

THE INFLUENCE OF LEADERSHIP STYLE AND WORK ENVIRONMENT ON ORGANIZATIONAL CLIMATE WITH WORK ETHIC AS AN INTERVENING VARIABLE AT THE BELAWAN HARBORMASTER AND MAIN PORT AUTHORITY OFFICE

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ABSTRACT

This study aims to analyze the influence of leadership style and work environment on organizational climate, with work ethic as an intervening variable, at the Belawan Harbormaster and Main Port Authority Office. This research is motivated by the important role of leadership style and work environment conditions in shaping employee work ethic and creating a conducive organizational climate in an agency with a strategic function in the field of shipping safety and supervision. The study was conducted at the Belawan Harbormaster and Main Port Authority Office, located on Jalan Deli, Medan Belawan District, Zip Code 20411, starting in June 2025. The study population consisted of 244 employees, and the Slovin formula was used for sampling, resulting in a sample size of 151 respondents. Data collection was conducted through questionnaires, while data analysis employed a PLS-based Structural Equation Modeling (SEM) approach. The results indicate that leadership style and work environment have a positive and significant effect on work ethic and organizational climate. Furthermore, work ethic has been shown to have a positive and significant impact on organizational climate and mediate the relationship between leadership style and work environment. Overall, this study confirms that improving effective leadership styles and a supportive work environment can strengthen employee work ethic and create a better organizational climate.

Introduction

In the current era of globalization and modernization, organizations are required to increase their efficiency, effectiveness, and competitiveness, both in the private and public sectors. One key factor influencing organizational success is human resources.

Success in managing human resources greatly depends on the leadership style applied by management. Leadership style becomes the main foundation in shaping organizational culture, determining policy direction, and influencing employee behavior and work spirit. Effective leaders function not only as directors and controllers but also as motivators and role models in creating a positive work environment. In this context, the applied leadership style will have a direct impact on the organizational climate, which is the psychological and social atmosphere felt by employees in carrying out their duties. A healthy organizational climate can increase job satisfaction, loyalty, and employee performance, while a poor organizational climate can cause conflict, work stress, and decreased productivity. An unpleasant work environment will cause employees to have decreased performance, and the time to achieve given tasks may not align with set targets, making the implemented work system ineffective and inefficient. Conversely, a pleasant work environment will have a positive impact on both the individual and the company, so employees gain satisfaction in their performance achievements and the company also achieves its intended goals.

Furthermore, leadership style also influences work ethic, which is an individual's attitude and spirit in carrying out work that reflects the values of hard work, discipline, responsibility, and dedication. High work ethic is crucial, especially in a public organization environment tasked with providing services to the community. Employees with good work ethic tend to show higher commitment, integrity, and productivity. However, the formation of work ethic cannot be separated from the leader's role in providing examples, motivation, and reinforcing positive work values. In the context of government organizations, such as the Belawan Main Harbormaster and Port Authority Office (KSOP), the role of leadership style becomes even more crucial. As a government agency under the Ministry of Transportation of the Republic of Indonesia, KSOP has a strategic role in regulating, supervising, and controlling port activities and shipping safety. Given the complexity and dynamics of the work, leaders are needed who can create a conducive work climate and build sustainable employee work ethic. Employee performance in this organization is not only assessed based on work results but also on discipline, responsibility, and the ability to cooperate and adapt in facing challenges.

However, in reality, many problems are still found regarding organizational climate and low work ethic that can hinder the achievement of institutional goals. Disharmony in work relationships, low motivation, and lack of employee involvement often indicate that the applied leadership style is not fully effective in creating a positive work environment. Therefore, it is crucial to thoroughly examine the relationship between leadership style, organizational climate, and work ethic. This study aims not only to determine the direct influence of leadership style on organizational climate and work ethic but also to test the role of work ethic as an intervening variable that bridges the influence between leadership style and organizational climate. By understanding this intervening role, organizations can formulate more appropriate leadership strategies to improve employee work ethic and create a healthy and productive organizational climate. It is hoped that the results of this study can provide practical contributions to the leadership of the Belawan Main KSOP in developing adaptive, humanistic, and

performance-oriented leadership styles to achieve optimal employee performance, as well as provide academic contributions to the development of human resource management science, especially in the public service sector. To strengthen the background, a pre-survey was conducted as follows:

Table 1. Pre-survey of Organizational Climate Variable (Y)

No	Statement	Yes	o	Yes (%)	No (%)
1	Organizational structure supports smooth task execution	9	21	30,0%	70,0%
2	The organization has clear work standards	8	22	26,7%	73,3%
3	I receive responsibilities that match my tasks	10	20	33,3%	66,7%

Based on Table 1, the pre-survey results for the organizational climate variable show that the majority of respondents answered No for all indicators. 70% of respondents assessed that the organizational structure does not yet support smooth task execution, 73.3% assessed that the organization does not yet have clear work standards, and 66.7% feel they have not received responsibilities that match their tasks. These findings indicate that the organizational climate is not yet optimal in supporting employee work execution.

Table 2. Pre-survey of Work Ethic Variable (Z)

No	Statement	Yes	No	Yes (%)	No (%)
1	I have good discipline in completing tasks	13	17	43,3%	56,7%
2	I have a sense of responsibility towards my work	12	18	40,0%	60,0%
3	I work hard to achieve work targets	10	20	33,3%	66,7%

Based on Table 2, the pre-survey for the work ethic variable shows that most respondents answered No for all three indicators. 56.7% of respondents assessed that discipline in completing tasks is still lacking, 60% assessed that the sense of responsibility towards work is not yet optimal, and 66.7% stated they do not work hard to achieve work targets. These findings indicate that employee work ethic still needs improvement.

Table 3. Pre-survey of Leadership Style Variable (X1)

No	Statement	Yes	No	Yes (%)	No (%)
1	The leader provides clear direction in task execution	10	20	33,3%	66,7%
2	The leader is able to motivate subordinates	8	22	26,7%	73,3%
3	The leader is able to make decisions appropriately	12	18	40,0%	60,0%

Based on Table 3, the pre-survey results show that respondents' perception of leadership style tends to be negative. 66.7% of respondents assessed that leaders do not yet provide clear direction in task execution, 73.3% assessed that leaders are not yet able to motivate subordinates, and 60% assessed that leaders are not yet able to make decisions appropriately. These findings indicate that the leadership style has not been applied effectively.

Table 4. Pre-survey of Work Environment Variable (X2)

No	Statement	Yes	No	Yes (%)	No (%)
1	Lighting in the workplace supports work smoothness	11	19	36,7%	63,3%
2	Air circulation in the workplace is quite good	9	21	30,0%	70,0%
3	The noise level in the workplace does not disturb work	7	23	23,3%	76,7%

Based on Table 4, the pre-survey for the work environment variable shows that the majority of respondents answered **No** for all indicators. **63.3%** of respondents assessed that lighting does not yet support work smoothness, **70%** assessed that air circulation is not yet good enough, and **76.7%** stated that the noise level still disturbs work. These findings show that work environment conditions do not yet optimally support task execution.

Problem Identification

The problem identification in this study is as follows:

1. Leadership Style (X1)

Based on pre-survey results, weaknesses are still found in the organization's leadership style. Leaders are assessed as not yet able to provide clear direction, not optimal in motivating subordinates, and not precise in decision-making. This condition indicates that the applied leadership style is not yet effective in supporting employee work execution.

2. Work Environment (X2)

The work environment also shows significant problems. Respondents assessed that lighting still does not support work smoothness, air circulation is not good, and the

noise level is quite disturbing. This indicates that the work environment is not yet conducive for employees to carry out their tasks optimally.

3. Work Ethic (Z)

Problems also arise in employee work ethic. Discipline in completing tasks is assessed as still low, a sense of responsibility towards work is not yet optimal, and efforts to work hard to achieve targets are not yet maximal. This phenomenon indicates that employee work ethic needs attention so that performance can be improved.

4. Organizational Climate (Y)

The organizational climate is also not yet well-formed. The organizational structure is assessed as not supporting work smoothness, work standards are unclear, and work responsibilities do not match tasks. This condition indicates that the organizational climate is not yet able to create a work atmosphere that supports effectiveness and coordination among employees.

Problem Formulation

After outlining the research background, the problem formulation will be made. The problem formulation in this study is as follows:

1. Does Leadership Style have a positive and significant influence on Organizational Climate at the Belawan Harbormaster and Main Port Authority Office?
2. Does Work Environment have a positive and significant influence on Organizational Climate at the Belawan Harbormaster and Main Port Authority Office?
3. Does Leadership Style have a positive and significant influence on Work Ethic at the Belawan Harbormaster and Main Port Authority Office?
4. Does Work Environment have a positive and significant influence on Work Ethic at the Belawan Harbormaster and Main Port Authority Office?
5. Does Work Ethic have a positive and significant influence on Organizational Climate at the Belawan Harbormaster and Main Port Authority Office?
6. Does Leadership Style have a positive and significant influence on Organizational Climate with Work Ethic as an intervening variable at the Belawan Harbormaster and Main Port Authority Office?
7. Does Work Environment have a positive and significant influence on Organizational Climate with Work Ethic as an intervening variable at the Belawan Harbormaster and Main Port Authority Office?

Research Objectives

Based on the problem formulation and background, the objectives of this research are as follows:

1. To test and analyze the influence of Leadership Style on Organizational Climate at the Belawan Harbormaster and Main Port Authority Office.
2. To test and analyze the influence of Work Environment on Organizational Climate at the Belawan Harbormaster and Main Port Authority Office.

3. To test and analyze the influence of Leadership Style on Work Ethic at the Belawan Harbormaster and Main Port Authority Office.
4. To test and analyze the influence of Work Environment on Work Ethic at the Belawan Harbormaster and Main Port Authority Office.
5. To test and analyze the influence of Work Ethic on Organizational Climate at the Belawan Harbormaster and Main Port Authority Office.
6. To test and analyze the influence of Leadership Style on Organizational Climate with Work Ethic as an intervening variable at the Belawan Harbormaster and Main Port Authority Office.
7. To test and analyze the influence of Work Environment on Organizational Climate with Work Ethic as an intervening variable at the Belawan Harbormaster and Main Port Authority Office.

Research Benefits

This research has several benefits based on theoretical foundations regarding leadership style, work environment, work ethic, and organizational climate as follows:

1. This research is beneficial for strengthening the theory explaining that leadership style and work environment are important factors in forming organizational climate. Theoretically, organizational climate is influenced by interpersonal processes, organizational structure, communication patterns, and work conditions. Therefore, this research provides a contribution in empirically testing the relationships between these variables.
2. This research also provides theoretical benefits in developing the concept of work ethic as an intervening variable. In theoretical foundations, work ethic is considered capable of mediating the relationship between organizational factors (such as leadership style and work environment) and organizational outcomes such as organizational climate. These findings can enrich conceptual models explaining the internal mechanisms of organizational climate formation in government agencies.
3. As research in the field of organizational behavior, this research can add to the literature in HRM theory development, especially in the context of the public sector and port service agencies. This is important, considering most related theories are still studied in the private sector, while the public sector has different bureaucratic and structural characteristics.
4. Theoretical foundations regarding leadership style, work environment, work ethic, and organizational climate are generally developed in the context of companies or business organizations. This research provides benefits in testing to what extent these theories are relevant when applied to government agencies such as the Belawan Harbormaster and Main Port Authority Office, which has service, regulatory, and law enforcement characteristics in the port sector.

Literature Review

Organizational Climate

Definition of Organizational Climate

According to Wirawan (2018), organizational climate is the perception held by individuals of the internal work environment of an organization that is consistently felt by organizational members and influences their motivation, attitudes, and work behavior. According to Sopiah (2020), organizational climate is the psychological and social atmosphere in the work environment felt by individuals and groups within the organization, which influences work spirit, satisfaction, and productivity. A positive organizational climate creates a healthy and conducive work environment.

Indicators of Organizational Climate

According to Wirawan (2018), indicators of organizational climate are as follows:

1. Structure The clarity of roles, rules, and work procedures applicable within the organization.
2. Standards The level of organizational expectations for employee work quality and productivity.
3. Responsibility The extent to which employees are given freedom to make decisions and carry out tasks independently.
4. Reward The availability and fairness of the reward system for employee work achievements, both material and non-material.
5. Support The level of support provided by superiors, coworkers, and the organization as a whole for employee needs and task execution.
6. Commitment The level of loyalty and sense of belonging employees have towards the organization where they work.

Factors Influencing Organizational Climate

According to Wirawan (2018), organizational climate is the perception of members towards the internal environment of the organization. Factors influencing it include:

1. Organizational structure
2. Work policies and rules
3. Communication patterns within the organization
4. Leadership style
5. Inter-employee relationships
6. Physical work environment and facilities
7. Organizational culture
8. Reward and performance appraisal systems

Leadership Style

Definition of Leadership Style

According to Gibson et al. (2020), leadership style is an individual's approach in providing direction, implementing plans, and motivating people. Each leader has a different style depending on personality, experience, and the situation faced in the organization.

Robbins and Judge (2019) propose that leadership style is a consistent pattern of behavior shown by a leader when influencing, motivating, and directing others. Leadership style affects team effectiveness and the achievement of organizational goals.

Indicators of Leadership Style

According to Gibson et al. (2020), leadership style can be measured with the following indicators:

1. Directing Ability The leader's ability to provide clear and firm direction to subordinates to achieve organizational goals.
2. Motivating Ability The leader's ability to arouse work spirit, enthusiasm, and employee commitment towards their tasks and responsibilities.
3. Decision-Making Ability The leader's ability to make appropriate, quick, and well-informed decisions.
4. Communication Skill The leader's ability to effectively and openly convey ideas, vision, instructions, and feedback to all team members.
5. Modeling Behavior The leader's ability to be a role model or example of good work behavior for subordinates, such as integrity, discipline, and hard work.

Factors Influencing Leadership Style

Based on the definition by Gibson et al. (2020) that leadership style is related to the leader's ability to provide direction, implement plans, and motivate subordinates, factors influencing leadership style include:

1. Leader's personality traits
2. Leader's work experience and background
3. Organizational situation and condition
4. Subordinates' needs and characteristics
5. Organizational culture
6. Organizational structure
7. Leader's managerial competency and ability

Work Environment

Definition of Work Environment

According to Sedarmayanti (2017), the work environment is the entirety of tools and materials encountered, the surrounding environment where a person works, work methods, and work arrangements both individually and as a group.

Indicators of Work Environment

According to Sedarmayanti (2017), indicators of work environment are as follows:

1. Lighting in the workplace.
Lighting or illumination is very beneficial for employees to obtain safety and work smoothness, therefore it is necessary to pay attention to lighting that is bright but not glaring.

2. Air circulation in the workplace.
Oxygen is a gas needed by living beings to sustain life, for the metabolic process. The surrounding air is considered dirty if the oxygen content in that air has decreased and has mixed with gases or odors harmful to health.
3. Noise in the workplace. One type of pollution that quite preoccupies experts to overcome is noise, which is unwanted sound to the ear. Especially in the long term, such sound can disturb work calmness, damage hearing, and cause communication errors; even according to research, serious noise can cause death.
4. Unpleasant odors in the workplace. The presence of odors around the workplace can be considered pollution because it can disturb work concentration. Continuously occurring odors can affect olfactory sensitivity.
5. Security in the workplace.
To keep the workplace and environmental conditions safe, it is necessary to pay attention to security at work. Therefore, security factors need to be realized. One way to maintain workplace security is by utilizing security personnel.

Factors Influencing Work Environment

According to Sedarmayanti (2017), the work environment includes work tools, physical conditions, work methods, and work arrangements. Thus, factors influencing the work environment can include:

1. Physical work factors, such as lighting, temperature, air circulation, and noise
2. Room layout and work layout factors
3. Work equipment and facilities factors
4. Inter-employee relationship factors (social environment)
5. Work methods and systems factors
6. Organizational work policies and procedures factors

Work Ethic

Definition of Work Ethic

According to Sinambela (2017), work ethic is a mental attitude reflecting the belief that work is an important and noble thing, carried out with full responsibility, discipline, and high spirit. Work ethic forms the basis for shaping productive work behavior. According to Priansa (2019), work ethic is the character or value possessed by an individual towards work that drives them to work professionally, honestly, and with full dedication. Work ethic plays an important role in determining the quality and results of a person's work.

Indicators of Work Ethic

According to Priansa (2019), indicators of work ethic include:

1. Discipline Compliance with rules and work time set by the organization.
2. Responsibility The ability to complete tasks and obligations according to expected standards without needing constant supervision.
3. Hard Work Spirit and perseverance in completing work even when facing challenges or pressure.

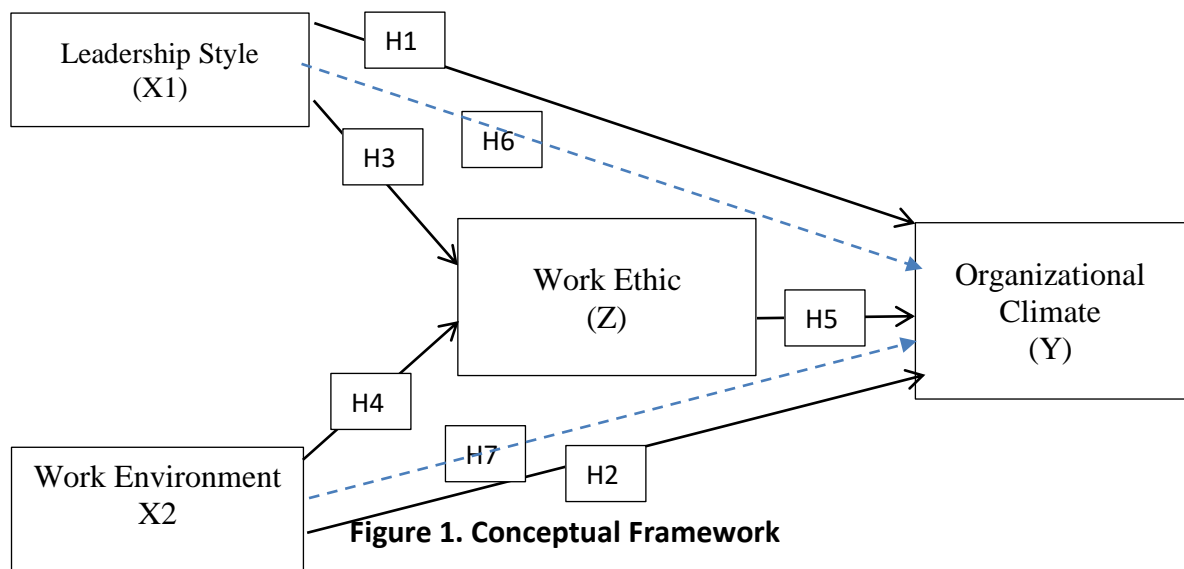
4. Honesty Showing integrity and openness in work, and avoiding fraudulent actions.
5. Commitment Sincerity and loyalty in carrying out work and willingness to contribute to organizational progress.
6. Professionalism Acting and behaving according to work ethics and having competence in carrying out tasks efficiently and effectively.

Factors Influencing Work Ethic

Referring to Priansa's (2019) view that work ethic is character and value towards work, work ethic is influenced by:

1. Individual values and morals
2. Internal work motivation
3. Organizational culture
4. Work experience and habituation
5. Leadership and managerial style
6. Physical and social work environment
7. Reward and incentive systems

Conceptual Framework



Hypotheses

Based on the conceptual framework that has been drawn, the research hypotheses will be formulated. The research hypotheses are as follows:

- H1 : Leadership Style has a positive and significant influence on Organizational Climate at the Belawan Harbormaster and Main Port Authority Office.
- H2 : Work Environment has a positive and significant influence on Organizational Climate at the Belawan Harbormaster and Main Port Authority Office.

H3 : Leadership Style has a positive and significant influence on Work Ethic at the Belawan Harbormaster and Main Port Authority Office.

H4 : Work Environment has a positive and significant influence on Work Ethic at the Belawan Harbormaster and Main Port Authority Office.

H5 : Work Ethic has a positive and significant influence on Organizational Climate at the Belawan Harbormaster and Main Port Authority Office.

H6 : Leadership Style has a positive and significant influence on Organizational Climate with Work Ethic as an intervening variable at the Belawan Harbormaster and Main Port Authority Office.

H7 : Work Environment has a positive and significant influence on Organizational Climate with Work Ethic as an intervening variable at the Belawan Harbormaster and Main Port Authority Office.

Research Methodology

Research Type

The type of research used by the researcher is quantitative research. According to Sugiyono (2017), quantitative research can be defined as a method based on the philosophy of positivism, used to study a specific population or sample, sampling techniques are generally done randomly, data collection uses research instruments, data analysis is quantitative/statistical with the aim of testing predetermined hypotheses. This quantitative research type is conducted to create a study aimed at adjusting a research.

Research Location and Time

The research location is at the Belawan Harbormaster and Main Port Authority Office, Jalan Deli, Medan Belawan District, Zip Code 20411. The research will be conducted starting in June 2025.

Population

According to Sugiyono (2017), population is a generalization area consisting of objects or subjects that have certain qualities and characteristics determined by the researcher to be studied and then conclusions are drawn. The population and sample in this study are employees of the Belawan Harbormaster and Main Port Authority Office, totaling 244 employees.

Sample

Because the number of respondents is more than one hundred, sampling is done using the Slovin formula as follows:

$$n = 244 / (1 + 244 \times 0,05^2)$$

$$n = 244 / (1 + 244 \times 0,0025)$$

$$n = 244 / (1 + 0,61)$$

$$n = 244 / 1,61$$

$n = 151,552$ This means the sample to be used is 151 employees.

Table 5. Number of Sample

Section	Number of Employees	Number of Respondents
1.Administration	53	$53/244 \times 151 = 33$
2.Supervision and Enforcement	92	$92/244 \times 151 = 57$
3.Sea Transportation Traffic	65	$65/244 \times 151 = 40$
4.Shipping and Seafaring	34	$34/244 \times 151 = 21$
Total	244	151

Source : Data diolah (2025)

Research Data Sources

The data source used in this research is primary data. According to Sugiyono (2017) in his book "*Metode Penelitian Kuantitatif, Kualitatif, dan R&D*", primary data is data obtained directly from the first source, either through interviews, observation, or questionnaires.

Data Collection Technique

Data collection technique uses questionnaire distribution. According to Sugiyono (2017) in his book "*Metode Penelitian Kuantitatif, Kualitatif, dan R&D*", a questionnaire is a data collection technique carried out by giving a set of written questions or statements to respondents to answer. Questionnaires are used to obtain primary data related to the research variables. This technique is suitable for quantitative research involving a large number of respondents because it can collect data efficiently and uniformly. In this study, the questionnaire is arranged in the form of a Likert scale providing five answer choices, namely:

Table 6. Likert Scale

Score	Answer Choice	Scale
1	Strongly Disagree	Likert
2	Disagree	Likert
3	Neutral	Likert
4	Agree	Likert
5	Strongly Agree	Likert

Operational Definition of Research Variables

Table 7. Operational Definition of Variables

Variable Type	Definition	Indicators
Organizational Climate (Y)	According to Wirawan (2018), organizational climate is the perception held by individuals of the internal work environment of an organization that is consistently felt by organizational members and influences their motivation, attitudes, and work behavior.	<ol style="list-style-type: none"> 1. Structure 2. Standards 3. Responsibility 4. Reward 5. Support 6. Commitment (Wirawan, 2018)
Leadership Style (X1)	According to Gibson et al. (2020), leadership style is an individual's approach in providing direction, implementing plans, and motivating people. Each leader has a different style depending on personality, experience, and the situation faced in the organization.	<ol style="list-style-type: none"> 1. Directing Ability 2. Motivating Ability 3. Decision-Making Ability 4. Communication Skill 5. Modeling Behavior (Gibson et al., 2020)
Work Environment (X2)	According to Sedarmayanti (2017), the work environment is the entirety of tools and materials encountered, the surrounding environment where a person works, work methods, and work arrangements both individually and as a group.	<ol style="list-style-type: none"> 1. Lighting in the workplace 2. Air circulation in the workplace 3. Noise in the workplace 4. Unpleasant odors in the workplace 5. Security in the workplace (Sedarmayanti, 2017)
Work Ethic (Z)	According to Priansa (2019), work ethic is the character or value possessed	<ol style="list-style-type: none"> 1. Discipline 2. Responsibility 3. Hard Work

	by an individual towards work that drives them to work professionally, honestly, and with full dedication.	4. Honesty 5. Commitment 6. Professionalism (Priansa, 2019)
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Data Analysis Technique

Data analysis in this study uses Structural Equation Modeling (SEM) based on Partial Least Square (PLS) using SmartPLS 3.3.3 software. According to (Gozali, 2014), Partial Least Square (PLS) is a fairly robust analysis method because it is not based on many assumptions.

Measurement Model (Outer Model)

Procedures in testing the measurement model consist of validity and reliability tests.

1. Validity Test
 - a. Convergent Validity
 - b. Discriminant Validity
2. Reliability Test

The Cronbach's alpha value is recommended to be greater than 0.7, and composite reliability is also recommended to be greater than 0.7 (Sekaran, 2015).

Structural Model (Inner Model)

This test is conducted to determine the relationship between exogenous and endogenous constructs that have become hypotheses in this research (Hair et al., 2017). To produce inner model testing values, the steps in SmartPLS are done using the bootstrapping method. The structural model is evaluated using R-square for dependent variables, Stone-Geisser Q-square test for predictive relevance, and t-test and significance of structural path coefficient parameters with explanations as follows:

1. Coefficient of Determination / R Square (R^2)

In assessing the model with PLS, it begins by looking at R-square for each dependent latent variable. Its interpretation is the same as in regression. Changes in R-square value can be used to assess the influence of certain independent latent variables on dependent latent variables, whether they have a substantive influence (Ghozali, 2012). The R^2 value is generally between 0 and 1.

2. Predictive Relevance (Q^2)

This test is used to measure how well observed values are generated by the model and its parameter estimates. If the Q^2 value is greater than 0, it indicates the model has predictive relevance, meaning it has good observational values, while if the value is less than 0, it indicates the model does not have predictive relevance (Ghozali, 2015).

3. t-Statistic

This stage is used for hypothesis testing to determine the significance of relationships between variables in the research using the bootstrapping method. In the full Structural Equation Modeling model, besides confirming theory, it also explains the existence or absence of relationships between latent variables (Ghozali, 2015). A hypothesis is said to be accepted if the t-statistic value is greater than the t-table. According to (Latan and Ghozali, 2015), the t-table value criterion is 1.96 with a 5% significance level.

4. Path Coefficient

This test is used to determine the direction of the relationship between variables (positive/negative). If the value is between 0 and 1, then the direction of the relationship between variables is stated as positive. Whereas if the value is between 0 and -1, then the direction of the relationship between variables is stated as negative.

Results and Discussion

Outer Model Analysis

Measurement model (outer model) testing is used to determine the relationship between latent variables and observed variables. This testing consists of convergent validity, discriminant validity, and reliability.

Convergent Validity

Convergent validity is used to assess the validity of each indicator towards its underlying latent variable. Validity results can be seen in the outer loading table in SmartPLS software. The outer loading table contains numbers or values indicating the similarity between indicators and construct variables. An indicator is said to be reliable if it has a value greater than 0.7 in explaining the construct variable. The structural model illustration is depicted in the upcoming figure for this research.

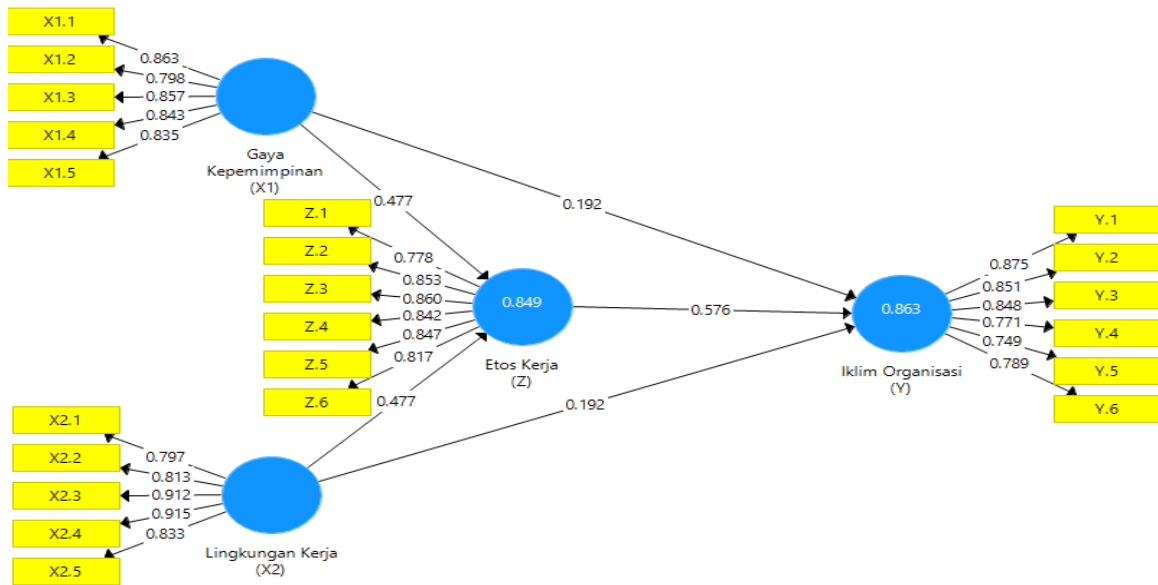


Figure 2. Outer Model

Source: Smart PLS 3.3.3

Smart PLS output for loading factor provides results in the following table: Outer Loadings

In this study, there are equations and the equation consists of two substructures. For substructure 1:

$$Z = b1X1 + b2X2 + e1$$

$$Z = 0,477 + 0,477 + e1$$

For substructure 2:

$$Y = b3X1 + b4X2 + b5Z + e2$$

$$Y = 0,192 + 0,192 + 0,576 + e2$$

Table 8. Outer Loadings

	Work Ethic_(Z)	Leadership Style_(X1)	Organizational Climate_(Y)	Work Environment_(X2)
X1.1		0,863		
X1.2		0,798		
X1.3		0,857		
X1.4		0,843		
X1.5		0,835		
X2.1				0,797
X2.2				0,813

X2.3				0,912
X2.4				0,915
X2.5				0,833
Y.1			0,875	
Y.2			0,851	
Y.3			0,848	
Y.4			0,771	
Y.5			0,749	
Y.6			0,789	
Z.1	0,778			
Z.2	0,853			
Z.3	0,860			
Z.4	0,842			
Z.5	0,847			
Z.6	0,817			

Source: Smart PLS 3.3.3

Based on the outer loadings results, all indicators for the Leadership Style (X1) variable show strong loading values ranging from 0.798 to 0.863, indicating that all statement items are able to reflect their construct well. The Work Environment (X2) variable also has high loading values between 0.797 and 0.915, showing very good indicator contributions in explaining that variable. For the Organizational Climate (Y) variable, outer loadings values are in the range of 0.749 to 0.875, meaning the indicators are considered valid although there is variation in strength among items. Meanwhile, the Work Ethic (Z) variable has consistently high outer loadings values between 0.778 and 0.860, affirming that all indicators have a strong relationship to the work ethic construct. Overall, all indicators in the table have met the convergent validity criteria because they have outer loading values above 0.70, so it can be concluded that these indicators are suitable for use in the research model.

Discriminant Validity

Analyzing the cross loading table can help determine discriminant validity. These results are used to assess discriminant validity at the indicator level, where the indicator should have a higher correlation with its latent variable compared to other latent variables (outside the block). To understand better, see the table available below:

Table 9. Discriminant Validity

	Work Ethic_(Z)	Leadership Style_(X1)	Organizational Climate_(Y)	Work Environment_(X2)
X1.1	0,812	0,863	0,774	0,811
X1.2	0,772	0,798	0,774	0,698
X1.3	0,699	0,857	0,681	0,687
X1.4	0,696	0,843	0,678	0,685
X1.5	0,744	0,835	0,738	0,751
X2.1	0,656	0,684	0,689	0,797
X2.2	0,718	0,645	0,718	0,813
X2.3	0,834	0,798	0,790	0,912
X2.4	0,822	0,822	0,802	0,915
X2.5	0,766	0,754	0,723	0,833
Y.1	0,836	0,788	0,875	0,795
Y.2	0,790	0,747	0,851	0,759
Y.3	0,799	0,752	0,848	0,766
Y.4	0,713	0,670	0,771	0,632
Y.5	0,653	0,618	0,749	0,602
Y.6	0,677	0,669	0,789	0,683
Z.1	0,778	0,695	0,708	0,758
Z.2	0,853	0,751	0,750	0,780
Z.3	0,860	0,716	0,772	0,723
Z.4	0,842	0,754	0,791	0,742
Z.5	0,847	0,789	0,786	0,767
Z.6	0,817	0,744	0,778	0,683

Source: Smart PLS 3.3.3

Results uji discriminant validity menunjukkan bahwa nilai loading indikator on konstraknya masing-masing lebih tinggi dibandingkan nilai korelasi dengan konstruk lain. Hal ini terlihat terutama pada indikator variabel Leadership Style (X1), Work Environment (X2), Organizational Climate (Y), dan Work Ethic (Z), di mana setiap indikator memiliki nilai tertinggi pada kolom konstruk asalnya. Temuan ini mengindikasikan bahwa setiap konstruk dalam model mampu membedakan diri secara jelas dari konstruk lainnya. Dengan demikian, dapat disimpulkan bahwa discriminant validity pada model telah terpenuhi dan variabel penelitian No mengalami masalah multikolinearitas antar konstruk.

Composite reliability

Penilaian yang akan datang menghitung nilai reliabilitas dengan mempertimbangkan reliabilitas komposit masing-masing komponen. Konstruk dikatakan reliabel jika nilai reliabilitas komposit sama dengan atau melebihi 0,6. Jika nilai Cronbach alpha melebihi 0,7 maka seluruh konstruk dalam blok tersebut dianggap reliabel pada setiap konstruk variabel. Selanjutnya jika nilai AVE lebih tinggi dari 0,7 maka setiap konstruk variabel dianggap valid. Table berikut menyajikan nilai pemuatan konstruk variabel penelitian yang diperoleh dari penggunaan perangkat lunak Smart PLS.

Table 10. Construct Reliability and Validity

	Cronbach's Alpha	Reliabilitas Komposit	Rata-rata Varians Diekstrak (AVE)
Work Ethic_(Z)	0,912	0,932	0,694
Leadership Style_(X1)	0,895	0,923	0,705
Organizational Climate_(Y)	0,898	0,922	0,664
Work Environment_(X2)	0,907	0,931	0,732

Source: Smart PLS 3.3.3

Based on the results of reliability and construct validity testing, all research variables show Cronbach's Alpha and Composite Reliability values above 0.80, indicating a very good level of internal consistency of the instrument. In addition, the Average Variance Extracted (AVE) value for all variables is above 0.50, thus meeting the convergent validity criteria. Therefore, it can be concluded that the measurement instruments for the Work Ethic, Leadership Style, Organizational Climate, and Work Environment variables are declared reliable and valid for use in the research.

Analysis of Inner Model

Assessment of the inner model is done to verify the stability and accuracy of the created structural model. Several indicators are used in the evaluation of the structural model for the analysis stage.

Coefficient of Determination (R2)

The results of data analysis conducted using SmartPLS 3.0 software show the R Square values as follows:

Table.11. R Square Results

	R Square	Adjusted R Square
Work Ethic_(Z)	0,849	0,847
Organizational Climate_(Y)	0,863	0,860

Source: Smart PLS 3.3.3

The R Square values show that the independent variables in the model are able to explain the Work Ethic variable (Z) by 84.9% and the Organizational Climate variable (Y) by 86.3%, while the remainder is influenced by other factors outside the research model. The Adjusted R Square values, which are not far different, indicate that the model has a strong and stable level of feasibility in explaining the dependent variable. Overall, these results indicate that the predictive ability of the model is very good.

Hypothesis Testing

After examining the internal model, the next step is to evaluate the relationships between latent constructs according to the hypotheses in this research. Hypothesis analysis in this research uses T-Statistics and P-Values. A hypothesis is considered accepted if the T-Statistics value is > 1.96 and the P-Value is < 0.05 . This is the output of Path Coefficients for direct effects:

Table 12 Path Coefficients (The Influence of Langsung)

	Original Sample (O)	T Statistics (O/STDEV)	P Values	Results
Work Ethic_(Z) -> Organizational Climate_(Y)	0,576	7,785	0,000	Accepted
Leadership Style_(X1) -> Work Ethic_(Z)	0,477	7,261	0,000	Accepted
Leadership Style_(X1) -> Organizational Climate_(Y)	0,192	2,659	0,004	Accepted
Work Environment_(X2) -> Work Ethic_(Z)	0,477	7,302	0,000	Accepted
Work Environment_(X2) -> Organizational Climate_(Y)	0,192	3,019	0,001	Accepted

Source: Smart PLS 3.3.3

1. The Influence of Work Ethic on Organizational Climate

The results show that Work Ethic has a positive and significant influence on Organizational Climate with a T Statistic value of 7.785 and a P Value of 0.000. This means that the better the employee's work ethic, the more positive the organizational climate that is formed. The hypothesis is stated as accepted.

2. The Influence of Leadership Style on Work Ethic

Leadership Style has a positive and significant influence on Work Ethic with a T Statistic value of 7.261 and a P Value of 0.000. This means that the application of appropriate leadership style can improve employee work ethic. The hypothesis is stated as accepted.

3. The Influence of Leadership Style on Organizational Climate

Leadership Style also proves to have a positive and significant influence on Organizational Climate with a T Statistic of 2.659 and a P Value of 0.004. This shows that leaders play a role in forming a more conducive organizational atmosphere. The hypothesis is stated as accepted.

4. The Influence of Work Environment on Work Ethic

Work Environment has a positive and significant influence on Work Ethic with a T Statistic value of 7.302 and a P Value of 0.000. The better the work environment conditions, the higher the work ethic shown by employees. The hypothesis is stated as accepted.

5. The Influence of Work Environment on Organizational Climate

Work Environment also has a positive and significant influence on Organizational Climate, as indicated by a T Statistic value of 3.019 and a P Value of 0.001. Thus, a supportive work environment also strengthens the organizational climate. The hypothesis is stated as accepted.

Table 13. Path Coefficients Indirect Effects)

	Original Sample (O)	T Statistics (O/STDEV)	P Values	Results
Leadership Style_(X1) -> Work Ethic_(Z) -> Organizational Climate_(Y)	0,275	5,706	0,000	Accepted
Work Environment_(X2) -> Work Ethic_(Z) -> Organizational Climate_(Y)	0,274	5,061	0,000	Accepted

Source: Smart PLS 3.3.3

1. Indirect Influence of Leadership Style on Organizational Climate through Work Ethic

The results show that Leadership Style has a positive and significant indirect influence on Organizational Climate through Work Ethic with a T Statistic value of 5.706 and a P Value of 0.000. This means that Work Ethic is able to mediate the relationship between Leadership Style and Organizational Climate, so that the application of good leadership style can strengthen organizational climate through improving work ethic. The hypothesis is stated as accepted.

2. Indirect Influence of Work Environment on Organizational Climate through Work Ethic

Work Environment also proves to have a positive and significant indirect influence on Organizational Climate through Work Ethic with a T Statistic of 5.061 and a P Value of 0.000. These findings show that supportive work environment conditions can improve

employee work ethic, which in turn can create a better organizational climate. The hypothesis is stated as accepted.

Conclusion

The conclusions of this study are as follows:

1. Concludes that work ethic has a positive and significant influence on organizational climate, so the higher the employee's work ethic, the better the organizational climate that is formed.
2. Shows that leadership style has a positive and significant influence on work ethic, meaning that effective leadership can improve employee work ethic.
3. States that leadership style has a positive and significant influence on organizational climate, so good leadership style also contributes to creating a conducive organizational climate.
4. Proves that work environment has a positive and significant influence on work ethic, which means a comfortable and supportive work environment can improve employee work ethic.
5. Shows that work environment has a positive and significant influence on organizational climate, so good work conditions can improve the work atmosphere within the organization.
6. Proves the existence of an indirect influence of leadership style on organizational climate through work ethic, so work ethic acts as a mediator.
7. Shows that work environment has an indirect influence on organizational climate through work ethic, so work ethic also mediates the relationship between work environment and organizational climate.

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