

Ethical Leadership, Ethical Climate, and Job Satisfaction as Predictors of Employee Integrity: PLS-SEM Evidence from Indonesian Public Revenue Institutions

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ABSTRACT

This study examines how ethical leadership influences employee integrity in public sector tax administration, focusing on the mediating roles of ethical climate and job satisfaction. Data were collected from 260 civil servants using proportionate stratified random sampling across ten Tax Service Offices under the Directorate General of Taxes in West Sumatra and Jambi, Indonesia. Using PLS-SEM, the results show that ethical leadership significantly enhances ethical climate and job satisfaction. Ethical climate strongly predicts employee integrity and mediates the leadership-integrity relationship, while job satisfaction shows no direct or mediating effect. These findings indicate that integrity is driven more by normative and structural conditions than affective attitudes, highlighting ethical climate as the key mechanism linking leadership to integrity.

INTRODUCTION

Integrity represents a fundamental pillar shaping the quality, credibility, and legitimacy of governance in modern public sector organizations. In contemporary public administration, it is no longer viewed merely as personal morality, but as an institutional system ensuring that public authority is exercised in the public interest rather than for personal or group benefit (OECD, 2020). Consequently, strengthening integrity has become a strategic priority in building transparent, accountable, and trustworthy public institutions.

Integrity is particularly critical in institutions managing state revenues, such as the Directorate General of Taxes (DGT). As a government body under the Ministry of Finance responsible for tax administration, the DGT plays a central role in sustaining national development through tax collection. In this context, public trust underpins the legitimacy and credibility of tax authorities and directly influences voluntary taxpayer compliance. When tax officials are perceived as transparent, fair, and consistent, compliance increases due to intrinsic motivation rooted in trust in the system's integrity and fairness (Shelvi & Rachmawati, 2025).

To strengthen integrity, the Indonesian government established the Integrity Assessment Survey (IAS), administered by the Corruption Eradication Commission. This instrument measures corruption risks and evaluates the effectiveness of anti-corruption initiatives, serving as a comprehensive mechanism for monitoring institutional integrity (Dewantara Susilo et al., 2020). Within the DGT, IAS scores function as Key Performance Indicators (KPI) to assess the implementation of integrity, accountability, and professionalism in tax service delivery (Laporan Kinerja Direktorat Jenderal Pajak, 2024).

Table 1. Work Units with Integrity KPI Achievement Below Target

No	Regional Tax Office	Tax Office	Target	Realization (%)	Achievement (%)
1	North Sumatra I	Lubuk Pakam	85	84.46	99.36
2	West Sumatra and Jambi	Jambi Pelayangan	85	82	96.47
3	Riau	Pekanbaru Senapelan	85	79.01	92.95
4	West Sumatra and Jambi	Bukittinggi	85	68.31	80.36
5	West Sumatra and Jambi	Padang Satu	85	63.48	74.68
6	Riau Island	Bintan	85	51.09	60.11

Source: Performance Report of Tax Offices, 2024 (processed data)

Data from the DGT's 2024 (processed data) performance report reveal that, while the average integrity performance of regional offices has exceeded the established target of 85 percent, notable variations persist across regions. The highest achievement was recorded by the Regional Offices of Papua, West Papua, and Maluku at 113.54 percent, while the lowest was observed in the Regional Office of the Riau Islands at 101.16 percent. The Regional Office of West Sumatra

and Jambi recorded an average achievement of 102.70 percent, masking critical underperformance at the unit level. Specifically, three Tax Offices under this regional office failed to meet the integrity target: the Tax Office of Jambi Pelayangan (82%), Tax Office of Bukittinggi (68.31%), and Tax Office of Padang Satu (63.48%), all below the 85 percent threshold. This pattern of persistent underperformance at the sub-regional level signals that aggregate indicators may obscure meaningful integrity deficits warranting empirical investigation.

Understanding employee integrity requires examining both leadership behavior and organizational context. Based on Social Learning Theory, individuals learn appropriate behavior by observing authority figures (Bandura, 1977), making leaders central in shaping ethical standards. Ethical leadership refers to behavior aligned with accepted norms, reinforced through communication, decision-making, and role modeling (Brown et al., 2005). Empirical studies show that ethical leadership reduces integrity violations and promotes ethical behavior (Simarmata et al., 2025; Hamoudah et al., 2021; Al Halbusi, Ruiz-Palomino, et al., 2021; Al Halbusi et al., 2023).

Beyond direct effects, ethical leadership influences behavior through ethical climate, defined as shared perceptions of norms guiding appropriate conduct (Victor & Cullen, 1988). Ethical climate translates leadership cues into consistent organizational expectations. Prior studies show that ethical leadership strengthens ethical climate (Dey et al., 2022; Al Halbusi, Williams, et al., 2021; Enwereuzor et al., 2020), which in turn promotes ethical behavior and reduces violations (Hamoudah et al., 2021; Simarmata et al., 2025; Al Halbusi, Ruiz-Palomino, et al., 2021; Al Halbusi et al., 2023). However, findings are mixed; Smithikrai et al. (2025) found a significant effect on integrity, while Samka et al. (2021) reported no significant relationship in the Indonesian public sector ($p = 0.497$), suggesting context dependency.

Job satisfaction represents an affective pathway linking ethical leadership to behavior. Studies show that ethical leadership enhances job satisfaction (Guo, 2022; Aftab et al., 2023; Ramlawati et al., 2023; Alhaiou & Aldayel, 2025), and satisfied employees tend to exhibit stronger ethical commitment. Evidence also suggests that job satisfaction influences and mediates integrity (Makayasa et al., 2020; Mahaful, 2021; Kyambade & Namatovu, 2025). However, this relationship varies across contexts; for instance, Harismeihendra & Lufpi (2024) found its effect contingent on organizational conditions such as culture. Moreover, most studies are conducted in law enforcement or other sectors, raising questions about applicability in tax administration settings.

Despite growing evidence, three gaps remain. First, employee integrity as a distinct outcome is underexplored, particularly in revenue institutions where integrity failures directly affect public trust and state revenue (Dey et al., 2022; Konadu et al., 2025). Second, ethical climate and job satisfaction have been examined separately, leaving the relative dominance of normative (ethical climate) versus affective (job satisfaction) pathways unresolved, especially in high-accountability contexts. Third, tax administration remains underrepresented in empirical research, despite its unique characteristics, including strict accountability systems, measurable integrity targets, and strong

reform pressures (Makayasa et al., 2020; Harismeihendra & Lufpi, 2024; Kyambade & Namatovu, 2025; Alhaiou & Aldayel, 2025).

This study addresses these gaps by examining the influence of ethical leadership on employee integrity, with ethical climate and job satisfaction as concurrent mediators, in the Regional Office of the DGT in West Sumatra and Jambi. The study extends Social Learning Theory in public sector contexts (Bandura, 1977; Brown et al., 2005), clarifies the roles of normative and affective mechanisms (Victor & Cullen, 1988), and provides practical insights for strengthening integrity-oriented leadership and institutional frameworks in public revenue organizations (OECD, 2020).

THEORETICAL REVIEW

Social Learning Theory

The hypotheses in this study are grounded in Social Learning Theory (SLT) (Bandura, 1977), which posits that individuals develop behavioral standards through observing and internalizing the actions of salient role models, particularly leaders. Within organizational contexts, ethical leadership provides critical behavioral cues that shape both collective norms and individual attitudes. Drawing on this perspective, the present study proposes a dual-path mediation model in which ethical leadership influences employee integrity through two complementary mechanisms: a normative-structural pathway via ethical climate and an affective pathway via job satisfaction. These mechanisms are further theorized to operate sequentially, with ethical climate enhancing job satisfaction, forming an integrated explanatory framework from which the following hypotheses are derived.

Ethical Leadership and Ethical Climate

From a social learning perspective, ethical leaders act as salient role models whose consistent demonstration of normatively appropriate conduct shapes employees' understanding of acceptable behavior. Through repeated observation and social reinforcement, these behaviors become collectively internalized, forming shared perceptions that define the organizational ethical climate. A substantial body of evidence across diverse national and institutional contexts consistently identifies ethical leadership as a strong predictor of ethical climate, including studies conducted in Bangladesh, Nigeria, Iran, Indonesia, Malaysia, and Iraq (e.g., Aloustani et al., 2020; Al Halbusi, Williams, et al., 2021; Dey et al., 2022; Enwereuzor et al., 2020; Samka et al., 2021). These findings, including evidence from time-lagged and public sector designs, demonstrate the robustness of this relationship.

H1: Ethical leadership has a significant positive effect on ethical climate.

Ethical Leadership and Job Satisfaction

From a social learning perspective, ethical leadership shapes employees' affective responses by fostering perceptions of fairness, transparency, and support. Observing ethical leaders reduces role ambiguity and strengthens positive expectations toward the work environment, which in turn enhances job satisfaction. Thus, ethical leadership influences job-related attitudes not only

through direct interaction but also through the broader organizational environment it cultivates. Empirical evidence across diverse organizational contexts consistently supports this relationship. Prior studies conducted in service, healthcare, IT, and public sector settings in Macau, Iran, Pakistan, Indonesia, and Saudi Arabia (e.g., Aftab et al., 2023; Alhaiou & Aldayel, 2025; Guo, 2022; Kaffashpoor & Sadeghian, 2020; Ramlawati et al., 2023; Udin et al., 2023) demonstrate that ethical leadership is a robust and positive predictor of job satisfaction.

H2: Ethical leadership has a significant positive effect on job satisfaction.

Ethical Climate and Employee Integrity

From a social learning perspective, ethical climate operates as a system of shared norms that guides behavior through collective expectations and reinforcement. When ethical standards are clearly defined, consistently enforced, and socially endorsed, employees are more likely to internalize these norms and engage in integrity-consistent conduct beyond the direct influence of individual leaders. A substantial body of empirical evidence supports this relationship across public and cross-national contexts. Prior studies in Saudi Arabia, Malaysia, Indonesia, Iraq, and Thailand (e.g., Al Halbusi, Ruiz-Palomino, et al., 2021; Al Halbusi et al., 2023; Hamoudah et al., 2021; Simarmata et al., 2025; Smithikrai et al., 2025) consistently demonstrate that ethical climate reduces misconduct and promotes integrity-related behaviors. However, some findings indicate context-dependent variability, particularly in Indonesian public sector settings (Samka et al., 2021), suggesting that institutional conditions may shape the strength of this relationship.

H3: Ethical climate has a significant positive effect on employee integrity.

Job Satisfaction and Employee Integrity

From a social learning perspective, job satisfaction reflects a positive affective state that can reinforce ethical behavior through reciprocal responses to perceived organizational support. Employees who experience higher levels of satisfaction are more likely to exhibit responsible and integrity-consistent conduct as a form of positive reciprocity. Empirical evidence provides partial support for this relationship, primarily within law enforcement contexts. Studies conducted in Indonesia and Uganda (e.g., Makayasa et al., 2020; Mahaful, 2021; Harismehendra & Lufpi, 2024; Kyambade & Namatovu, 2025) generally find that job satisfaction positively influences integrity-related outcomes, although some findings suggest that this effect may be indirect or contingent upon other organizational factors such as culture. However, the generalizability of this relationship remains limited, as most prior studies are concentrated in policing environments. In high-accountability institutions such as tax administration, where integrity is strongly shaped by normative and structural pressures, the affective pathway may play a less dominant role. Accordingly, this study treats this relationship as an empirically open question.

H4: Job satisfaction has a significant positive effect on employee integrity.

Ethical Climate and Job Satisfaction

From a social learning perspective, ethical climate signals shared expectations regarding fairness, integrity, and organizational support, which shape employees' affective responses toward their work environment. When employees perceive that ethical standards are consistently upheld and rewarded, they are more likely to develop positive attitudes, reflected in higher levels of job satisfaction. Empirical evidence across healthcare, education, and multi-industry contexts consistently supports this relationship. Studies conducted in Turkey, Iran, Ghana, Bangladesh, and Malaysia (e.g., Al Halbusi, Williams, et al., 2021; Amoah et al., 2022; Dey et al., 2022; Faramarzpour et al., 2021; Köroğlu et al., 2024) demonstrate a robust positive association between ethical climate and job satisfaction, including evidence of mediating mechanisms such as interpersonal trust.

H5: Ethical climate has a significant positive effect on job satisfaction.

Ethical Climate Mediates the Relationship between Ethical Leadership and Employee Integrity

Ethical climate is proposed as the primary normative structural mediating mechanism through which ethical leadership influences employee integrity. From a social learning perspective, ethical leaders shape shared ethical norms that employees internalize, and these collectively reinforced expectations subsequently guide integrity-consistent behavior. Empirical evidence across multiple contexts consistently supports this mediating role. Prior studies in Malaysia, Iraq, Saudi Arabia, and Indonesia (e.g., Al Halbusi, Williams, et al., 2021; Al Halbusi, Ruiz-Palomino, et al., 2021; Al Halbusi et al., 2023; Hamoudah et al., 2021; Simarmata et al., 2025) demonstrate that ethical climate serves as a significant transmission mechanism linking ethical leadership to ethical behavior and integrity-related outcomes. However, some findings indicate context-dependent limitations. For instance, evidence from Indonesian public sector settings shows that while ethical leadership strongly predicts ethical climate, the indirect effect on behavior may not always be significant (Samka et al., 2021). These mixed findings underscore the importance of empirically validating this mediation within high-accountability institutional contexts such as tax administration, rather than assuming its generalizability.

H6: Ethical climate significantly mediates the relationship between ethical leadership and employee integrity.

Job Satisfaction Mediates the Relationship between Ethical Leadership and Employee Integrity

Job satisfaction is proposed as the affective mediating mechanism through which ethical leadership influences employee integrity. From a social learning perspective, ethical leadership fosters a fair and supportive work environment that enhances employees' positive affective responses, which in turn motivate reciprocation through integrity-consistent behavior. Empirical support for this pathway remains relatively limited and context-dependent. Existing evidence from Indonesia and Uganda (e.g., Kyambade & Namatovu, 2025; Makayasa et al., 2020) suggests that job satisfaction can function as a significant mediator

linking ethical leadership to integrity-related outcomes. However, other findings indicate that this relationship may operate indirectly through additional organizational mechanisms, such as organizational culture, highlighting the conditional nature of the affective pathway (Harismehendra & Lufpi, 2024). Given the relatively limited empirical base and its concentration in law enforcement contexts, this mediation is treated as an empirically open question, particularly within high-accountability institutional environments where normative-structural mechanisms may be more dominant.

H7: Job satisfaction significantly mediates the relationship between ethical leadership and employee integrity.

Ethical Climate Mediates the Relationship between Ethical Leadership and Job Satisfaction

Ethical climate is proposed as a mediating mechanism linking ethical leadership to job satisfaction. From a social learning perspective, ethical leaders shape shared perceptions of fairness, consistency, and organizational support, which subsequently influence employees' affective evaluations of their work environment, reflected in higher job satisfaction. Empirical evidence across multiple contexts consistently supports this relationship. Prior studies conducted in Turkey, Iran, Ghana, Bangladesh, and Malaysia (e.g., Al Halbusi, Williams, et al., 2021; Amoah et al., 2022; Dey et al., 2022; Faramarzpour et al., 2021; Koroğlu et al., 2024) demonstrate that ethical climate serves as an important mechanism through which organizational conditions shape employees' attitudinal outcomes, including job satisfaction. While prior research has established this mediating relationship, it has not been integrated within a broader dual-path framework linking ethical leadership to employee integrity. This study therefore incorporates this mechanism into a more comprehensive structural model.

H8: Ethical climate significantly mediates the relationship between ethical leadership and job satisfaction.

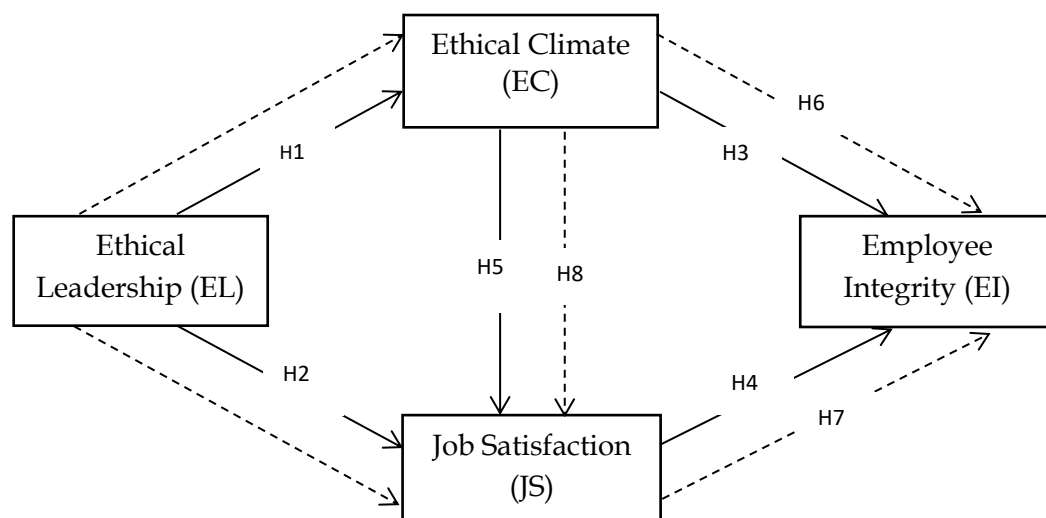


Figure 1. Conceptual Framework

METHODOLOGY

Sampling and Data Collection

This study employed a quantitative approach using a survey method to analyze the causal relationships among the research variables. A causal approach was used to explain the influence of ethical leadership on employee integrity, with ethical climate and job satisfaction as mediating variables (Creswell, 2014). The study was conducted at Tax Offices under the Regional Office of the Directorate General of Taxes in West Sumatra and Jambi. The research population consisted of 794 employees across ten Tax Offices. The sample size was determined based on the table developed by Krejcie and Morgan (1970) with a 95% confidence level, resulting in a minimum sample of 254 respondents. Data were collected through an online questionnaire distributed via Google Forms during regular working hours. A total of 260 questionnaires were returned and declared valid. The achieved sample of 260 respondents exceeds the minimum required by Krejcie and Morgan (1970) for a population of 794, ensuring adequate statistical power for PLS-SEM analysis. Proportionate stratified random sampling was used to ensure proportional representation from each work unit. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS version 4 software, following three testing stages: the outer model, inner model, and hypothesis testing.

Common Method Bias Control

Since all variables were measured using self-report data from a single source, the potential for common method bias (CMB) was assessed (Podsakoff et al., 2003). Procedurally, anonymity was ensured, the questionnaire was structured by separating sections, and a brief time lag was applied. Statistically, Harman's single factor test showed that no single factor dominated the variance, indicating that CMB is not a significant concern. These procedures are consistent with (Podsakoff et al., 2003) and PLS-SEM guidelines (Hair et al., 2017; Hair et al., 2021). The PCA results show that the first component has an eigenvalue of 13.588 and explains 48.5% of the total variance, with the same cumulative value for the first component. This finding indicates that no single factor dominates the majority of the variance (below the 50% threshold), suggesting that common method bias is not a significant concern in this study.

Instruments

All variables in this study were measured using established and validated scales with high reliability in previous research. A 5-point Likert scale (1 = strongly disagree, 5 = strongly agree) was used to obtain respondents' answers. Ethical leadership was measured using a 10-item scale adapted from Al Halbusi et al. (2023) based on the concept developed by Brown et al. (2005). A sample item is, "My supervisor conducts his/her work in an ethical manner". Job satisfaction was measured using a 5-item scale adapted from Kyambade & Namatovu. (2025), with a sample item, "I feel satisfied with the recognition I receive for my work". Employee integrity was measured using a 5-item scale also adapted from Kyambade & Namatovu. (2025), for example, "I hold myself accountable for my actions, both professionally and personally". Ethical climate was measured using

a 14-item scale adapted from Al Halbusi et al. (2021) including items such as, “In my organization, employees are expected to follow their own personal and moral beliefs.”

RESULTS

Respondent Demographics

Table 2 shows that the study involved 260 respondents, with the majority being male (55%). Most respondents were aged 31–40 years (40%), followed by those aged 20–30 years (33%). In terms of education, the majority held a bachelor’s degree (S1/D4) at 59%, followed by diploma (D3) graduates (21%) and master’s degree (S2) holders (13%). Based on work experience, most respondents had 6–10 years of experience (38%) and more than 16 years (32%), while those with 0–5 years of experience represented the smallest group (3%).

Table 2. Respondent Demographics

Characteristics	Number	Percentage (%)
Gender		
Male	142	55%
Female	118	45%
Age		
20 - 30 years	85	33%
31 - 40 years	103	40%
41 - 50 years	38	15%
>50 years	34	13%
Education Level		
High School (SMA)	1	0.4%
Diploma 1(D1)	17	6.5%
Diploma 3 (D3)	55	21%
Bachelor’s Degree (S1/D4)	154	59%
Master’s Degree (S2)	33	13%
Work Experience		
0 - 5 years	7	3%
6 - 10 years	98	38%
11 - 15 years	73	28%
>16 years	82	32%

Source: processed data

Outer Model Measurement

The outer model was evaluated through validity and reliability assessments. Convergent validity was examined using factor loadings and the average variance extracted (AVE). Following the recommendations of Hair et al. (2021), factor loadings should exceed 0.70, while AVE values should be at least 0.50 to establish adequate convergent validity. In addition, construct reliability was assessed using composite reliability (CR) and Cronbach’s alpha, with both values expected to exceed 0.70 to indicate satisfactory internal consistency (Hair

et al., 2017; Hair et al, 2021). The results of the outer model evaluation are presented in Table 3

Table 3. Validity and Reliability Test Results

Construct	Items	Outer Loading	Cronbach's alpha	CR	AVE
Employee Integrity	EI1	0,842	0,886	0,917	0,688
	EI2	0,751			
	EI3	0,855			
	EI4	0,792			
	EI5	0,900			
Ethical Leadership	EL1	0,886	0,970	0,974	0,790
	EL2	0,921			
	EL3	0,922			
	EL4	0,924			
	EL5	0,711			
	EL6	0,896			
	EL7	0,896			
	EL8	0,902			
	EL9	0,917			
	EL10	0,892			
Ethical Climate	EC1	0,775	0,916	0,932	0,631
	EC2	0,808			
	EC3	0,734			
	EC4	Drop			
	EC5	Drop			
	EC6	Drop			
	EC7	0,789			
	EC8	0,815			
	EC9	0,839			
	EC10	0,794			
	EC11	0,796			
	EC12	Drop			
	EC13	Drop			
	EC14	Drop			
Job Satisfaction	JS1	0,789	0,825	0,876	0,587
	JS2	0,780			
	JS3	0,799			
	JS4	0,752			
	JS5	0,705			

Source: processed data

This study assessed item reliability, internal consistency, and convergent validity of the measurement model. The results indicate that most indicators exhibit outer loadings above 0.70, reflecting strong relationships between the indicators and their respective constructs. However, several indicators of the

ethical climate construct (EC4, EC5, EC6, EC12, EC13, and EC14) showed outer loadings below the recommended threshold and were therefore removed from the model.

These excluded items correspond to the independence and instrumental climate dimensions in (Victor & Cullen, 1988) typology, which reflect individualistic and self-interest-oriented ethical orientations. This exclusion is theoretically justified, as such orientations are less compatible with the collectivistic and rule-based institutional context of Indonesia’s public sector tax administration. In contrast, the retained eight indicators adequately represent the caring, rules, and law and code dimensions, which are more relevant to integrity formation in high-accountability public institutions.

Following item refinement, all remaining indicators demonstrated satisfactory reliability, with outer loadings exceeding 0.70. Furthermore, all constructs exhibited strong internal consistency, as evidenced by Cronbach’s alpha and composite reliability values above 0.70. The AVE values for all constructs also exceeded 0.50, confirming adequate convergent validity. This refinement is consistent with PLS-SEM guidelines that prioritize construct validity over scale completeness (Hair et al, 2021). Overall, these results indicate that the measurement model meets the recommended criteria for reliability and convergent validity.

Table 4. HTMT Ratio (Discriminant Validity)

Construct	Employee Integrity	Ethical Climate	Ethical Leadership	Job Satisfaction
Employee Integrity	-			
Ethical Climate	0,670	-		
Ethical Leadership	0,466	0,643	-	
Job Satisfaction	0,489	0,737	0,750	-

Source: processed data

Based on the results of the Heterotrait–Monotrait Ratio (HTMT) analysis presented in Table 4, all HTMT values were found to be below the recommended threshold of 0.90. Specifically, the HTMT value between Employee Integrity and Ethical Climate was 0.670, between Ethical Leadership and Ethical Climate was 0.643, and between Ethical Leadership and Employee Integrity was 0.466. Furthermore, the HTMT values for Job Satisfaction with Ethical Climate, Employee Integrity, and Ethical Leadership were 0.737, 0.489, and 0.750, respectively. These results indicate that all constructs exhibit adequate discriminant validity, as each construct is empirically distinct from the others. Therefore, the measurement model in this study satisfies the discriminant validity criterion based on the HTMT approach.

Inner Model Measurement

The coefficient of determination (R^2) was used to evaluate the quality of the structural model in the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach. According to Hair et al. (2021), R^2 indicates the model's ability to explain the variance of endogenous constructs. A higher R^2 value reflects a greater proportion of variance explained by the exogenous constructs, indicating better predictive accuracy of the model. R^2 values range from 0 to 1, where values closer to 0 indicate weak explanatory power and values closer to 1 indicate strong explanatory power. In general, R^2 values of 0.75, 0.50, and 0.25 are considered substantial, moderate, and weak, respectively.

Table 5. R-Square and Predictive Relevance (Q^2) Results

Variable	R square	Q^2 (predictive relevance)
Ethical Climate	0,368	0,344
Employee Integrity	0,371	0,172
Job Satisfaction	0,557	0,455

Source: processed data

Based on Table 5, the coefficient of determination (R^2) reflects the model's ability to explain the variance of endogenous constructs. Ethical Climate has an R^2 of 0.368, Employee Integrity 0.371, and Job Satisfaction 0.557, indicating that the model explains 36.8%, 37.1%, and 55.7% of their variances, respectively. Overall, the model demonstrates moderate explanatory power, with Job Satisfaction showing the strongest predictive capability.

Predictive relevance was assessed using the Stone-Geisser Q^2 obtained through blindfolding. All Q^2 values are above zero, confirming adequate predictive relevance. Ethical Climate shows a Q^2 of 0.344 (moderate), Job Satisfaction 0.455 (strong), and Employee Integrity 0.172 (acceptable). The relatively lower Q^2 for Employee Integrity suggests that additional factors beyond the model may influence this construct, offering directions for future research.

Table 6. The Effect Size Results

Variable	F^2 (effect size)
Ethical Climate → Employee Integrity	0,292
Ethical Climate → Job Satisfaction	0,204
Ethical Leadership → Ethical Climate	0,582
Ethical Leadership → Job Satisfaction	0,295
Job Satisfaction → Employee Integrity	0,004

Source: processed data

As shown in Table 6, effect size (f^2) was used to assess the practical significance of each structural path based on Cohen's (1988) criteria (0.02 = small, 0.15 = medium, 0.35 = large). The relationship between Ethical Leadership and Ethical Climate shows the largest effect ($f^2 = 0.582$), indicating that ethical leadership is the strongest driver of ethical climate. The paths from Ethical

Leadership to Job Satisfaction ($f^2 = 0.295$) and from Ethical Climate to Employee Integrity ($f^2 = 0.292$) also demonstrate large effects, highlighting their importance in the model.

Meanwhile, Ethical Climate has a moderate effect on Job Satisfaction ($f^2 = 0.204$), supporting the proposed sequential mediation. In contrast, the effect of Job Satisfaction on Employee Integrity is negligible ($f^2 = 0.004$), suggesting it is not a practically meaningful predictor in this context.

Hypothesis Test Results

The results of the study generally indicate significant relationships among most of the variables examined. The t-value used in this study can be interpreted as follows: a t-value of less than 1.96 indicates that there is no significant effect between two variables, whereas a t-value greater than 1.96 indicates a significant relationship between the variables.

Table 7. Direct Effect and Indirect Effect

Hypothesis	Path	T Value	P Value	Results
H1	Ethical Leadership → Ethical Climate	9,753	0,000	Support
H2	Ethical Leadership → Job Satisfaction	8,223	0,000	Support
H3	Ethical Climate → Employee Integrity	8,286	0,000	Support
H4	Job Satisfaction → Employee Integrity	1,064	0,144	Unsupport
H5	Ethical Climate → Job Satisfaction	6,745	0,000	Support
H6	Ethical Leadership → Ethical Climate → Employee Integrity	5,978	0,000	Support
H7	Ethical Leadership → Job Satisfaction → Employee Integrity	1,037	0,150	Unsupport
H8	Ethical Leadership → Ethical Climate → Job Satisfaction	6,112	0,000	Support

Source: processed data

As presented in Table 7, hypothesis H1, H2, H3, and H5 are supported, as they have t-values greater than 1.96 and p-values less than 0.05. These findings indicate that ethical leadership has a significant effect on ethical climate, ethical leadership has a significant effect on job satisfaction, ethical climate has a significant effect on employee integrity, and ethical climate has a significant effect on job satisfaction. Meanwhile, hypothesis H4 is rejected because the t-value of 1.064 is lower than 1.96 and the p-value of 0.144 is greater than 0.05. This result indicates that job satisfaction does not have a significant effect on employee integrity.

Hypothesis H6 is supported with a t-value of 5.978 and a p-value of 0.000, indicating that ethical climate mediates the relationship between ethical leadership and employee integrity. Hypothesis H8 is also supported with a t-value of 6.112 and a p-value of 0.000, indicating that ethical climate mediates the relationship between ethical leadership and job satisfaction. Meanwhile, hypothesis H7 is not supported because it has a t-value of 1.037 and a p-value of

0.150, indicating that job satisfaction does not mediate the relationship between ethical leadership and employee integrity.

DISCUSSION

The Effect of Ethical Leadership on Ethical Climate (H1)

The finding that ethical leadership positively and significantly influences ethical climate is consistent with Social Learning Theory (Bandura, 1977), which posits that individuals learn values and behaviors by observing authority figures. In organizational contexts, leaders serve as normative anchors whose conduct employees observe, internalize, and reproduce. This finding is consistent with (Dey et al., 2022; Enwereuzor et al., 2020; Aloustani et al., 2020), who demonstrate that ethical leadership plays a crucial role in shaping employees' perceptions of the organizational ethical climate. The large effect size observed ($f^2 = 0.582$) further confirms that ethical leadership is not merely a statistically significant but also a practically dominant driver of ethical climate formation a finding that extends prior evidence by establishing the magnitude of this relationship within a high-accountability tax administration context, where prior studies had not yet documented effect sizes of this scale.

The Effect of Ethical Leadership on Job Satisfaction (H2)

The positive and significant effect of ethical leadership on job satisfaction is likewise explained through Social Learning Theory's motivational dimension: employees who observe ethical leaders anticipate fair treatment and positive outcomes, which generates higher affective responses to their work. This finding is consistent with (Guo, 2022; Aftab et al., 2023; Ramlawati et al., 2023; Kaffashpoor & Sadeghian, 2020). The large effect size ($f^2 = 0.295$) confirms that this relationship is not only statistically robust but also practically significant, contributing to the literature by demonstrating that the ethical leadership-job satisfaction relationship operates with comparable strength in tax bureaucracies as in the private sector and healthcare contexts where it has been predominantly studied.

The Effect of Ethical Climate on Employee Integrity (H3)

The positive and significant effect of ethical climate on employee integrity supports the theoretical proposition that a strong ethical climate functions as an organizational-level extension of Social Learning Theory's reinforcement processes: when employees collectively perceive that ethical norms are clearly defined and consistently enforced, they develop shared expectations that integrity-consistent conduct will be positively reinforced. This finding is consistent with (Hamoudah et al., 2021); (Smithikrai et al., 2025); (Simarmata et al., 2025). Importantly, this finding also resolves a contradiction in the existing literature: Samka et al. (2021) studying Indonesian civil servants in Aceh, found that ethical climate did not significantly predict ethical behavior. The present study, conducted in a different Indonesian public sector context, namely tax administration, finds a significant and practically meaningful effect ($f^2 = 0.292$), suggesting that the normative influence of ethical climate on integrity is not uniformly absent in Indonesian public sector institutions but rather depends on

the specific accountability structures and compliance culture of the institutional setting.

The Effect of Ethical Climate on Job Satisfaction (H5)

The positive and significant effect of ethical climate on job satisfaction ($T = 6.745, p = 0.000$) supports the proposition that a well-established ethical climate serves as a structural antecedent of employees' affective responses to their work. When employees collectively perceive that ethical norms are consistently upheld and fairly enforced within the organization, they develop a sense of psychological safety, procedural fairness, and normative alignment that enhances their overall satisfaction with their work environment. This finding is grounded in Social Learning Theory's reinforcement dimension: employees who observe that ethical conduct is institutionally recognized and rewarded are more likely to develop positive affective orientations toward their workplace. This finding is consistent with prior studies demonstrating that ethical climate positively predicts job satisfaction across various organizational contexts, including (Dey et al., 2022); (Faramarzpour et al., 2021); (Köroğlu et al., 2024). Within the specific context of Indonesia's tax administration, this result is particularly noteworthy, as it suggests that the normative work environment shaped by ethical standards is a meaningful driver of employee well-being, a finding with direct implications for human resource management in public sector institutions undergoing anti-corruption reform.

The Mediating Role of Ethical Climate in the Relationship Between Ethical Leadership and Employee Integrity (H6)

The confirmed mediation of ethical climate in the ethical leadership-employee integrity relationship establishes the normative-structural pathway as the dominant transmission channel through which ethical leadership fosters integrity in Indonesia's DGT. This finding is consistent with (Al Halbusi, Williams, et al., 2021; Al Halbusi, Ruiz-Palomino, et al., 2021; Simarmata et al., 2025). Theoretically, this confirms that ethical leadership's influence on integrity is not primarily direct but is institutionally mediated. Ethical leaders shape integrity by constructing and sustaining the normative environment within which employees collectively operate, rather than through one-to-one behavioral modeling alone. This finding advances the literature by providing the first empirical evidence of this mediation pathway within Indonesia's tax administration, extending prior evidence predominantly from Iraqi, Malaysian, and Saudi Arabian contexts to a Southeast Asian emerging economy governance setting.

The Mediating Role of Ethical Climate in the Relationship Between Ethical Leadership and Job Satisfaction (H8)

The confirmed mediation of ethical climate in the ethical leadership-job satisfaction relationship completes the sequential mediation structure proposed in this study, demonstrating that the normative work environment created by ethical leaders, rather than direct leadership behavior alone, is the proximate

driver of employees' positive affective responses to their work. This finding is consistent with (Köroğlu et al., 2024; Faramarzpour et al., 2021; Dey et al., 2022). Taken together with the confirmed direct effect of ethical climate on job satisfaction (H5), this mediation finding contributes to the literature by establishing that ethical climate simultaneously functions as both a normative outcome of ethical leadership and a proximate antecedent of job satisfaction a dual role that prior studies have not examined within a single integrated structural model. The sequential pathway of ethical leadership, ethical climate, job satisfaction thus represents a theoretically coherent and empirically validated transmission mechanism within Indonesia's tax bureaucracy.

The Non-Significant Effects of Job Satisfaction on Employee Integrity and Its Mediating Role (H4 and H7)

The non-significant effects of job satisfaction on employee integrity (H4) and the non-significant mediation of job satisfaction in the ethical leadership-integrity relationship (H7), together with the negligible effect size ($f^2 = 0.004$), represent the theoretically most important finding of this study. Grounded in Social Learning Theory, this pattern is explained by the distinction between normative learning and affective motivation: while ethical leaders successfully generate positive affective responses (job satisfaction) among tax administration employees, these affective responses do not translate into integrity-consistent conduct because integrity formation in this institutional context is primarily governed by normative and structural mechanisms specifically, the ethical climate rather than by employees' emotional states toward their work. In high-accountability public institutions such as the DGT, where integrity is formally monitored, evaluated against measurable performance indicators, and subject to anti-corruption oversight, employees' integrity behavior is more strongly conditioned by perceived organizational norms and structural expectations than by their affective job attitudes. This interpretation is fully consistent with Social Learning Theory, which distinguishes between the acquisition of behavior through observation of reinforcement contingencies (normative pathway) and the motivation to perform behavior based on anticipated personal outcomes (affective pathway), and predicts that when structural reinforcement contingencies are strong, they will dominate affective motivational pathways.

This finding diverges from Makayasa et al. (2020); Kyambade & Namatovu, (2025); Harismeihendra & Lufpi. (2024), all of whom found positive relationships between job satisfaction and integrity in law enforcement contexts. This divergence is theoretically significant: it suggests that the affective pathway from job satisfaction to integrity is context-dependent and may be more operative in organizational settings where integrity standards are primarily maintained through interpersonal relationships and professional culture, as in law enforcement, than in settings where integrity is formally institutionalized through performance measurement systems and anti-corruption mechanisms, as in tax administration. This finding thus makes a novel theoretical contribution by delineating the boundary conditions under which job satisfaction functions as an integrity driver, advancing the literature beyond the current assumption that the job satisfaction-integrity relationship generalizes across public sector contexts.

CONCLUSIONS AND RECOMMENDATIONS

The findings of this study advance the literature in three important ways. First, they confirm that in high-accountability public revenue institutions, employee integrity is primarily driven by normative-structural conditions rather than affective job attitudes. Second, they establish the dual-path mediation model as a valid framework for understanding how ethical leadership operates within tax bureaucracies, with ethical climate serving as the dominant transmission channel for both integrity and job satisfaction outcomes. Third, they contribute to the delineation of boundary conditions in the ethical leadership literature by demonstrating that the dominance of normative versus affective pathways to integrity is contingent on the institutional accountability structures of the organizational context—a finding relevant not only to tax administration but to any high-accountability public institution in emerging economies where anti-corruption reform is actively underway.

This study has several limitations that warrant acknowledgment. First, the use of single-source self-report data introduces the risk of common method bias, whereby correlations among variables may appear stronger than they actually are. Second, the focus on a single regional office of the DGT limits the generalizability of the findings to other DGT units and broader public institutions. Third, the cross-sectional design does not permit definitive causal inference, and the directionality of relationships among constructs cannot be conclusively confirmed.

FURTHER STUDY

Future research is encouraged to adopt multi-source data collection to minimize same-source bias, expand the scope to multiple DGT regional offices or comparable public institutions such as the Supreme Audit Board (BPK) and the Corruption Eradication Commission (KPK), and employ longitudinal or mixed-method designs to confirm the causal direction of the relationships examined. Additionally, the integration of variables such as organizational commitment, moral courage, moral disengagement, and compliance culture is recommended to provide a more comprehensive understanding of employee integrity formation in public sector contexts.

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