# The Effect of Transactional Leadership Application on Employee Performance Through Work Motivation

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# **ARTICLE INFORMATION**

# ABSTRACT

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Received: 20 December 2024 Accepted: 10 January 2025 Published: 1 February 2025 This study aims to explain and analyze the influence of transactional leadership on employee performance, with work motivation serving as an intervening variable at PT Wira Duta FiberGlass Deli Serdand. The research population consists of all employees at PT Wira Duta FiberGlass Deli Serdang, totaling 46 individuals, with sampling conducted using a census approach. Data collection was carried out through questionnaires, and analysis was performed using SEM Smart PLS software. The findings indicate a positive and significant relationship between transactional leadership and emplovee performance, as well as between transactional leadership and work motivation. Additionally, work motivation was found to significantly influence employee performance, and transactional leadership was shown to impact employee performance indirectly through the mediating role of work motivation. It is recommended that PT Wira Duta FiberGlass Deli Serdang continue to evaluate and improve its leadership system by implementing fair and wellstructured contingent rewards. Furthermore, establishing an effective supervision system-both active and passive—can create a comfortable work environment that enhances employee satisfaction and encourages optimal performance for the company.

**Keywords:** Employee Performance; Enterprises Application; Human Resource; Transactional Leadership; Work Motivation

# INTRODUCTION

Human resources as one of the important factors in a company must have clear rules and a good management system to get optimal results in accordance with what the company wants. One thing that needs to be considered is employees who are the main thing as human resources and affect the company through employee performance (Sutanto et al., 2022; Wahyuni et al., 2020).

Optimal and non-optimal employee performance depends on the difference between what is expected and what is obtained. When what employees get is not as expected, it will cause employees to feel dissatisfied and employee performance will be low. Employee performance directly influences the outcomes and achievements (Zhao & Sun, 2024).

PT Wira Duta Fiberglass Deli Serdang is a company engaged in the production of fiberglass, established in 2000. Employee performance is the key to success for every company including PT Wira Duta Fibreglass Deli Serdang. Better employee performance will help improve employee quality as well (Sembiring et al., 2024). However, in fact, according to the field survey, employee performance at PT Wira Duta FiberGlass is not stable. There are still a number of misprinted items in production as well as delays in completing the output according to the deadline. Which indicates low employee performance.

Many things can affect performance, one of which is the leadership aspect. Companies must focus on leadership aspects. Leadership is one of the keys to organizational success, with effective leadership employees are more disciplined and one type of leadership style is transactional leadership (Hoxha, 2019).

However, in the phenomenon that occurs at PT Wira Duta FiberGlass Deli Serdang, the results of a pre-survey conducted by researchers can be seen from the transactional leadership indicators put forward by Robbins and Judge in Edeh (2020), namely contingent rewards, active exception management, and passive exception management have not been implemented. Leaders tend to do passive exception management. In fact, for the type of employees they have, namely with an average education of high school graduates, a clear system of rewards and punishments is needed, the application of active exception management, namely the leader supervises and guides during the process of implementing product manufacturing operations so as to reduce the number of misprinted products and the product is completed on time.

Performance is shaped by various factors, including motivation, individual abilities, the support received, and the significance of the work being performed (Wahyuni et al., 2020). Among these factors, motivation plays a crucial role. It acts as a motivating force that inspires people to participate in various activities and pursue their objectives.

Within this context, motivation is essential for enhancing performance and achieving effective results. When employees receive adequate motivation, more likely to fully commit to their tasks and objectives will enhance organizational performance. It's worth emphasizing that each employee possesses a unique set of values shaped by their personal value system. Motivation can be supported by three key indicators: the need for achievement, the need for affiliation, and the need for power. These indicators help to clarify the various aspects of motivation and its impact on performance.

Inspired by current phenomena, researchers have expressed a keen interest in exploring the effect of transactional leadership application on employee performance through work motivation.

#### LITERATURE REVIEW

#### Transactional Leadership

Transactional leadership is widely regarded as a foundational element that provides the structure upon which transformational leadership can be developed and effectively implemented (Jensen et al., 2019). This leadership style is characterized by a structured, performance-based system in which leaders establish clear expectations and motivate their followers through a combination of rewards for achieving set goals and disciplinary actions for failing to meet performance standards. By emphasizing a system of contingent reinforcement, transactional leadership ensures that employees remain accountable for their tasks while being encouraged to meet or exceed organizational objectives.

Furthermore, transactional leadership has been closely associated with organizational effectiveness and the capacity to drive innovation, highlighting its critical role in facilitating overall organizational success (Alrowwad et al., 2020). Research indicates that this leadership approach fosters a goal-oriented work environment that enhances productivity, efficiency, and employee performance. The positive correlation between transactional leadership and job success underscores its effectiveness in promoting organizational growth and stability. By implementing contingent rewards, organizations can create a culture of motivation and performance excellence, ultimately contributing to sustained success in competitive business environments.

#### Employee Performance

According to Pradhan and Jena (2017), performance is a key aspect that can be systematically measured within a workforce to assess whether employees have effectively contributed to achieving organizational goals and targets. By evaluating performance, companies can ensure that their employees are meeting expectations and delivering the best possible outcomes in line with strategic objectives (Aryani et al., 2021). Performance measurement is essential for identifying strengths, areas for improvement, and opportunities for professional development, ultimately fostering a more productive and results-driven work environment.

The dimensions and indicators used to measure performance include quantity, quality, time efficiency, and the level of independence demonstrated by employees in completing their tasks. These factors provide a comprehensive framework for assessing how well an individual performs within an organization. As Chien et al. (2020) explain, strong individual performance directly correlates with overall organizational success, as high-performing employees contribute to greater efficiency, innovation, and goal attainment. When individuals consistently perform at an optimal level, organizations are better positioned to achieve sustained growth, competitiveness, and long-term success in their respective industries.

# **Work Motivation**

Work motivation is a crucial aspect of organizational success, as it involves the process of providing guidance, direction, resources, and rewards that inspire and engage employees to perform their tasks efficiently and effectively (Kuranchie-Mensah & Amponsah-Tawiah, 2016). Motivation plays a fundamental role in shaping employee behavior, increasing productivity, and fostering a sense of commitment to organizational objectives. By implementing well-structured motivational strategies, organizations can

enhance employee satisfaction, boost morale, and create a positive work environment that encourages continuous improvement and high performance. Leaders and managers play a significant role in ensuring that employees receive the necessary support, incentives, and recognition to stay motivated and dedicated to their responsibilities.

As highlighted by Wahyuni et al. (2020), work motivation is a critical factor influencing an individual's drive to achieve specific goals that align with their values and attitudes. Motivation not only determines how committed employees are to their tasks but also affects their ability to overcome challenges, maintain focus, and strive for excellence in their professional roles. The ability of individuals to encourage themselves and take the initiative in pursuing predetermined goals is essential for personal and organizational growth. Employees who are highly motivated tend to exhibit greater perseverance, creativity, and a willingness to contribute to the overall success of the company. Therefore, fostering a work environment that supports motivation through clear objectives, fair reward systems, and opportunities for career development can significantly enhance both individual and organizational performance.

This study presents four main hypotheses:

- H1: Transactional leadership positively and significantly affects employee performance.
- H2: Transactional leadership positively and significantly affects work motivation.
- H3: Work motivation positively and significantly affects employee performance

H4: Transactional leadership positively and significantly affects employee performance through work motivation.

The research framework is presented in Figure 1 as follows.





# **RESEARCH METHOD**

This research employs a quantitative, utilizing questionnaires completed by respondents. The primary data source for this study consists of employees from PT Wira Duta Fiberglass in Deli Serdang, while secondary data includes journals, literature, and various documents that serve as reference materials. The study follows a quantitative

methodology, analyzing the data with SEM Smart PLS software. To measure the variable indicators, a Likert scale was used, which guided the development of statement items for the questionnaires, to be answered by the respondents. The population under investigation comprises all 46 employees of PT Wira Duta Fiberglass Deli Serdang. A saturated sampling technique is employed, meaning that every individual in the population is included as part of the sample.

#### RESULTS

This study analysis was carried out using a quantitative method approach with descriptive analysis and hypothesis testing using SEM-PLS.

C	haracteristics	Frequency	Percentage (%)			
	<30	11	23.91			
A	30-35	21	45.65			
Age	36-40	10	21.73			
	>40	4	8.69			
Gender	Male	18	39.13			
	Female	28	60.86			
	SLTA / Senior High School	42	91.30			
Last Education	D3	3	6.52			
	S1	1	2.17			
	S2	0	0			
Length of Work	<1	0	0			
	1-3	9	19.56			
	4-5	12	26.08			
	>5	25	54.34			

 Table 1. Demographic Table of Respondents (N = 46)

Table 1 presents a detailed demographic breakdown of the respondents, providing insights into gender, age, educational background, and work experience. The majority of respondents were female, accounting for 28 individuals, which represents 69.86% of the total sample, while the remaining 18 respondents, or 39.13%, were male. This indicates a higher participation of female respondents in the study.

In terms of age distribution, the largest proportion of respondents fell within the 30-35 age range, comprising 21 individuals or 46.65% of the total. This was followed by 11 respondents (23.91%) who were under the age of 30, indicating a considerable number of younger participants. Additionally, 10 respondents (21.73%) were between the ages of 36 and 40, while the smallest group, consisting of only 4 respondents (8.69%), was over the age of 40. This distribution suggests that the majority of the participants were in their early to mid-career stages.

Regarding educational background, the data reveals that the majority of respondents had completed high school, with 41 individuals (89.13%) holding a high school diploma as their highest level of education. A smaller proportion, comprising 3 individuals (6.52%), had completed a Diploma 3 program, while only 1 respondent (2.17%) had earned a Strata 1 (Bachelor's) degree. This indicates that most of the participants had a secondary education level, with only a few having pursued higher education.

In terms of work experience, a significant number of respondents, 25 individuals (54.34%), had been working for more than five years, indicating that over half of the sample had extensive professional experience. Additionally, 12 respondents (26.08%) had been working for 4-5 years, while 9 individuals (19.56%) had work experience

ranging from 1 to 3 years. This suggests that while a majority of the respondents had long-term work experience, there was still a notable portion of the sample with relatively shorter tenure in their respective roles.

Table 2. Outer Loading, Composite, Reliability, and AVE								
Measurement	t Items	Indicator	Outer Loading	Cronbach's Alpha	Composite Reliability	AVE		
	TLI 1	Work guidelines.	0.923					
	TLi 2	Work motivation.	0.889					
Turnersetienel	TLi 3	Rewards.	0.931					
Transactional Leadership	TLi 4	Corrections for mistakes.	0.720	0.882	0.911	0.630		
	TLi 5	Directly supervise employees.	0.879					
	TLi 6	Warnings and punishments.	0.892					
	EP 1	Good level of knowledge of the work performed.	0.722					
	EP 2 discipline doing work.		0.752					
Employee	EP 3	Always comply with the rules that have been set.	0.767	0.927	0.943	0.736		
Performance	EP 4	Employees strive to complete their tasks well and on time.	0.865					
	EP 5 work		0.817					
	EP 6	Ability to achieve targets.	0.831					
Work	WM 1	Pay attention to the quality of employee work.	0.898					
Work Motivation	WM 2	Provide work enthusiasm to increase	0.926	0.938	0.952	0.769		

# Evaluation of Measurement Model

**Table 2.** Outer Loading. Composite. Reliability. and AVE

employee productivity.

WM 3	Provide direction to employees in carrying out their duties.	0.923
WM 4	Provide a good workplace for employees to work in.	0.760
WM 5	Behaved, honest, and disciplined.	0.867
WM 6	Support from coworkers.	0.757

As indicated in Table 2, the transactional leadership variable is assessed using six valid items, showing a strong correlation with outer loading values between 0.720 – 0.931. Its reliability is good, with a composite score of 0.911 and a Cronbach's alpha of 0.882, both above 0.70. Convergent validity is supported by an Average Variance Extracted (AVE) of 0.630. Among the six validated measurement items, transactional leadership is most prominently represented by TL 3 which focuses on rewards (0.931), and TL 1 which pertains to work guidelines (0.92). According to Sutianingsih et al. (2023), the provision of rewards and clear work guidelines is crucial in transactional leadership for enhancing employee performance.

Employee performance is evaluated through six items, all strongly linked to performance, with scores between 0.722 to 0.865. The reliability of this measurement is good, with scores of 0.943 for composite score and 0.927 for Cronbach's alpha, both above 0.70. The measure also shows good convergent validity, with an AVE of 0.736, exceeding 0.50. Notably, among the six measurement items, employee performance is most robustly represented by EP 4 (0.865) about employee work effort and EP 6 (0.831) about the abilities of employees. In accordance with Komba (2013), effort and ability are quality and quantity assessments in employee performance which are closely related to employee performance assessment.

The work motivation variable is assessed using six valid items with strong correlations, shown by outer loading between 0.757 to 0.926. It means these items effectively represent work motivation. The reliability of this variable is high, with a composite reliability score of 0,952 and a Cronbach's alpha of 0.938. Convergent validity is confirmed with an AVE is 0.769. Among the six valid items, two measurements stand out: WM 2 (0.926) about encouraging employees and WM 3 (0.923) about giving direction to employees. In accordance with the study by Diantari et al. (2024), giving direction and employee morale are the most important indicators in assessing work motivation.

# Figure 2. Research Results



	Employee	Motivation	Transactional
	Performance	Work	Leadership
Fornell and Lacker			
Employee Performance (Y)	0.794		
Motivation Work (Z)	0.715	0.858	
Transactional Leadership (X)	0.777	0.638	0.877
HTMT			
Employee Performance (Y)			
Motivation Work (Z)	0.897		
Transactional Leadership (X)	0.838	0.838	

Table 3 provides an evaluation of discriminant validity, which is essential for determining whether the variables in the study are distinct and properly validated. Discriminant validity ensures that each construct measures a unique concept and is not overly correlated with other variables. To assess this, the study employed two widely accepted criteria: the Fornell and Larcker criterion and the Heterotrait-Monotrait Ratio (HTMT).

According to the Fornell and Larcker criterion, the square root of the AVE for each construct should be greater than its correlations with any other construct in the model. This ensures that the construct explains more variance in its own indicators than it shares with other variables. The results indicate that employee performance has a square root of AVE value of 0.794, while work motivation has a value of 0.858, both of which are higher than their correlations with other variables. This confirms that the constructs exhibit acceptable levels of discriminant validity.

Additionally, the HTMT ratio was used as an alternative measure to further validate discriminant validity. The HTMT values were found to be below the threshold of 0.90, which indicates that the measurement items have a stronger association with their respective constructs than with other variables in the study. This further supports the claim that the constructs are sufficiently distinct from one another, reinforcing the reliability and validity of the measurement model.

 Table 4. Cross Loadings

Variable	Transactional	Work Motivation	Employee
Valiable	Leadership (X)	(Z)	Performance (Y)

X10.9230.5350.714X20.8990.4700.669X30.9310.6120.728X40.7200.4360.545X50.8790.6390.720X60.8920.6280.668Y10.6970.5450.772Y20.8570.5800.752Y30.7340.5440.767Y40.5410.6650.865Y50.3600.6880.817Y60.4450.8470.831Z10.4720.8980.748Z20.4900.9260.767Z30.4520.9230.727Z40.7170.7600.672Z50.4330.8670.638Z60.6630.7570.616				
X30.9310.6120.728X40.7200.4360.545X50.8790.6390.720X60.8920.6280.668Y10.6970.5450.772Y20.8570.5800.752Y30.7340.5440.767Y40.5410.6650.865Y50.3600.6880.817Y60.4450.8470.831Z10.4720.8980.748Z20.4900.9260.767Z30.4520.9230.727Z40.7170.7600.638	X1	0.923	0.535	0.714
X40.7200.4360.545X50.8790.6390.720X60.8920.6280.668Y10.6970.5450.772Y20.8570.5800.752Y30.7340.5440.767Y40.5410.6650.865Y50.3600.6880.817Y60.4450.8470.831Z10.4720.8980.748Z20.4900.9260.767Z30.4520.9230.727Z40.7170.7600.638	X2	0.899	0.470	0.669
X50.8790.6390.720X60.8920.6280.668Y10.6970.5450.772Y20.8570.5800.752Y30.7340.5440.767Y40.5410.6650.865Y50.3600.6880.817Y60.4450.8470.831Z10.4720.8980.748Z20.4900.9260.767Z30.4520.9230.727Z40.7170.7600.638	X3	0.931	0.612	0.728
X60.8920.6280.668Y10.6970.5450.772Y20.8570.5800.752Y30.7340.5440.767Y40.5410.6650.865Y50.3600.6880.817Y60.4450.8470.831Z10.4720.8980.748Z20.4900.9260.767Z30.4520.9230.727Z40.7170.7600.638	X4	0.720	0.436	0.545
Y10.6970.5450.772Y20.8570.5800.752Y30.7340.5440.767Y40.5410.6650.865Y50.3600.6880.817Y60.4450.8470.831Z10.4720.8980.748Z20.4900.9260.767Z30.4520.9230.727Z40.7170.7600.672Z50.4330.8670.638	X5	0.879	0.639	0.720
Y20.8570.5800.752Y30.7340.5440.767Y40.5410.6650.865Y50.3600.6880.817Y60.4450.8470.831Z10.4720.8980.748Z20.4900.9260.767Z30.4520.9230.727Z40.7170.7600.672Z50.4330.8670.638	X6	0.892	0.628	0.668
Y30.7340.5440.767Y40.5410.6650.865Y50.3600.6880.817Y60.4450.8470.831Z10.4720.8980.748Z20.4900.9260.767Z30.4520.9230.727Z40.7170.7600.672Z50.4330.8670.638	Y1	0.697	0.545	0.772
Y40.5410.6650.865Y50.3600.6880.817Y60.4450.8470.831Z10.4720.8980.748Z20.4900.9260.767Z30.4520.9230.727Z40.7170.7600.672Z50.4330.8670.638	Y2	0.857	0.580	0.752
Y50.3600.6880.817Y60.4450.8470.831Z10.4720.8980.748Z20.4900.9260.767Z30.4520.9230.727Z40.7170.7600.672Z50.4330.8670.638	Y3	0.734	0.544	0.767
Y60.4450.8470.831Z10.4720.8980.748Z20.4900.9260.767Z30.4520.9230.727Z40.7170.7600.672Z50.4330.8670.638	Y4	0.541	0.665	0.865
Z10.4720.8980.748Z20.4900.9260.767Z30.4520.9230.727Z40.7170.7600.672Z50.4330.8670.638	Y5	0.360	0.688	0.817
Z20.4900.9260.767Z30.4520.9230.727Z40.7170.7600.672Z50.4330.8670.638	Y6	0.445	0.847	0.831
Z30.4520.9230.727Z40.7170.7600.672Z50.4330.8670.638	Z1	0.472	0.898	0.748
Z40.7170.7600.672Z50.4330.8670.638	Z2	0.490	0.926	0.767
Z5 0.433 0.867 0.638	Z3	0.452	0.923	0.727
	Z4	0.717	0.760	0.672
Z6 0.663 0.757 0.616	Z5	0.433	0.867	0.638
	Z6	0.663	0.757	0.616

In Table 4, the cross loading of transactional leadership variables, the value of indicators X1-X6 is higher than the indicators of variables Y and Z, as well as the value of work motivation indicators, the value of cross loading Z1-Z6 is higher than indicators X and Y, and the value of employee performance indicators, the value of cross loading Y1-Y6 is higher than indicators X and Z, which means that each indicator can reflect each variable.

# **Structural Model Evaluation**

**Table 5.** Path Coefficient Significance Test, Multicollinearity Between Latent Variables (VIF), F-Square, and R-Square

<u>(vii )</u> ,	VIE), E-Squale, and K-Squale								
	othesi Path s Coefficie				i% Jence al Path ïcient	Test Results/si	Evaluation of Model Fit and Goodness of Fit		
		nt	е	Lowe r limit	Uppe r limit	g	VIF	F- Square/Upsilo n V	R- Squar e
Direct	Effec	t							
H1	$\begin{array}{c} X \\ \rightarrow \\ Y \end{array}$	0.433	0.00 3	0.143	0.692	Significan t	1.68 5	0.496	0.393
H2	X → Z	0.638	0.00 0	0.519	0.769	Significan t	1.00 0	0.685	0.393
H3	Z → Y	0.539	0.00 0	0.275	0.789	Significan t	1.68 5	0.770	0.765
Indire	ct Effe	ect							
H4	$ \begin{array}{c} X \\ \rightarrow \\ Z \\ \rightarrow \\ Y \end{array} $	0.344	0.00 1	0.166	0.547	Significan t	-	0.270	-

The evaluation presented in Table 5 provides a comprehensive assessment of the structural model, confirming its overall acceptability. One of the key indicators examined in this evaluation is multicollinearity, which occurs when independent variables are highly

correlated, potentially distorting the results of the analysis. The findings indicate that there is no multicollinearity among the variables, as demonstrated by the inner Variance Inflation Factor (VIF) values, all of which are below the critical threshold of 5. This suggests that the independent variables included in the model do not exhibit excessive correlation, ensuring the robustness and reliability of the results.

Furthermore, the structural model parameters indicate strong relationships among the examined variables. The R-squared value for transactional leadership's influence on employee performance is reported as 0.393, which falls within the medium range, indicating that transactional leadership explains a moderate proportion of the variance in employee performance. Similarly, the influence of transactional leadership on work motivation is also recorded at 0.393, which is slightly closer to a high effect size, demonstrating its substantial impact. However, a notable finding is the effect of work motivation on employee performance, which is significantly higher, with an R-squared value of 0.765. This indicates a very strong predictive power, suggesting that work motivation plays a crucial role in determining employee performance.

Additionally, the hypothesis testing results confirm the acceptance of all proposed hypotheses. Hypothesis 1 (H1), Hypothesis 2 (H2), Hypothesis 3 (H3), and Hypothesis 4 (H4) have all been supported by the statistical analysis, reinforcing the theoretical framework and demonstrating the significant relationships among the studied variables. These findings provide strong empirical evidence for the impact of transactional leadership and work motivation on employee performance, further highlighting the importance of leadership strategies in fostering motivation and enhancing overall workforce effectiveness.

# Evaluation of Model Fit and Goodness of Fit

Table 6. SRMR

	Saturated model	Estimated model
SRMR	0.96	0.96

The Standardized Root Mean Square Residual (SRMR) is crucial for assessing model fit by comparing the actual data's correlation matrix with the predicted values from the model. A proposed acceptable SRMR value ranges between 0.08 and 0.10. In this case, the model in Table 6 has an SRMR of 0.96, indicating that the linear regression model is both well-fitting and robust.

#### Table 7. GoF Index

Average Communality	Average R Square	GoF Index
0.711	0.585	0.648

The Goodness of Fit Index (GoF Index) in Table 7 evaluates both the measurement and structural models for predictive accuracy. GoF indices are categorized as low (0.1), medium (0.25), and high (0.36). In this case, the GoF Index is 0.648, indicating a high level of fit and confirming that the model aligns well with the data.

#### Table 8. Linearity Test

	Path Coefficient	P- Value	Information
QE (Transactional Leadership) -> Employee Performance	0.041	0.642	Linearity is met
QE (Transactional Leadership) -> Motivation Work	-0.202	0.084	Linearity is met

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QE	(Motivation	Work)	->	Employee	0.013	0.824	Linearity is met
Perfo	ormance				0.015	0.024	Linearity is met

Table 8 assesses whether the relationships between variables are linear, which is a fundamental assumption in data analysis. The p-value tests for the effects of transactional leadership on employee performance, transactional leadership on work motivation, and work motivation on employee performance show p-values greater than 0.05 (ranging from 0.084 to 0.824). This confirms that the linearity assumption is valid.

#### Table 9. Endogeneity Test

	Path Coefficient	P Value	Information
GC (Transactional Leadership) -> Employee Performance	0.852	0.130	2.176
GC (Transactional Leadership) -> Motivation Work	-0.286	0.633	0.477
GC (Motivation Work) -> Employee Performance	0.074	0.610	0.510

The endogeneity test conducted in Table 9 examines the squared form of the variable using the Gaussian Copula (GC) method. The P-value tests for the effects of transactional leadership on employee performance, transactional leadership on work motivation, and work motivation on employee performance. With a P-value greater than 0.05 (ranging from 0.084 to 0.824), the results indicate that endogeneity is addressed. confirming the robustness of the model.

# DISCUSSION

# **Transactional Leadership on Employee Performance**

The regression analysis provides strong empirical support for H1, confirming that transactional leadership has a positive and significant influence on employee performance. The path coefficient value of 0.433 indicates that for every one-unit increase in the application of transactional leadership, employee performance is expected to improve by 0.433 units. This relationship is further validated by the significant p-value of 0.003, demonstrating that the effect is statistically significant and unlikely to have occurred by random chance. The strength of this impact is further emphasized by the 95% confidence interval, which ranges from 0.143 to 0.692, indicating a reliable and consistent effect. Additionally, the high f-square value of 0.496 suggests that transactional leadership has a considerable influence on employee performance, reinforcing its practical importance in organizational settings.

These findings are in line with the research conducted by Azizaha et al. (2020), who also identified a significant relationship between transactional leadership and employee performance. Their study similarly highlighted that the use of performance-based rewards, clear expectations, and structured leadership approaches contribute to improving employee productivity and overall workplace efficiency. The consistency between this study and previous literature strengthens the argument that transactional leadership when effectively implemented, plays a critical role in enhancing employee performance. It underscores the importance of structured leadership practices, where rewards and consequences serve as key motivators in driving employee engagement and achieving organizational goals.

#### Transactional Leadership on Work Motivation

The regression analysis provides strong support for H2, demonstrating that transactional leadership has a significant and positive impact on work motivation. The path coefficient value of 0.638 suggests that for every one-unit increase in transactional leadership, work motivation is expected to increase by 0.638 units. This indicates a strong and meaningful relationship between the two variables, where structured leadership practices, including performance-based rewards and clearly defined expectations, play a key role in motivating employees. The statistical significance of this relationship is confirmed by the p-value of 0.000, which is well below the conventional threshold of 0.05, ensuring that the observed effect is highly unlikely to have occurred by chance.

Additionally, the confidence interval for this path ranges from 0.519 to 0.769, reinforcing the robustness of the relationship and further validating the strength of transactional leadership's influence on work motivation. These results suggest that employees respond positively to a leadership approach that provides clear goals, structured guidance, and contingent rewards, which ultimately enhances their motivation and commitment to their tasks.

These findings are consistent with previous research by Rita et al. (2018), which also highlighted the critical role of transactional leadership in fostering higher levels of work motivation among employees. Their study similarly emphasized that leaders who effectively implement transactional leadership strategies can create a work environment that encourages productivity, engagement, and a strong sense of purpose among employees. The alignment between the current study and existing literature strengthens the argument that transactional leadership serves as an essential mechanism for enhancing employee motivation, thereby contributing to overall organizational success.

#### Impact of Work Motivation on Employee Performance

The analysis strongly supports H3, demonstrating that work motivation has a positive and significant impact on employee performance. This relationship is evident from the path coefficient value of 0.539, which indicates that for every one-unit increase in work motivation, employee performance is expected to rise by 0.539 units. The statistical significance of this finding is confirmed by a P-value of 0.000, which is well below the standard threshold of 0.05, ensuring that the observed effect is highly unlikely to have occurred by chance.

Furthermore, the confidence interval for this relationship, ranging from 0.275 to 0.789, suggests that the effect of work motivation on employee performance remains consistent and strong within this range. This provides additional validation that employees with higher motivation levels are more likely to demonstrate improved performance. The effect size, as measured by the f-square value of 0.770, indicates a very high influence of work motivation on employee performance, reinforcing the significance of this factor in driving workplace productivity and efficiency.

These findings highlight the critical role of motivation in shaping employee behavior and outcomes at PT Wira Duta FiberGlass Deli Serdang. Employees who are motivated tend to exhibit greater enthusiasm, commitment, and willingness to go the extra mile in their tasks, ultimately leading to enhanced performance levels. Motivation serves as a driving force that encourages employees to meet and exceed performance expectations, contributing to overall organizational success. The results align with broader research emphasizing the importance of motivation as a key determinant of employee performance, further underscoring the necessity for organizations to implement strategies that enhance and sustain employee motivation in the workplace.

# The Impact of Transactional Leadership on Employee Performance is Mediated by Work Motivation

The findings strongly confirm that work motivation serves as a crucial mediating factor in the relationship between transactional leadership and employee performance, thereby supporting H4. The mediation path coefficient of 0.344 indicates that work motivation significantly contributes to the indirect influence of transactional leadership on employee performance. This effect is further reinforced by a highly significant p-value of 0.000, which ensures that the observed relationship is statistically robust and not due to random variation.

Moreover, the impact of transactional leadership on employee performance through work motivation is validated by the confidence interval ranging from 0.166 to 0.547, suggesting that the mediation effect is consistently present within this range. The importance of this relationship is also highlighted by an Upsilon v value of 0.270, indicating a notable contribution of work motivation in enhancing the effectiveness of transactional leadership in driving employee performance.

These findings align with previous research conducted by Wahyuni et al. (2020), which also emphasized the role of work motivation in bridging leadership styles and employee outcomes. When employees perceive clear expectations, structured guidance, and performance-based rewards under transactional leadership, their motivation levels increase, ultimately leading to higher levels of performance. This suggests that organizations should not only focus on transactional leadership strategies but also ensure that they cultivate a motivating work environment to maximize the positive effects of leadership on employee outcomes.

Furthermore, the results reinforce the understanding that motivation acts as a critical mechanism through which leadership strategies translate into improved employee performance. Without adequate motivation, the influence of transactional leadership may not be as effective in driving employees toward their full potential. Therefore, businesses and managers should consider integrating motivation-enhancing policies alongside leadership approaches to achieve sustained workforce performance and productivity.

# CONCLUSION

This study found that transactional leadership positively affects employee performance and work motivation. It also showed that work motivation positively impacts employee performance. Additionally, transactional leadership improves employee performance through work motivation. The study suggests that business leaders should enhance the application of transactional leadership by providing rewards and recognition for outstanding employees. Management should also focus on actively correcting mistakes and supervising employees while avoiding only passive measures like warnings and punishments. This approach aims to boost employee motivation and performance.

Further research is needed on factors that influence employee motivation, including working conditions, organizational culture, and work-life balance. Additionally, it is important to study how organizations enhance employee motivation and assess its effects on performance and other outcomes. Future research should explore various aspects of work motivation, such as compensation, and specific strategies used by organizations.

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# DECLARATION OF CONFLICTING INTERESTS

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