

The Effect of Intrinsic Motivation on the Performance of Labor Supervisors in North Sumatera with Work Engagement as a Moderation

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Abstract. *This study aims to analyze the influence of intrinsic motivation on the performance of labor inspectors in North Sumatera, with work engagement as a moderating factor. This study used a quantitative approach, collecting data through distributing questionnaires to 100 respondents, labor inspectors at the North Sumatera Provincial Manpower Office. The data analysis technique used in this study was Partial Least Squares (PLS). The results of the study indicate that intrinsic motivation has a positive and significant effect on the performance of labor inspectors. This indicates that the higher an employee's intrinsic motivation, the higher their performance. Furthermore, work engagement has been shown to moderate the effect of intrinsic motivation on labor inspector performance. Work engagement strengthens the relationship between intrinsic motivation and performance, so employees with high work engagement tend to demonstrate more optimal work performance. This research provides implications that increasing intrinsic motivation and work engagement needs to be a concern for organizations in efforts to improve the performance of labor supervisors.*

Keywords: *Intrinsic Motivation; Labor Supervisor Performance; Work Engagement.*

1. Introduction

The performance of public officials is a fundamental element in the successful implementation of state functions, particularly in the delivery of public services and the enforcement of regulations. In public administration studies, official performance is understood not only as compliance with administrative procedures and rules, but also encompasses the quality of substantive task execution, professionalism, responsiveness, and the ability of officials to respond to community problems fairly and accountably. (Kolly et al., 2021). Thus, the assessment of public apparatus performance should ideally not only be based on administrative indicators, but also on the extent to which the public actually feels the benefits of state functions.

One of the state's functions with a high level of complexity and risk of conflict is labor inspection. Labor inspection plays a strategic role in ensuring the enforcement of labor norms, protecting workers' rights, and maintaining a balance in industrial relations between workers and employers. However, various studies indicate that labor inspection in Indonesia still faces effectiveness issues, both due to limited resources, the breadth of inspection objects, and weak coercive power in enforcing labor norms. (Muharam et al., 2022). This condition often causes the public to perceive employment supervision as less than optimal. (Dewi & Tampubolon, 2025).

In the context of labor inspectors, performance is not only measured by the fulfillment of administrative duties or the number of supervisory activities carried out, but also by the quality of case handling, objectivity of attitude, and the supervisor's ability to deal with industrial relations conflicts. Previous research shows that the performance of labor inspectors at the regional level is generally assessed as good in terms of carrying out formal duties, but still faces various obstacles in practice, such as pressure from conflicting parties, high workloads, and limited supporting resources. (Kairupan et al., 2021). This indicates that the performance of labor inspectors is not solely determined by systems and procedures, but also by internal factors within the apparatus.

The gap between administrative and substantive performance indicates that the performance assessment of labor inspectors cannot be adequately explained solely through formal indicators. In work situations filled with pressure, conflict, and moral demands, supervisors require a strong internal drive to continue carrying out their duties professionally and consistently. In the organizational behavior literature, intrinsic motivation is understood as an individual's internal drive to work because the work is perceived as meaningful and aligned with personal values, rather than solely due to external incentives. (Bhurtel, 2025). Intrinsic motivation has been shown to play an important role in maintaining the quality of public apparatus performance, especially in the context of stressful work and ethical dilemmas. (Rahman et al., 2025).

In addition to intrinsic motivation, organizational behavior studies also emphasize the importance of work engagement as a positive psychological state that reflects an individual's level of attachment to their work. Work engagement is characterized by vigor, dedication, and absorption, enabling individuals to remain energized, dedicated, and focused in the face of high work demands. Numerous studies have shown that work engagement positively influences performance and acts as a mechanism that translates psychological resources into productive work behavior, particularly in jobs with high emotional demands and high conflict. (Abukhalifa & Kamil, 2025; Vuong, 2025).

2. Research Methods

This study uses a quantitative approach with an explanatory research approach. This quantitative approach was chosen because this study aims to empirically test the relationship between variables through numerical measurements and statistical analysis. Explanatory research is used to explain the causal relationship between the independent variables, dependent variables, and moderating variables formulated in the research hypothesis. (Creswell & David Creswell, 2018).

The explanatory approach allows researchers to test theories and conceptual models that have been built based on literature reviews, particularly regarding the influence of intrinsic motivation on the performance of labor supervisors with work engagement as a moderating variable. (Babbie, 2016).

3. Results and Discussion

3.1. Description of Research Object

The object of this research is labor inspectors working at the North Sumatra Provincial Manpower Office. Labor inspectors are tasked with supervising the implementation of labor regulations, providing guidance to companies and workers, and ensuring the fulfillment of labor rights in accordance with applicable provisions. This study aims to analyze the effect of Intrinsic Motivation on the performance of labor inspectors with Work Engagement as a moderating variable. Intrinsic Motivation relates to an individual's inner drive to work optimally, while Work Engagement describes the level of attachment, enthusiasm, and dedication of an individual to their work. The performance of labor inspectors in this study is measured based on their ability to complete tasks, work quality, responsibility, and achievement of work targets. With high Intrinsic Motivation and Work Engagement, it is expected that labor inspectors will be able to improve their performance optimally.

3.1.1 Respondent Characteristics

Before analyzing the research data, the respondent characteristics are presented to provide a general overview of the profile of the respondents used in this study. Respondent characteristics include age, gender, highest level of education, length of service, and position. The respondent characteristics are shown in the following table.

Table 3.1 Respondent Characteristics

Characteristics	Category	Amount	Percentage
Age	20 to 30 years	2	2
	31 to 35 years old	3	3
	36 to 30 years	8	8
	> 30 years	86	86
Gender	Man	62	62
	Woman	38	38
Last education	High School	1	1
	D3	1	1
	S1	67	67
	S2	31	31
Years of service	2 to 5 years	2	2
	6 to 10 years	6	6
	11 to 15 years	16	16

	> 15 years	76	76
Position	Young Labor Supervisor	23	23
	Middle Labor Supervisor	5	5
	First Labor Inspector	2	2
	Structural Official of the Manpower Supervision Unit	29	29
	Administrative Officer at the Manpower Inspection Unit	26	26
	Other Functional Officials in the Manpower Supervision Unit	13	13
	Total Respondents	100	100

Based on research data, respondents were predominantly employees aged >30 years. This indicates that most respondents have experience and maturity in carrying out labor inspection duties. In terms of gender, respondents were predominantly male compared to female. Based on their highest educational level, the majority of respondents had a bachelor's degree, followed by respondents with a master's degree. This indicates that most labor inspectors have an adequate educational background to support the implementation of their job duties and responsibilities.

In terms of length of service, the majority of respondents have worked for more than 15 years. This indicates that the majority of respondents have extensive work experience in the field of labor inspection, thus understanding the duties and functions of the job in depth. Based on position, the majority of respondents hold the positions of Labor Inspector (first, junior, and middle) and Structural Officials of the Labor Inspection Unit. In addition, there are also respondents who serve as Administrative Officers and other Functional Officials in the Labor Inspection Unit.

3.1.2. Descriptive Analysis of Variables

Descriptive analysis aims to provide a summary (description) of data for understanding and information. The information presented is based on 100 respondents' responses to three variable components. Furthermore, the number of interval classes must equal three intervals to determine the average score for each respondent's response to meet the assessment

category. The assessment criteria can be divided into the following categories once the intervals are known:

Table 3.1.2 Assessment Criteria Intervals

Interval Class	Assessment Categories
1.00 – 2.33	Low
2.33 – 3.67	Currently
3.68 – 5.00	Tall

Source: Ghozali, 2015

3.1.3. Respondents' Perceptions of Variables Intrinsic Motivation

The analysis of the Intrinsic Motivation variable was conducted based on established indicators. The Intrinsic Motivation indicator consists of six statements. In this study, several factors were taken into consideration, as seen from the respondents' perceptions, as follows:

Table 3.1.3 Summary of Respondents' Perceptions of Intrinsic Motivation

No	Statement	Mean	Standard Deviation
1	I am personally satisfied when carrying out supervisory duties.	3,250	0.766
2	This job provides a significant challenge for me.	3,360	0.713
3	I have the freedom to make decisions regarding my work.	3,990	0.889
3	This job gives me the opportunity to grow professionally.	3,270	0.760
5	This job has a very meaningful value for my life.	3,320	0.719
6	I am happy with the supervisory duties I perform, even though there is no material reward.	3,180	0.865

No	Statement	Mean	Standard Deviation
Overall average		3,228	0.786

Source: Processed Data 2026

Based on Table 3.3, it is known that the Intrinsic Motivation variable obtained an overall average of 3.228, which is included in the high category. This indicates that respondents have good Intrinsic Motivation in carrying out labor supervision duties.

The highest mean score was found for the statement "This job provides meaningful challenges for me," with a score of 3.360. This result indicates that respondents feel that working as a labor supervisor provides challenges that can encourage enthusiasm and work motivation from within. Meanwhile, the lowest mean score was found for the statement "I have the freedom to make decisions related to my work," with a score of 3.990. However, this score is still in the high category, which means that respondents still feel freedom in carrying out their work.

Overall, the research results show that labor supervisors have high intrinsic motivation, demonstrated by a sense of satisfaction with their work, the presence of work challenges, opportunities for professional development, and a sense of pleasure in carrying out their duties even without material rewards.

3.1.4. Respondents' Perceptions of Work Engagement

The Work Engagement analysis was conducted based on the established indications, which consist of 6 (six) statements in the Work Engagement indicator. The following are the results of respondents' perceptions of the Work Engagement variable:

Table 3.1.4 Summary of Respondents' Perceptions of Work Engagement

No	Statement	Mean	Standard Deviation
1	I have high energy in carrying out supervisory duties.	3,330	0.601
2	I am very involved in my work.	3,320	0.586
3	I am very enthusiastic in carrying out my work.	3,360	0.656

No	Statement	Mean	Standard Deviation
3	I am very focused and not easily distracted when carrying out supervisory duties.	3,190	0.595
5	I am very dedicated to completing the supervisory tasks assigned to me.	3,290	0.588
6	I am very connected to my work and feel like it is a part of me.	3,330	0.663
Overall average		3,320	0.615

Source: Processed Data 2026

Based on Table 3.3 the Work Engagement variable obtained an overall average of 3.320, which is categorized as high. This indicates that respondents have a high level of work engagement in carrying out their labor supervision duties.

The highest mean score was found for the statement "I am very involved in my work" with a score of 3.320. This result indicates that respondents have a strong involvement in the work they carry out, allowing them to give full attention and commitment in carrying out supervisory duties. Meanwhile, the lowest mean score was found for the statement "I am very focused and not easily distracted when carrying out supervisory duties" with a score of 3.190. However, this score is still in the high category, which means that respondents still have a good level of focus and concentration in their work.

Overall, the research results show that labor supervisors have high Work Engagement, characterized by high work energy, enthusiasm, dedication, involvement in work, and a sense of ownership of the work being carried out.

3.2. Validity Test

The data collection process using an online questionnaire resulted in 100 respondents. Prior to further data analysis, the questionnaire's validity was tested to ensure its suitability as a research instrument. The SEM-PLS method was used to conduct this validity test. Validity test results were considered valid if the factor loading value exceeded 0.6.

Table 3.2.1 Validity Test Results

Indicator	Loading Factor
X1	0.867
X2	0.829
X3	0.808
X4	0.828
X5	0.844
X6	0.754
Y1	0.739
Y2	0.748
Y3	0.796
Y4	0.811
Y5	0.822
Y6	0.756
Z1	0.786
Z2	0.807
Z3	0.793
Z4	0.855

Z5	0.809
Z6	0.817

Source: Processed Data, 2026

Validity testing was conducted to determine the extent to which the indicators were able to measure the constructs being studied. Based on Table 3.2 the validity test results indicate that all indicators in the research variables have loading factor values above 0.60. Thus, all indicators are declared valid and suitable for use in further research model testing. Overall, the results of this validity test demonstrate that all indicators in the study have met the criteria for convergent validity. Therefore, it can be concluded that the research instrument used is valid and can proceed to the reliability testing and structural model testing stages.

3.2.2. Reliability Test of Research Instruments

After the questionnaire is declared valid, the next step is to conduct a reliability test to measure the level of trustworthiness of the questionnaire. Questionnaires that are used repeatedly in research need to be tested to ensure their reliability in measuring the variables studied. "The Cronbach's Alpha value is used as a reliability indicator, with the following criteria: a value ≥ 0.9 indicates very high reliability; between 0.7 and 0.9 means high reliability; between 0.5 and 0.7 indicates moderate reliability; and a value below 0.5 indicates low reliability." The test results indicate that all question items in this study have a very good level of reliability, so they are suitable for use, as seen.

Table 3.2.2. Reliability Test Results

Variables	Cronbach's Alpha	Information
Intrinsic Motivation	0.904	Very high reliability
Performance of Labor Inspectors	0.870	High reliability
<i>Work Engagement</i>	0.896	High reliability

Source: Processed Data, 2026

3.2.3. Discriminant Validity Test

Discriminant Validity Test shows that the indicator variance that substantially represents the construct can be identified through the factor loading (FL) value, which describes the results of construct reliability testing based on discriminant validity. According to Hair et al. (2022), discriminant validity using the Fornell-Larcker approach is met if the square root of the AVE value for each construct is greater than the correlation between constructs. Based on the results in Table 4.8, the square root of the AVE value for each construct is greater than the correlation between constructs, so the research model has met the discriminant validity criteria based on the Fornell-Larcker approach.

Table 3.2.3. Discriminant Validity (Fornell-Larcker Criterion)

	Intrinsic Motivation	Performance Inspectors	of Labor Work Engagement
Intrinsic Motivation	0.822		
Performance of Labor Inspectors	0.650	0.779	
Work Engagement	0.544	0.605	0.811

Source: Processed Data, 2026

Discriminant validity testing is performed to ensure that each variable in the research model has distinct characteristics and does not overlap with other variables. This test is performed by comparing the square root of the Average Variance Extracted (AVE) value on the diagonal of the table with the correlation values between constructs off the diagonal.

These results indicate that the indicators in each variable are able to explain their constructs specifically and have clear differences from other constructs. Therefore, it can be concluded that the measurement model in this study has met the criteria for discriminant validity based on the Fornell–Larcker approach.

3.2.4. Coefficient Determination (R²)

The coefficient of determination (R-Square) is used to determine the extent to which an independent variable explains the dependent variable in a research model. The R-Square value indicates the proportion of variation in the dependent variable that can be explained by the independent variable, while the remainder is influenced by factors outside the

research model. The higher the R-Square value, the better the model's ability to explain the relationship between the variables studied.

Table 3.2.4 Coefficient of Determination

	<i>R Square</i>	<i>R Square Adjusted</i>
Performance of Labor Inspectors	0.538	0.524

Source: Data processed 2026

Based on the test results in the table above, an R Square value of 0.538 and an Adjusted R Square value of 0.524 were obtained for the labor supervisor performance variable. These values indicate that the Intrinsic Motivation and Work Engagement variables, along with their moderating effects, are able to explain 53.8% of the labor supervisor performance variable, while the remaining 46.2% is explained by other variables outside this study.

The R-square value of 0.538 also indicates that the research model has moderate to strong ability to explain the relationship between the independent and dependent variables. Thus, intrinsic motivation and work engagement significantly contribute to improving the performance of labor supervisors.

3.2.5. SEM-PLS Analysis

This study uses 3 (three) latent variables, each of which has indicators or manifest variables in accordance with the operational definitions that have been previously determined."PLS SEM analysis is used to test the relationship between these variables by evaluating the outer model (measurement model) and inner model (structural model)."

3.2.6. Outer Model Evaluation

According to Ghozali (2015), "the outer model functions as a measurement model used to assess the validity and reliability of a model." Meanwhile, the inner model is used to explain and predict the relationship between latent variables in the research model. Outer model testing is conducted to ensure that each indicator is able to measure the construct it represents accurately and consistently. Convergent validity evaluation is carried out by looking at the loading factor value and Average Variance Extracted (AVE). These two measures are used to determine the extent to which the indicator is able to explain the latent variable being measured. Next, discriminant validity is tested using the cross-loading value to ensure that each indicator has a stronger relationship to its construct compared to other constructs. In addition to validity testing, the reliability of the measurement model is also evaluated using

the Composite Reliability value to determine the level of consistency of the indicators in measuring the research construct. The entire testing process is carried out with the help of the SmartPLS application so that the validity and reliability of each latent variable can be analyzed comprehensively during the outer model evaluation stage. The results of the data processing are then presented in the form of an outer model as shown in Figure 4.1.

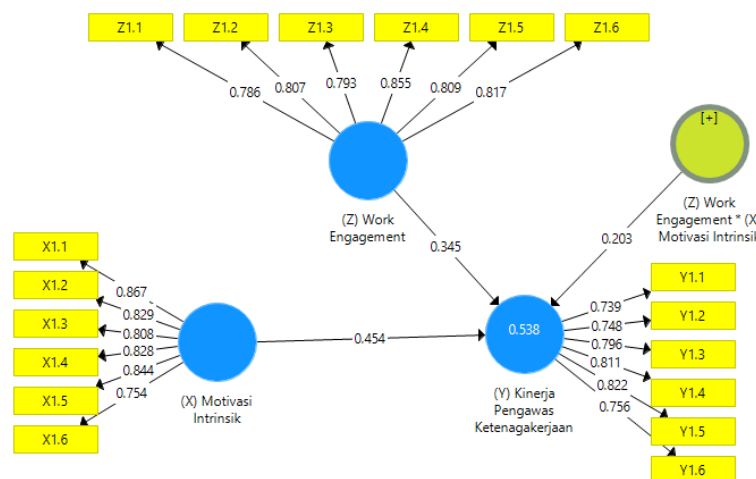


Figure 3.2.6. Results of outer model testing

The results of the initial analysis of the outer model indicate that all correlation coefficients between variables and their indicators meet the standard criteria established for the outer model. This indicates that the model has good validity and reliability, and is consistent..

Outer model analysis is conducted to measure the relationship between research indicators and the latent variables they represent. This test aims to ensure that each indicator measures the research construct validly and reliably. In this study, there are four types of testing that must be carried out, namely convergent validity, composite reliability, Average Variance Extracted (AVE), and Cronbach's Alpha.

4. Conclusion

Intrinsic motivation has a positive and significant effect on the performance of labor inspectors. This indicates that the higher the intrinsic motivation of labor inspectors, the higher their performance in carrying out their supervisory duties. Work Engagement is able to moderate the influence of Intrinsic Motivation on the performance of labor inspectors. The results of the study indicate that Work Engagement strengthens the relationship between Intrinsic Motivation and labor inspector performance. The higher the Work Engagement an employee has, the stronger the influence of Intrinsic Motivation on improving performance.

will be. In addition to acting as a moderating variable, Work Engagement was also found to have a positive and significant direct influence on Labor Inspector Performance.

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