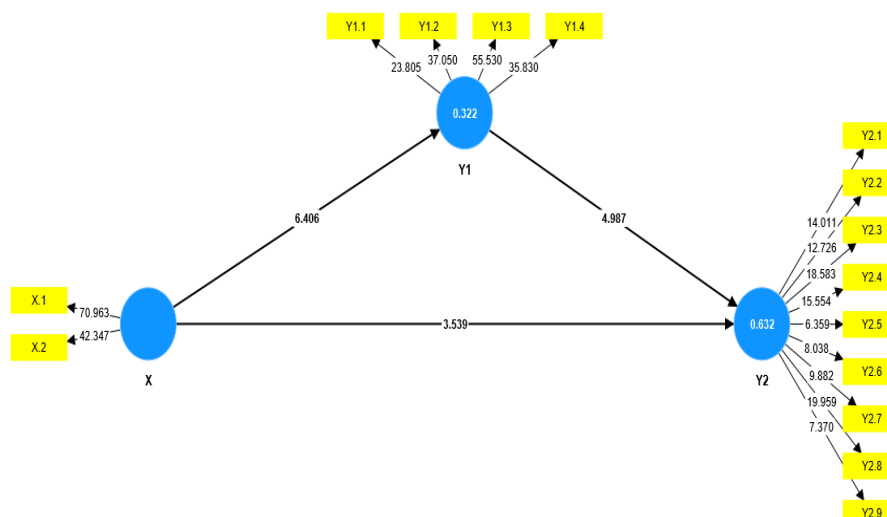


Figure 3. T Value Structural Model

3.2 Discussion

The current study discovered a number of important findings. First, grit directly and favorably affects how effective one's work is, indicating the critical role grit plays in determining effectiveness. This suggests that workers who are consistently interested in their work and put up a persistent effort tend to be highly empowered, effective, collaborative, coordinated, integrated, obedient, validated, and reliable. This conclusion supports and validates Liang's (2021) research, which shows that grit affects effectivity at work.

Second, PWB is seen to be the most important predictor of overall job effectiveness since it directly and favorably affects work effectiveness. Increasing PWB is thought to act as a stimulant to boost effectivity. For instance, proactive employees demonstrate high efficacy, proficiency in development and collaboration, effective coordination, and the capacity to foster integration and obedience. They also tend to communicate transparently, take initiative, prevent problems, and foster innovation. The outcome is in line with earlier studies that shown that PWB has an impact on how effectively people work (Smithikrai, 2022; Pratama et al., 2023; Febriana et al., 2019).

Third, grit immediately and favorably affects PWB. It was proposed that a steady and firm grit encouraged PWB development in workers. Employees who consistently show interest in their work and put in steady, consistent effort, for instance, will be sensitive to picking up missed tasks and averting potential workplace issues. The findings of earlier research support the impact of grit on PWB (Suendarti et al., 2020; Widodo & Chandrawaty, 2021; Hermita et al., 2023; Nisar et al., 2020; Holl et al., 2023)

Finally, this research stated that PWB mediates the influence of grit on work effectiveness. The results are in line with prior research, validating the direct influence of grit on PWB (Suendarti et al., 2020; Hermita et al., 2023; Holl et al., 2023) and subsequent influence of PWB on work effectiveness (Smithikrai, 2022; Pratama et al., 2023; Febriana et al., 2019). It also introduced a new empirical model that clarifies the indirect influence of grit on work effectiveness through PWB. The results showed that PWB played a critical role in mediating the effects of grit on work effectiveness.

This research has theoretical and practical implications that support PWB, which is seen to be a crucial component of programs that aim to improve employee work effectiveness by boosting grit. Consequently, in order to increase work effectiveness, leaders should support the development of employee grit and PWB. Leaders at all organizational levels must actively attempt to develop employee grit to promote more PWB and job effectiveness in order to have a significant influence. These efforts might be directed by utilizing grit and PWB indicators. Leaders are also recommended to expedite the adoption of rules that are especially intended to foster employee grit and PWB. It offers guidance to staff members who handle planning tasks and leaders in the Secretariat General and Directorates of the Indonesian Ministry of Transportation regarding the importance of fostering PWB and employee grit development in order to improve workers' effectivity. The findings theoretically provide support for the link between grit and productivity at work via PWB. In the future, this theoretical foundation will likely be a useful resource for academic research and activity, especially in the fields of public administration and policy, leadership, organizational behavior, and HRM.

However, there are a number of shortcomings in this study that require more investigation. Its complete dependence on employee viewpoints and a limited range of theoretical indicators is one of its drawbacks. Additionally, the research's sample scope is restricted to public entities, specifically the Secretariat General and Directorates under the Ministry of Transportation of

the Republic of Indonesia's Directorate General of Transportation. Additionally, there is no investigation of the qualitative details underlying the variables' causal link.

4. Conclusion

The relationship between grit and PWB, two essential factors influencing work effectiveness, was clarified by this study. The results showed that the organization from using a comprehensive approach, supporting both grit and PWB to increase worker effectiveness. The analysis also contributed to the corpus of existing research by improving understanding of the PWB mediation mechanism and the causal relationship between grit and work effectiveness. However, the present study acknowledged the need for more investigation to validate the results in different contexts. Future research on the subject should consider other individual factors like personality, self-efficacy, motivation, achievement, emotional intelligence, and adversity intelligence that may have an impact on worker effectiveness. In order to give further light on the mediating function of PWB, it is advised that more rigorous qualitative or mixed methods techniques be used. Additional data sources that can be used include input from leaders and coworkers.

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