

Motivation and work commitment on employee productivity through job satisfaction: an employee-level study

Deferimanto Laia¹, Reza Nurul Ichsan², Muhammad Razali³

^{1,2,3}Management Study Program, Faculty of Economics, Universitas Pembinaan Masyarakat Indonesia, Medan, Indonesia

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ABSTRACT

Employee productivity is an important aspect of organizational performance and may be influenced by employees' work motivation, work commitment, and job satisfaction. This study aims to examine the relationships between work motivation, work commitment, and employee productivity, while also examining the role of job satisfaction as an intervening variable at CV. Dunia Outbound Kita. A quantitative associative research design was employed involving 50 employees selected using a saturated sampling technique. Data were collected through a structured questionnaire using a five-point Likert scale and analyzed using SPSS version 26. The analysis included classical assumption testing, multiple linear regression, partial and simultaneous significance tests, coefficient of determination, path analysis, and indirect-effect analysis. The results show that work motivation has a significant positive relationship with employee productivity ($\beta = 0.025$; $t = 2.255$; $p = 0.029$), while work commitment also has a significant positive relationship with employee productivity ($\beta = 0.547$; $t = 4.358$; $p < 0.001$). Work motivation does not have a statistically significant relationship with job satisfaction ($\beta = 0.017$; $t = 1.977$; $p = 0.054$), whereas work commitment has a significant positive relationship with job satisfaction ($\beta = 0.224$; $t = 3.786$; $p < 0.001$). Job satisfaction is also positively and significantly related to employee productivity ($\beta = 0.576$; $t = 5.376$; $p < 0.001$). The coefficient of determination indicates that work motivation, work commitment, and job satisfaction jointly explain 40.9% of the variation in employee productivity. The indirect-effect analysis indicates an indirect relationship between work commitment and employee productivity through job satisfaction, while no statistically supported indirect relationship was established between work motivation and employee productivity through job satisfaction. These findings provide empirical evidence that employee productivity is associated with work motivation, work commitment, and job satisfaction in the organizational context studied.

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Corresponding Author:

Deferimanto Laia
Management Study Program, Faculty of Economics, Universitas Pembinaan Masyarakat Indonesia
Jl. Teladan, No. 15, Kota Medan, Sumatera Utara 20222
Email: deferimantol@gmail.com

1. INTRODUCTION

Human resources constitute an essential component in determining how effectively an organization carries out its activities and achieves its objectives. The ability of employees to perform their responsibilities is closely related to organizational outcomes, particularly productivity. For this reason, organizations need to pay attention not only to work targets but also to the conditions that encourage employees to perform their duties consistently. Previous studies have emphasized that employee-related factors, including motivation, commitment, and job satisfaction, are relevant to organizational effectiveness and productivity (Liana & Denjayanti, 2022; Fauzi et al., 2022; Gagné & Deci, 2005).

Employee productivity becomes increasingly important when organizations face demanding operational schedules and expectations regarding service quality. CV. Dunia Outbound Kita operates in several business activities, including event organization, tourism and travel, human resource development, construction-related services, and outbound facility development. The company relies on employees with different responsibilities to ensure that operational activities are completed according to client requirements. Based on the conditions identified in the research setting, several productivity-related issues were observed, including delays in the implementation of training and outbound activities, differences between planned and delivered service quality, and targets that were not consistently achieved. These conditions were accompanied by limited recognition of employee performance, restricted opportunities for further training, repetitive work activities, and relatively low employee involvement in organizational activities.

Motivation and work commitment are two employee factors that may contribute to the way employees carry out their responsibilities. Motivation can encourage employees to direct their effort toward organizational objectives, while commitment reflects the extent to which employees are willing to remain involved and contribute to the organization. Earlier research included in the present study provides evidence that motivation and commitment are associated with employee outcomes. Meta-analytic evidence also indicates a positive relationship between attitudinal organizational commitment and job performance (Riketta, 2002). For example, Liana and Denjayanti (2022) examined motivation and job satisfaction in relation to employee performance, while other studies considered the relationship between motivation, commitment, and productivity. Research by Narpati et al. (2020), as reviewed in the present study, also examined the relationship of motivation, work commitment, and job satisfaction with productivity.

Job satisfaction provides another perspective for understanding employee productivity because employees' responses to their work may be connected with their willingness to participate, perform tasks, and maintain their contribution to the organization. Previous literature has examined the relationship between motivation and job satisfaction, while other studies have considered the contribution of commitment to satisfaction. From the perspective of self-determination theory, workplace conditions that support autonomy, competence, and relatedness can promote autonomous motivation and high-quality performance (Deci et al., 2017). Recent meta-analytic evidence likewise synthesizes relationships between motivational processes and adaptive workplace outcomes, including job satisfaction and job performance (Hagger & McAnally Star, 2026). In the research reviewed for this study, Vanessa and Nawawi (2022) investigated motivation and work-related conditions in relation to job satisfaction. The present research extends this line of inquiry by examining motivation and work commitment simultaneously and positioning job satisfaction within the relationship between these factors and employee productivity.

Although previous studies have addressed motivation, commitment, satisfaction, and productivity, differences remain in the combination of variables, research setting, and analytical relationships examined. The present study focuses specifically on employees of CV. Dunia Outbound Kita and brings motivation, work commitment, job satisfaction, and employee productivity into one analytical framework. The research therefore aims to determine the relationships between motivation and productivity, work commitment and productivity, motivation and job satisfaction, work commitment and job satisfaction, and job satisfaction and productivity, while also examining the role of job satisfaction in the relationship between employee factors and employee productivity. This approach is expected to provide empirical evidence that can enrich the discussion of employee-related determinants of productivity and provide a context-specific contribution for human resource management at CV. Dunia Outbound Kita.

2. METHOD

2.1 Research Design and Setting

This study employed a quantitative associative research design to examine the relationships among work motivation, work commitment, job satisfaction, and employee productivity. A quantitative approach was selected because the relationships among the research variables were examined using numerical data and statistical procedures. The study was conducted at CV. Dunia Outbound Kita, with employees serving as the unit of analysis.

In the proposed research model, work motivation (X1) and work commitment (X2) were specified as independent variables, job satisfaction (Z) as the intervening variable, and employee productivity (Y) as the dependent variable.

2.2 Population and Sample

The population consisted of all employees of CV. Dunia Outbound Kita, totaling 50 employees. Because the population was relatively small and all members of the population could be accessed by the researcher, a saturated sampling technique was applied. Accordingly, all members of the population were included in the research sample. Therefore, the final sample consisted of 50 employees.

2.3 Measurement Instrument

The research instrument was a structured questionnaire developed by the researchers and adapted to the organizational context of CV. Dunia Outbound Kita. The questionnaire was designed based on established conceptual definitions and empirical studies related to work motivation, work commitment, job satisfaction, and employee productivity. The instrument was not adopted verbatim from a single organization-specific questionnaire; rather, the indicators were operationalized from relevant theoretical and empirical sources and then adjusted to reflect the characteristics and work context of the respondents.

Work motivation was measured using indicators related to rewards and incentives, supportive working conditions, career development, clarity of objectives, and autonomy, with the conceptualization informed by Gagné and Deci (2005) and Deci et al. (2017). Work commitment was measured through indicators of loyalty, involvement, ownership, willingness to make extra effort, and intention to remain with the organization, referring to the organizational commitment literature and previous empirical research (Riketta, 2002; Kustiawan et al., 2022). Job satisfaction was measured using indicators covering salary and benefits, coworker relationships, promotion opportunities, job security, and workload, based on previous studies examining job satisfaction and employee outcomes (Wau & Purwanto, 2021; Ikhsan & Supartha, 2023). Employee productivity was measured through work quality, time efficiency, target achievement, innovation, and discipline or attendance, with reference to previous studies concerning employee productivity and related workplace outcomes (Narpati et al., 2020; Haslindah et al., 2023; Asifah & Prapanca, 2024).

Each construct consisted of 10 questionnaire items, resulting in a total of 40 items. All items were measured using a five-point Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. Before the questionnaire was administered to the respondents, the wording of the items was adjusted to ensure that the statements were understandable and relevant to the organizational context of CV. Dunia Outbound Kita while maintaining the intended meaning of each indicator.

The questionnaire was administered directly to 50 employees of CV. Dunia Outbound Kita. The validity of the instrument was assessed using item-total correlation, with an item considered valid when its significance value was below 0.05 and its correlation coefficient exceeded the critical value. With 50 respondents, the critical value used was 0.275. Reliability was evaluated using Cronbach's Alpha, with a coefficient of 0.70 or higher considered to indicate acceptable internal consistency. The detailed validity and reliability results are presented in the Results and Discussion section.

2.4 Instrument Validity and Reliability

Before the main analysis, the questionnaire instrument was evaluated for validity and reliability to ensure that the items appropriately measured the intended constructs.

Item validity was assessed using item-total correlation. An item was considered valid when the correlation coefficient met the predetermined minimum criterion and the significance value was below 0.05. The validity assessment was conducted for each questionnaire item within the respective construct.

The reliability of each construct was assessed using Cronbach's Alpha to determine the internal consistency of the questionnaire items. A construct was considered reliable when the Cronbach's Alpha coefficient met the predetermined reliability criterion of 0.70 or higher.

The validity and reliability analyses were conducted before the hypothesis testing and regression analysis.

2.5 Data Collection Procedure

The research procedure consisted of several stages. First, the researcher identified the research problem and formulated the research objectives. Second, the relevant literature was reviewed and the research variables and indicators were determined. Third, the questionnaire was developed based on the indicators of each research variable. Fourth, the questionnaire was distributed to the 50 employees included in the research sample.

After the questionnaires were completed, the responses were coded and entered into the Statistical Package for the Social Sciences (SPSS) version 26. The resulting dataset was then prepared for descriptive analysis, classical assumption testing, regression analysis, and path analysis.

2.6 Classical Assumption Testing

Before conducting the regression and path analyses, classical assumption tests were performed to ensure that the regression models met the required statistical assumptions. The tests included normality, multicollinearity, and heteroscedasticity testing. These assumption tests were conducted using Statistical Package for the Social Sciences (SPSS) version 26.

The normality test was conducted using the Kolmogorov–Smirnov test. The residuals were considered to be normally distributed when the Asymp. Sig. value was greater than 0.05. A significance value below 0.05 indicates a statistically significant deviation from normality.

Multicollinearity was assessed using the Tolerance and Variance Inflation Factor (VIF) values. The regression model was considered to have no problematic multicollinearity when the Tolerance value was greater than 0.10 and the VIF value was less than 10.00. Tolerance and VIF values were examined for the independent variables included in each regression model.

Heteroscedasticity was examined using the Glejser test. The model was considered free from statistically significant heteroscedasticity when the significance value for each predictor was greater than 0.05. A significance value of less than or equal to 0.05 would indicate the presence of statistically significant heteroscedasticity.

The results of the normality, multicollinearity, and heteroscedasticity tests are presented in the Results and Discussion section. The assumption-test results are interpreted using a significance level of 5% ($\alpha = 0.05$). These procedures were conducted before hypothesis testing to ensure that the regression and path analyses were based on models that met the required statistical assumptions.

2.7 Data Analysis

The data were analyzed using SPSS version 26. Descriptive analysis was first conducted to provide an overview of the research variables. Subsequently, the data were analyzed using multiple linear regression and path analysis.

The t-test was used to examine the partial effect of each independent variable on the relevant dependent or intervening variable. The F-test was used to examine the simultaneous effect of the predictors. The coefficient of determination (R^2) was used to determine the proportion of variance in the dependent variable explained by the predictors included in the regression model.

Path analysis was subsequently employed to examine the direct and indirect relationships involving job satisfaction as an intervening variable. Two structural equations were specified:

$$\text{Equation 1: } Z = \beta_1 X_1 + \beta_2 X_2 + e_1$$

$$\text{Equation 2: } Y = \beta_3 X_1 + \beta_4 X_2 + \beta_5 Z + e_2$$

where X_1 represents work motivation, X_2 represents work commitment, Z represents job satisfaction, and Y represents employee productivity. β represents the estimated path coefficient, while e represents the error term.

The indirect effects were assessed by multiplying the relevant path coefficients from the independent variable to job satisfaction and from job satisfaction to employee productivity. All hypothesis tests were evaluated at a 5% significance level ($\alpha = 0.05$).

3. RESULTS AND DISCUSSION

This section presents the empirical findings obtained from 50 employees of CV. Dunia Outbound Kita. The analysis includes descriptive statistics, instrument validity and reliability testing, classical assumption testing, partial and simultaneous hypothesis testing, coefficient of determination, path analysis, and indirect-effect analysis.

3.1 Descriptive Statistics

Descriptive statistics were used to summarize the levels of work motivation, work commitment, job satisfaction, and employee productivity among the 50 employees included in the study. Each construct was measured using ten questionnaire items on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). For ease of interpretation, the total scores for each construct were converted into average item scores ranging from 1.00 to 5.00. Descriptive analysis is useful for presenting the general characteristics and tendency of respondents' perceptions before further hypothesis and regression analyses are conducted. Previous studies have likewise examined work motivation, commitment, job satisfaction, and employee performance using questionnaire-based quantitative approach.

Table 1. Descriptive Statistics of Research Variables

Variable	N	Minimum	Maximum	Mean	Standard Deviation
Work Motivation	50	31	50	43.62	4.476
Work Commitment	50	27	49	41.82	4.434
Job Satisfaction	50	30	50	40.70	4.773
Employee Productivity	50	31	50	42.60	4.603

The descriptive results indicate that the respondents generally reported positive perceptions of all four research variables. Work motivation had a mean score of 4.362 with a standard deviation of 0.448, indicating a very high level. This result is consistent with the importance of work motivation as a factor associated with employees' work-related attitudes and outcomes. Recent empirical research has examined work motivation in relation to job satisfaction and employee performance, although the strength and significance of these relationships may vary across organizational contexts.

Work commitment obtained a mean score of 4.182 with a standard deviation of 0.443 and was categorized as high. This finding indicates that the respondents generally demonstrated a high level of commitment to their work, reflected in loyalty, involvement, a sense of ownership, willingness to make additional efforts, and intention to remain with the organization. The importance of commitment in relation to employee outcomes has also been documented in recent organizational studies. For example, *Djastuti et al.* (2023) examined work motivation and organizational commitment in relation to employee performance, while other recent studies have investigated commitment together with motivation and job satisfaction in explaining employee outcomes.

Job satisfaction had a mean score of 4.070 and a standard deviation of 0.477, which placed it in the high category. This finding indicates that employees generally expressed a favorable level of satisfaction with aspects of their work, including salary and benefits, relationships with coworkers, promotion opportunities, job security, and workload. This descriptive result is relevant to previous research showing that job satisfaction is commonly examined as an important employee-related variable and may be associated with motivation, commitment, and employee performance.

Employee productivity recorded a mean score of 4.260 with a standard deviation of 0.460 and was categorized as very high. This indicates that respondents generally perceived their productivity positively, particularly in terms of work quality, time efficiency, target achievement, innovation, and discipline or attendance. Previous empirical research has also examined job satisfaction, work motivation, and employee commitment in relation to employee performance and productivity, supporting the relevance of these constructs within the broader context of human resource management.

Overall, the descriptive statistics show that work motivation and employee productivity were categorized as very high, whereas work commitment and job satisfaction were categorized as high. The mean scores provide an overview of respondents' perceptions before proceeding to the validity and reliability assessment, classical assumption testing, regression analysis, and path analysis. These descriptive findings should therefore be interpreted as characteristics of the 50 employees participating in this study rather than as evidence of causal relationships among the variables. The

subsequent inferential analyses are used to examine the hypothesized relationships among work motivation, work commitment, job satisfaction, and employee productivity.

3.2 Validity and Reliability Testing

Validity and reliability testing was conducted to ensure that the questionnaire items adequately measured the intended constructs and produced consistent measurements. The questionnaire consisted of 40 items, with 10 items for each construct: work motivation, work commitment, job satisfaction, and employee productivity. All items were measured using a five-point Likert scale. Validity was assessed using the item-total correlation, while reliability was evaluated using Cronbach's alpha. An item was considered valid when its calculated correlation coefficient (*r*-count) exceeded the critical *r*-value at a 5% significance level. A construct was considered reliable when its Cronbach's alpha coefficient was at least 0.70.

The validity results show that all questionnaire items met the required criterion. The critical *r*-value for 50 respondents was 0.275. The item-total correlation coefficients for work motivation ranged from 0.459 to 0.829, while those for work commitment ranged from 0.498 to 0.801. For employee productivity, the item-total correlation coefficients ranged from 0.593 to 0.851, whereas the coefficients for job satisfaction ranged from 0.537 to 0.830. Since all calculated *r*-values were greater than 0.275, all 40 questionnaire items were considered valid.

The reliability results also demonstrate acceptable internal consistency across all constructs. The Cronbach's alpha coefficients were 0.886 for work motivation, 0.871 for work commitment, 0.921 for employee productivity, and 0.768 for job satisfaction. All coefficients exceeded the minimum criterion of 0.70. These findings indicate that the questionnaire items consistently measured their respective constructs. The relatively high reliability coefficients are also consistent with previous studies emphasizing the importance of reliable measurement when examining work motivation, commitment, job satisfaction, and employee-related outcomes (Deci et al., 2017; Fauzi et al., 2022; Kustiawan et al., 2022).

The validity and reliability findings provide an adequate measurement basis for the subsequent regression and path analyses. Previous empirical studies have also demonstrated the relevance of these constructs in explaining employee outcomes. For example, work motivation and job satisfaction have been associated with employee productivity, while organizational commitment and job satisfaction have been linked to employee performance (Haslindah et al., 2023; Sutarman et al., 2024). In addition, research by Ikhsan and Supartha (2023) indicates that job satisfaction can be examined as an intervening variable in the relationship between work motivation and employee performance. Therefore, the measurement results in this study support the use of the four constructs in the subsequent analysis of the proposed research model. The research instrument and its indicators are presented in Table 2.

Table 2. Validity and Reliability Results

Construct	Item	Item-Total Correlation (<i>r</i> -count)	<i>r</i> -table	Validity	Cronbach's Alpha	Reliability
Work Motivation	X1.1	0.558	0.275	Valid	0.886	Reliable
	X1.2	0.459	0.275	Valid		
	X1.3	0.719	0.275	Valid		
	X1.4	0.829	0.275	Valid		
	X1.5	0.746	0.275	Valid		
	X1.6	0.709	0.275	Valid		
	X1.7	0.706	0.275	Valid		
	X1.8	0.778	0.275	Valid		
	X1.9	0.780	0.275	Valid		
	X1.10	0.726	0.275	Valid		
Work Commitment	X2.1	0.498	0.275	Valid	0.871	Reliable
	X2.2	0.545	0.275	Valid		
	X2.3	0.743	0.275	Valid		
	X2.4	0.716	0.275	Valid		
	X2.5	0.573	0.275	Valid		
	X2.6	0.747	0.275	Valid		
	X2.7	0.772	0.275	Valid		
	X2.8	0.754	0.275	Valid		
	X2.9	0.696	0.275	Valid		
	X2.10	0.801	0.275	Valid		
Employee Productivity	Y.1	0.593	0.275	Valid	0.921	Reliable
	Y.2	0.737	0.275	Valid		

	Y.3	0.769	0.275	Valid		
	Y.4	0.790	0.275	Valid		
	Y.5	0.844	0.275	Valid		
	Y.6	0.851	0.275	Valid		
	Y.7	0.758	0.275	Valid		
	Y.8	0.812	0.275	Valid		
	Y.9	0.763	0.275	Valid		
	Y.10	0.752	0.275	Valid		
Job Satisfaction	Z.1	0.670	0.275	Valid	0.768	Reliable
	Z.2	0.743	0.275	Valid		
	Z.3	0.830	0.275	Valid		
	Z.4	0.810	0.275	Valid		
	Z.5	0.748	0.275	Valid		
	Z.6	0.713	0.275	Valid		
	Z.7	0.662	0.275	Valid		
	Z.8	0.714	0.275	Valid		
	Z.9	0.537	0.275	Valid		
	Z.10	0.583	0.275	Valid		

The results in Table 2 confirm that all 40 questionnaire items have item-total correlation coefficients above the critical r -value of 0.275. Thus, all items satisfy the validity criterion. Furthermore, the Cronbach's alpha coefficients for all four constructs exceed 0.70, confirming adequate internal consistency. These results indicate that the measurement instrument is sufficiently valid and reliable for further statistical analysis.

3.3 Classical Assumption Testing

Classical assumption testing was conducted before the regression and path analyses to ensure that the statistical models met the necessary assumptions for further analysis. The tests consisted of normality, multicollinearity, and heteroscedasticity testing. The normality test was conducted using the Kolmogorov–Smirnov procedure, multicollinearity was assessed using Tolerance and Variance Inflation Factor (VIF) values, and heteroscedasticity was examined using the Glejser test. The results of the classical assumption tests are presented in Table.

Table 3. Classical Assumption Test Results

No.	Model / Assumption Test	Indicator	Result	Criterion	Decision
1	Normality	Kolmogorov–Smirnov Asymp. Sig.	0.071	> 0.05	Normal
2	Regression Model 1 – Multicollinearity	Work Motivation: Tolerance / VIF	0.627 / 1.594	Tolerance > 0.10; VIF < 10.00	No multicollinearity
3	Regression Model 1 – Multicollinearity	Work Commitment: Tolerance / VIF	0.627 / 1.594	Tolerance > 0.10; VIF < 10.00	No multicollinearity
4	Regression Model 1 – Heteroscedasticity	Work Motivation: Glejser Sig.	0.538	> 0.05	heteroscedasticity No
5	Regression Model 1 – Heteroscedasticity	Work Commitment: Glejser Sig.	0.196	> 0.05	heteroscedasticity No
6	Regression Model 2 – Multicollinearity	Work Motivation: Tolerance / VIF	0.627 / 1.595	Tolerance > 0.10; VIF < 10.00	No multicollinearity
7	Regression Model 2 – Multicollinearity	Work Commitment: Tolerance / VIF	0.522 / 1.915	Tolerance > 0.10; VIF < 10.00	No multicollinearity
8	Regression Model 2 – Multicollinearity	Job Satisfaction: Tolerance / VIF	0.770 / 1.299	Tolerance > 0.10; VIF < 10.00	No multicollinearity
9	Regression Model 2 – Heteroscedasticity	Work Motivation: Glejser Sig.	0.737	> 0.05	heteroscedasticity No
10	Regression Model 2 – Heteroscedasticity	Work Commitment: Glejser Sig.	0.113	> 0.05	heteroscedasticity No
11	Regression Model 2 – Heteroscedasticity	Job Satisfaction: Glejser Sig.	0.255	> 0.05	heteroscedasticity No

The Kolmogorov–Smirnov normality test produced an Asymp. Sig. value of 0.071. Because the significance value was greater than 0.05, the residuals were considered normally distributed. Thus, the normality assumption was satisfied.

Multicollinearity was assessed using the Tolerance and Variance Inflation Factor (VIF) values. The acceptance criteria were a Tolerance value greater than 0.10 and a VIF value lower than 10.00. Based on these criteria, the regression model is considered to be free from problematic multicollinearity when both conditions are fulfilled. The Tolerance and VIF values should be reported directly from the original SPSS regression output to document the numerical evidence for this assumption.

Heteroscedasticity was examined using the Glejser test. The significance values obtained were greater than 0.05. Because the significance values exceeded the 0.05 threshold, the regression model did not indicate statistically significant heteroscedasticity.

Overall, the available results indicate that the normality and heteroscedasticity assumptions were satisfied. The multicollinearity assessment was based on the Tolerance and VIF criteria, with values meeting the specified thresholds indicating the absence of problematic multicollinearity. Therefore, the regression and path analyses could proceed after confirming the numerical Tolerance and VIF values from the original SPSS output.

3.4 Partial Significance Test

The partial significance test was conducted to examine the individual effect of each independent variable on the dependent and intervening variables. The test was performed at a significance level of 5% ($\alpha = 0.05$). A relationship was considered statistically significant when the p-value was less than 0.05. The results of the partial regression analysis are presented in Table 4.

Table 4. Partial Regression Results

No.	Relationship	β	t-value	p-value	Decision
1	Work Motivation → Employee Productivity	0.025	2.255	0.029	Significant
2	Work Commitment → Employee Productivity	0.547	4.358	<0.001	Significant
3	Work Motivation → Job Satisfaction	0.017	1.977	0.054	Not Significant
4	Work Commitment → Job Satisfaction	0.224	3.786	<0.001	Significant
5	Job Satisfaction → Employee Productivity	0.576	5.376	<0.001	Significant

Note: β represents the standardized path coefficient. The significance level was set at $\alpha = 0.05$.

The results show that work motivation has a significant relationship with employee productivity, as indicated by a t-value of 2.255 and a p-value of 0.029. This finding indicates that differences in employees' work motivation are associated with differences in their productivity. The result is consistent with previous research showing that work motivation is an important factor associated with employee performance and productivity (Wau & Purwanto, 2021; Haslindah *et al.*, 2023). Motivation can encourage employees to direct greater effort toward achieving organizational work targets.

Work commitment also has a significant relationship with employee productivity, with a t-value of 4.358 and a p-value below 0.001. The positive path coefficient ($\beta = 0.547$) indicates that higher work commitment is associated with higher employee productivity in the context of this study. This finding is in line with research by Sutarman *et al.* (2024), which found that organizational commitment was significantly related to work productivity among employees in Indonesian manufacturing industries. Similarly, Mubarak *et al.* (2021) reported that organizational commitment was associated with employee work outcomes. These findings suggest that employees who demonstrate stronger attachment and willingness to contribute to their organization may also demonstrate greater productivity.

In contrast, work motivation does not have a statistically significant relationship with job satisfaction, because the t-value is 1.977 and the p-value is 0.054, which is slightly higher than the 0.05 significance level. Although the path coefficient is positive ($\beta = 0.017$), the statistical evidence is insufficient to conclude that work motivation has a significant relationship with job satisfaction in this sample. This result differs from findings reported by Tarmidi and Yusup (2021), who found a significant relationship between work motivation and job satisfaction. The difference may reflect differences in organizational context, employee characteristics, measurement conditions, or the composition of the samples studied.

Work commitment has a significant relationship with job satisfaction, with a t-value of 3.786 and a p-value below 0.001. The positive coefficient ($\beta = 0.224$) indicates that stronger work commitment is associated with higher job satisfaction among the respondents. This finding is consistent with Mubarak *et al.* (2021) and Kustiawan *et al.* (2022), who reported significant relationships involving organizational commitment and job satisfaction. The result suggests that employees who feel a

stronger sense of attachment and involvement with their organization may also experience more positive evaluations of their work.

Finally, job satisfaction has a significant relationship with employee productivity, with a t-value of 5.376 and a p-value below 0.001. The positive path coefficient ($\beta = 0.576$) indicates a positive relationship between job satisfaction and employee productivity. This finding is consistent with previous studies reporting that job satisfaction is associated with employee performance and productivity (Asifah & Prapanca, 2024; Susilowati & Fadli, 2023). In the context of CV. Dunia Outbound Kita, the finding indicates that employees who report higher levels of job satisfaction tend to demonstrate higher levels of productivity.

Overall, the partial significance test shows that work motivation and work commitment are significantly related to employee productivity, work commitment is significantly related to job satisfaction, and job satisfaction is significantly related to employee productivity. Meanwhile, the relationship between work motivation and job satisfaction is not statistically significant at the 5% significance level.

3.4.1 Work Motivation and Employee Productivity

The results demonstrate that work motivation has a significant relationship with employee productivity. The t-value of 2.255 and p-value of 0.029 indicate that the relationship is statistically significant at the 5% level.

This finding indicates that employees' motivation is associated with their productivity in carrying out organizational tasks. Motivation can encourage employees to direct their effort toward achieving organizational objectives, maintaining work quality, and completing tasks within the expected time.

This finding is consistent with Wau and Purwanto (2021), who found that work motivation was significantly associated with employee performance. Similarly, Haslindah *et al.* (2023) reported that work motivation was an important factor associated with employee productivity. In the context of CV. Dunia Outbound Kita, motivational aspects such as rewards, supportive working conditions, career development, clear objectives, and autonomy may contribute to employee productivity.

3.4.2 Work Commitment and Employee Productivity

Work commitment has a significant relationship with employee productivity. The analysis produced a t-value of 4.358 and a p-value below 0.001.

This finding indicates that employees with stronger organizational commitment tend to demonstrate greater involvement and effort in carrying out their responsibilities. Commitment can be reflected through loyalty, involvement in organizational activities, a sense of ownership, willingness to provide additional effort, and intention to remain in the organization. This finding is consistent with Sutarman *et al.* (2024), who found a significant relationship between organizational commitment and work productivity among employees in Indonesian manufacturing industries. Mubarok *et al.* (2021) also reported that organizational commitment was associated with employee work outcomes. These findings support the view that stronger commitment may encourage employees to demonstrate greater consistency and effort in completing organizational tasks.

3.4.3 Work Motivation and Job Satisfaction

The analysis shows that work motivation does not have a statistically significant relationship with job satisfaction. The t-value is 1.977 and the p-value is 0.054.

The result indicates that motivation alone may not be sufficient to explain differences in employee job satisfaction in the research setting. Although the path coefficient is positive, the p-value exceeds the 0.05 significance level. This finding differs from Tarmidi and Yusup (2021), who reported a significant relationship between work motivation and job satisfaction. Differences in organizational context, employee characteristics, and working conditions may contribute to differences between the findings.

Job satisfaction may involve several aspects of the employment experience, including compensation, relationships with coworkers, promotion opportunities, job security, and workload. Research by Asifah and Prapanca (2024) and Susilowati and Fadli (2023) also emphasizes the relevance of job-related conditions and satisfaction in explaining employee outcomes. Therefore, the finding suggests that employees may remain motivated to complete their responsibilities without necessarily experiencing a corresponding increase in overall job satisfaction.

3.4.4 Work Commitment and Job Satisfaction

Work commitment has a significant relationship with job satisfaction. The t-value of 3.786 and p-value below 0.001 demonstrate statistical significance.

This finding indicates that employees who have stronger commitment toward the organization tend to experience higher job satisfaction. A sense of loyalty, involvement, ownership, and intention to remain in the organization may contribute to employees' positive evaluation of their work experience. This finding is consistent with Mubarok *et al.* (2021), who found that organizational commitment was associated with job satisfaction and employee outcomes. Kustiawan *et al.* (2022) similarly reported significant relationships involving organizational commitment and job satisfaction.

In the context of CV. Dunia Outbound Kita, strengthening employee involvement and organizational commitment may therefore be associated with improvements in job satisfaction. The finding also suggests that employees' psychological attachment to the organization is relevant to how they evaluate their work experience.

3.4.5 Job Satisfaction and Employee Productivity

Job satisfaction has a significant relationship with employee productivity. The t-value of 5.376 and p-value below 0.001 demonstrate statistical significance.

The finding indicates that employees who experience greater job satisfaction tend to demonstrate higher productivity. Satisfaction related to compensation, coworker relationships, promotion opportunities, job security, and workload may create a work environment that supports employees in performing their duties effectively. This finding is consistent with Asifah and Prapanca (2024), who examined the relationship between job satisfaction and employee productivity. Susilowati and Fadli (2023) also found that job satisfaction was relevant to employee productivity in the retail sector.

Therefore, job satisfaction represents an important variable in explaining employee productivity in the research setting. The positive relationship found in this study indicates that employees' evaluations of their work experience are associated with their productivity.

3.5 Simultaneous Significance Test

The simultaneous significance test was conducted to determine whether the independent variables jointly explain the intervening and dependent variables. The F-test evaluates whether the predictors, when considered together, have a statistically significant relationship with the dependent variable.

Table 5. Simultaneous Test Results

Model	Variables	F-value	p-value	Decision
1	Work Motivation and Work Commitment → Job Satisfaction	7.037	0.002	Significant
2	Work Motivation, Work Commitment, and Job Satisfaction → Employee Productivity	12.534	<0.001	Significant

The first model shows that work motivation and work commitment simultaneously have a significant relationship with job satisfaction, with an F-value of 7.037 and a p-value of 0.002. This indicates that the two predictors collectively contribute to explaining variation in job satisfaction. The result is consistent with previous research showing that employee attitudes and motivational factors can be jointly related to job satisfaction (Tarmidi & Yusup, 2021; Mubarok *et al.*, 2021).

The second model shows that work motivation, work commitment, and job satisfaction simultaneously have a significant relationship with employee productivity, with an F-value of 12.534 and a p-value below 0.001. This finding is consistent with research indicating that employee productivity can be associated with multiple work-related factors, including motivation, commitment, and job satisfaction (Haslindah *et al.*, 2023; Sutarman *et al.*, 2024).

These results demonstrate that employee productivity is associated with several employee-related factors considered simultaneously rather than with a single factor. The simultaneous significance of the model provides support for examining the variables together in the subsequent path analysis.

3.6 Coefficient of Determination

The coefficient of determination was used to determine the proportion of variance in the dependent variables explained by the predictors included in each regression model. The R^2 value indicates the proportion of variation in the dependent variable that can be statistically accounted for by the predictors included in the corresponding model.

Table 6. Coefficient of Determination

Model	Dependent Variable	R^2	Explained Variation
1	Job Satisfaction	0.230	23.0%
2	Employee Productivity	0.284	28.4%
3	Employee Productivity with Job Satisfaction	0.409	40.9%

The first model has an R^2 value of 0.230, indicating that work motivation and work commitment jointly explain 23.0% of the variation in job satisfaction. The remaining 77.0% is associated with other factors outside the predictors included in this model.

The second model has an R^2 value of 0.284, indicating that work motivation and work commitment explain 28.4% of the variation in employee productivity. This finding indicates that employee productivity is not explained exclusively by the two predictors included in the model, which is consistent with the multidimensional nature of employee productivity identified in previous research (Haslindah *et al.*, 2023; Sutarman *et al.*, 2024).

After job satisfaction was included in the model, the R^2 value increased to 0.409. This indicates that work motivation, work commitment, and job satisfaction jointly explain 40.9% of the variation in employee productivity, while the remaining 59.1% is explained by factors outside the model. The increase in explained variation after the inclusion of job satisfaction provides empirical support for considering job satisfaction as an additional variable in explaining employee productivity (Asifah & Prapanca, 2024; Susilowati & Fadli, 2023).

3.7 Path Analysis

Path analysis was conducted to examine the direct relationships among work motivation, work commitment, job satisfaction, and employee productivity. The analysis allows the relationships among the variables in the proposed structural model to be examined simultaneously.

Table 7. Standardized Path Coefficients

No.	Relationship	Path Coefficient (β)
1	Work Motivation → Employee Productivity	0.025
2	Work Commitment → Employee Productivity	0.547
3	Work Motivation → Job Satisfaction	0.017
4	Work Commitment → Job Satisfaction	0.224
5	Job Satisfaction → Employee Productivity	0.576

Based on the path analysis, the structural equations are formulated as follows:

$$Z = 0.017X_1 + 0.224X_2 + e_1$$

$$Y = 0.025X_1 + 0.547X_2 + 0.576Z + e_2$$

where X_1 represents work motivation, X_2 represents work commitment, Z represents job satisfaction, and Y represents employee productivity.

The path coefficients indicate that work motivation, work commitment, and job satisfaction have positive path coefficients in the proposed structural model. Among the direct paths to employee productivity, the coefficient for job satisfaction ($\beta = 0.576$) is larger than the coefficients for work commitment ($\beta = 0.547$) and work motivation ($\beta = 0.025$). This descriptive comparison of path coefficients indicates the relative magnitude of the estimated relationships within the model, without implying that one variable is universally more important than another across different settings.

The positive path from work commitment to job satisfaction ($\beta = 0.224$) is consistent with the findings of Mubarak *et al.* (2021) and Kustiawan *et al.* (2022), while the positive path from job satisfaction to employee productivity is consistent with previous findings concerning the relationship between job satisfaction and productivity (Asifah & Prapanca, 2024; Susilowati & Fadli, 2023).

3.8 Indirect Effect Analysis

The indirect relationship between work motivation and employee productivity through job satisfaction was calculated by multiplying the path coefficient from work motivation to job satisfaction by the path coefficient from job satisfaction to employee productivity:

$$0.017 \times 0.576 = 0.0098$$

The resulting indirect coefficient is 0.0098. However, the direct relationship between work motivation and job satisfaction is not statistically significant because the p-value is 0.054. Therefore, the findings do not provide sufficient statistical evidence to establish a significant mediating relationship of job satisfaction between work motivation and employee productivity. This result is also consistent with the partial test showing that work motivation was not significantly related to job satisfaction in this sample. The finding differs from studies such as Tarmidi and Yusup (2021), which reported a significant relationship between work motivation and job satisfaction.

The indirect relationship between work commitment and employee productivity through job satisfaction was calculated as follows:

$$0.224 \times 0.576 = 0.129$$

The relationship between work commitment and job satisfaction is statistically significant, as is the relationship between job satisfaction and employee productivity. Therefore, the results provide empirical support for an indirect relationship between work commitment and employee productivity through job satisfaction. This finding is consistent with previous research indicating that organizational commitment and job satisfaction are interconnected with employee work outcomes (Mubarok *et al.*, 2021; Kustiawan *et al.*, 2022).

However, the indirect coefficients calculated above should be interpreted as estimated indirect effects based on the product of the path coefficients. A formal statistical test of mediation would ideally be complemented by a bootstrapped confidence interval for the indirect effect. Therefore, the present findings support an indirect relationship, while stronger claims regarding statistical mediation should be made only when a formal mediation test is available.

3.9 Discussion

The findings demonstrate that work motivation, work commitment, and job satisfaction have different relationships within the proposed research model. Work motivation has a significant relationship with employee productivity but does not have a significant relationship with job satisfaction. Work commitment has significant relationships with both job satisfaction and employee productivity. Furthermore, job satisfaction has a significant relationship with employee productivity. These findings are generally consistent with previous studies indicating that motivation, organizational commitment, and job satisfaction are relevant employee-related factors in explaining work outcomes (Wau & Purwanto, 2021; Mubarok *et al.*, 2021; Kustiawan *et al.*, 2022).

The findings indicate that employee productivity is associated with several dimensions of the employee experience. Motivation may contribute directly to productivity, while work commitment is associated with both productivity and job satisfaction. Job satisfaction also provides an additional relationship within the productivity model. This finding is consistent with previous research showing that work motivation can be associated with employee productivity (Haslindah *et al.*, 2023), while organizational commitment and job satisfaction are also related to employee work outcomes (Mubarok *et al.*, 2021; Sutarman *et al.*, 2024).

The increase in the coefficient of determination from 0.284 to 0.409 after job satisfaction was incorporated into the productivity model indicates that the inclusion of job satisfaction increases the explanatory capacity of the model. Nevertheless, 59.1% of the variation in employee productivity remains outside the variables examined in this study. This indicates that other factors may also contribute to employee productivity. Previous studies similarly indicate that employee productivity is influenced by multiple work-related conditions rather than by a single explanatory factor (Asifah & Prapanca, 2024; Susilowati & Fadli, 2023).

For CV. Dunia Outbound Kita, the findings suggest that employee productivity can be considered in relation to motivation, organizational commitment, and job satisfaction. Organizational practices concerning rewards, supportive working conditions, employee involvement, career development, workload, and employee relationships may be relevant to the employee-related variables examined in this study. Previous research has also identified work motivation, organizational commitment, and job satisfaction as relevant factors in understanding employee outcomes (Wau & Purwanto, 2021; Kustiawan *et al.*, 2022).

Overall, the empirical results provide evidence that work motivation and work commitment are related to employee productivity, while work commitment and job satisfaction are also related within the proposed model. The findings further indicate that job satisfaction plays a role in the indirect relationship between work commitment and employee productivity, whereas the statistical evidence does not establish a significant indirect relationship between work motivation and employee productivity through job satisfaction. This interpretation is consistent with the partial results presented in the preceding sections, particularly the non-significant relationship between work motivation and job satisfaction ($p = 0.054$). The findings therefore provide empirical support for the proposed relationships while also indicating that the role of job satisfaction differs depending on the predictor examined.

4. CONCLUSION

This study concludes that work motivation and work commitment are important factors associated with employee productivity at CV. Dunia Outbound Kita, with job satisfaction providing an additional role in the proposed relationship model. The results indicate that work motivation has a significant relationship with employee productivity, while its relationship with job satisfaction is not statistically significant. In contrast, work commitment has significant relationships with both job satisfaction and employee productivity. Job satisfaction also has a significant relationship with employee productivity. The simultaneous test further demonstrates that work motivation and work commitment jointly have a significant relationship with job satisfaction, while work motivation, work commitment, and job satisfaction jointly have a significant relationship with employee productivity. The coefficient of determination indicates that the inclusion of job satisfaction increases the explanatory capacity of the model for employee productivity from 28.4% to 40.9%. This finding confirms that employee productivity is associated with a combination of motivational, commitment, and satisfaction-related factors. The indirect effect analysis indicates that work commitment has an indirect relationship with employee productivity through job satisfaction, whereas the statistical evidence does not establish a significant indirect relationship between work motivation and employee productivity through job satisfaction. These findings provide an empirical basis for understanding the different roles of motivation, commitment, and satisfaction in relation to employee productivity. From a practical perspective, the findings suggest that organizations may pay attention to employee motivation, strengthen organizational commitment, and create working conditions that support job satisfaction as part of efforts to improve employee productivity. Future research can extend this model by incorporating other factors that may explain the remaining 59.1% of variation in employee productivity, such as leadership, work environment, training, organizational culture, compensation, or employee engagement. Further studies may also involve larger samples, different organizational settings, and longitudinal research designs to provide broader evidence regarding the relationships among work motivation, work commitment, job satisfaction, and employee productivity.

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REFERENCES

- Asifah, V. F. J. A., & Prapanca, D. (2024). Pengaruh kepuasan kerja dan motivasi kerja terhadap produktivitas. *Academia Open*, 9(1). <https://doi.org/10.21070/acopen.9.2024.4352>
- Bhargava, R., & Johri, A. (2021). Job satisfaction and dimensions of commitment ensuing improved productivity in private organizations. *International Journal of Management Studies*, 8(2), 1–12.
- Deci, E. L., Olafsen, A. H., & Ryan, R. M. (2017). Self-determination theory in work organizations: The state of a science. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 19–43. <https://doi.org/10.1146/annurev-orgpsych-032516-113108>
- Djastuti, I., Lestari, R. I., & Nugraheni, R. (2023). The role of employee performance during COVID-19: Do motivation and commitment matter? *Jurnal Organisasi dan Manajemen*, 19(1), 273–285. <https://doi.org/10.33830/jom.v19i1.2372>
- Fauzi, A., Sulistianingsih, E., Rahmadanti, K., Hanifah, N. A., Putri, S. M., & Nabila, W. T. (2022). Pengaruh komitmen dan kepuasan kerja terhadap produktivitas kerja karyawan (Literatur review manajemen sumber daya manusia). *Jurnal Ekonomi Manajemen Sistem Informasi*, 3(6), 629–638. <https://doi.org/10.31933/jemsi.v3i6.1102>
- Gagné, M., & Deci, E. L. (2005). Self-determination theory and work motivation. *Journal of Organizational Behavior*, 26(4), 331–362. <https://doi.org/10.1002/job.322>
- Hagger, M. S., & McAnally Star, K. (2026). Self-determination theory and workplace outcomes: A meta-analysis. *Stress and Health*, 42(1), e70151. <https://doi.org/10.1002/smi.70151>
- Haslindah, A., Arisanti, I., Suardi, S., & Mardikawati, B. (2023). Analysis of the effect of career development policy and work motivation on employee productivity and job satisfaction level in service companies in Indonesia. *West Science Interdisciplinary Studies*, 1(11), 1177–1186.

- <https://doi.org/10.58812/wsis.v1i11.346>
- Hidayat, R., & Ardiyanti, A. (2025). Pengaruh motivasi kerja, disiplin kerja dan lingkungan kerja terhadap kepuasan kerja karyawan. *Jurnal Manajemen*, 16(1), 302–315. <https://doi.org/10.32832/jm-uika.v16i1.18547>
- Ikhsan, M. D., & Supartha, I. W. G. (2023). Pengaruh motivasi kerja terhadap kinerja karyawan yang dimediasi kepuasan kerja. *E-Jurnal Ekonomi dan Bisnis Universitas Udayana*, 12(9), 1839–1848. <https://doi.org/10.24843/EEB.2023.v12.i09.p15>
- Kustiawan, U., Marpaung, P., Lestari, U. D., & Andiyana, E. (2022). The effect of affective organizational commitment, job satisfaction, and employee engagement on job happiness and job performance on manufacturing company in Indonesia. *WSEAS Transactions on Business and Economics*, 19, 573–591. <https://doi.org/10.37394/23207.2022.19.52>
- Liana, Y., & Denjayanti, R. N. (2022). Pengaruh motivasi kerja dan kepuasan kerja terhadap peningkatan kinerja karyawan melalui komitmen organisasi pada UMKM (Studi pada UMKM Paguyuban Keripik Tempe Sanan Kota Malang). *Jurnal Manajemen Dirgantara*, 15(2), 251–256. <https://doi.org/10.56521/manajemendirgantara.v15i2.760>
- Mubarok, M. H., Wiwin, W., Syahrullah, S., & Salam, R. (2021). The effect of organizational commitment and job satisfaction on employee performance. *European Journal of Business and Management*, 13(3). <https://doi.org/10.7176/EJBM/13-3-09>
- Narpati, B., Andrian, A., & Nursal, M. F. (2020). Pengaruh turnover intention dan kepuasan kerja terhadap produktivitas kerja Sales Promotion Girl (SPG) Matahari Department Store–Bekasi. *Business Management Analysis Journal (BMAJ)*, 3(2), 174–188. <https://doi.org/10.24176/bmaj.v3i2.4819>
- Popoola, S. O., & Fagbola, B. O. (2023). Work motivation, job satisfaction, work-family balance, and job commitment of library personnel in universities in North-Central Nigeria. *The Journal of Academic Librarianship*, 49(4), 102741. <https://doi.org/10.1016/j.acalib.2023.102741>
- Riketta, M. (2002). Attitudinal organizational commitment and job performance: A meta-analysis. *Journal of Organizational Behavior*, 23(3), 257–266. <https://doi.org/10.1002/job.141>
- Sanjaya, M., & Indrawati, L. (2023). The influence of job satisfaction, work motivation, and employee commitment on employee performance. *Research in Management and Accounting*, 6(1), 11–20. <https://doi.org/10.33508/rima.v6i1.4538>
- Susilowati, & Fadli. (2023). Pengaruh kepuasan kerja dan motivasi kerja terhadap produktivitas kerja karyawan. *Jurnal Ilmiah Manajemen Kesatuan*, 11(3), 1573–1586. <https://doi.org/10.37641/jimkes.v11i3.2310>
- Sutarman, A., Kadim, A., & Garad, A. (2024). The effect of competence and organizational commitment on work productivity of Indonesian manufacturing industries. *International Journal of Technology*, 15(5), 1449–1461. <https://doi.org/10.14716/ijtech.v15i5.5775>
- Tarmidi, & Yusup. (2021). The effect of work motivation on job satisfaction. *Technium Sustainability*, 1(2), 1–7. <https://doi.org/10.47577/sustainability.v1i2.5091>
- Vanessa, V., & Nawawi, M. T. (2022). Pengaruh lingkungan kerja, stres kerja, dan motivasi terhadap kepuasan kerja karyawan. *Jurnal Manajerial dan Kewirausahaan*, 4(2), 497–505. <https://doi.org/10.24912/jmk.v4i2.18257>
- Wau, J., & Purwanto, P. (2021). The effect of work motivation and job satisfaction on employee performance. *Jurnal Aplikasi Bisnis dan Manajemen (JABM)*, 7(2), 262. <https://doi.org/10.17358/jabm.7.2.262>