

The Influence of the Work Environment and Work Discipline on the Continuous Professional Development of Employees at PT Samudra Utama Narapati

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Abstract

This study aims to analyze the influence of the work environment and work discipline on Continuous Professional Development. The methods used are descriptive and inferential quantitative approaches. The study population consists of 54 employees at the Tangerang branch of PT Samudra Utama Narapati; the sample was selected using a saturated sampling method. Data collection was conducted through questionnaires and observations. The results show that the work environment has no direct effect on Continuous Professional Development (CPD), indicating that employees' professional development is more influenced by internal factors, such as individual awareness and motivation. Work discipline has a positive and significant effect on CPD, suggesting that employees with high levels of discipline tend to be more active and motivated in improving their professional competencies. The work environment has a positive and significant effect on work discipline; a good work environment can increase employees' compliance and sense of responsibility at work. Work discipline was found to be a mediating variable in the relationship between the work environment and Continuous Professional Development. This study recommends establishing an annual training schedule, implementing a reward system, and developing a structured competency development system to effectively promote Continuous Professional Development.

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1. Introduction

Human resources are important assets that contribute greatly to the success and survival of a company. In the midst of increasingly fierce competition in the business world, changes in the way of working, and rapid technological advancements, manufacturing companies face a major challenge to improve the quality of their employee performance. Employees are required not only to have technical skills, but also the ability to continue learning, adapting, and improving professionalism on an ongoing basis or known as Continuous Professional Development (CPD). According to the British Computer Society (BCS) in Tanti (2021), Continuing Professional Development (CPD) is a systematic effort to maintain, improve and expand individual knowledge and skills.

Through Continuous Professional Development (CPD), employees are not only required to take part in formal training, but also be active in various self-competency improvement activities such as mentoring, coaching, discussions, and self-evaluation. The concept of Continuous Professional Development (CPD) is often equated with training, even though the two have fundamental differences. Training is part of Continuous Professional Development (CPD) but training is usually carried out in a certain time with the aim of improving skills or knowledge according to job needs in a relatively short period of time. While Continuous Professional Development (CPD) It has a wider and more sustainable scope because it covers all activities that can improve a person's professional competence throughout his or her career. Friedman, (2023), argues that Continuous Professional Development (CPD) is not only seen as momentary training, but as a continuous professional development process to support individual competence to change and the demands of work and organizational development. Musa et al. (2024), argue that Continuous Professional Development (CPD) plays a role in improving professional competence and lifelong learning.

On the other hand, sustainable professional development experiences obstacles in the world of work. Ababa's research, Nyelisani in Dea et al. (2026), states that obstacles in the implementation of Continuous Professional Development (CPD) include time constraints, budgets, low employee participation, heavy workloads, inadequate training facilities, lack of support from management, and the absence of well-structured Continuous Professional Development (CPD) guidelines.

The work environment has a role in encouraging Continuous Professional Development (CPD) Sedarmayanti in Liawati & Widowati (2021), stating that a non-physical work environment is a condition that occurs and is directly related to the work relationship, in order to create a harmonious relationship with the boss and with These are the same co-workers. Research by Aji et al. (2021) states that a good work environment has a significant effect on improving employee performance and work motivation.

In addition to the work environment, work discipline also has a strategic role to support the professional development of employees in an ongoing manner. As Murtiyoko & Tama (2025) say,

discipline is a top priority for the human resources department because productive employees and a disciplined workforce, will produce optimal performance and vice versa, the business will struggle to reach its maximum potential.

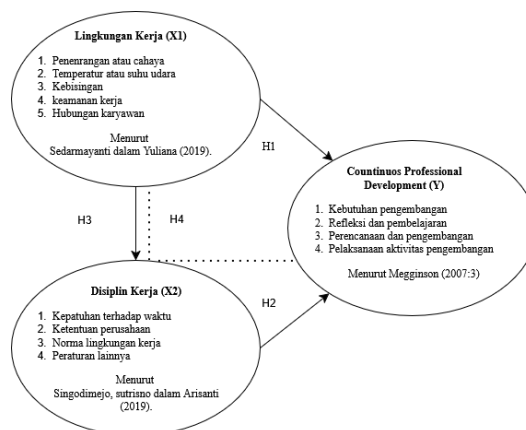
Based on the results of the pre-survey on employees of PT Samudra Utama Narapati related to the work environment, work discipline and Continuous Professional Development (CPD), it shows good conditions. However, there are several indicators that show a relatively low score related to the lack of equal distribution of training facilities by 20% in the Continuous Professional Development (CPD) variable, in the work discipline variable, 40% late working hours, 40% lack of precision, low compliance with company operational standards 46.7%, and ignoring work safety 26.7%. In the variables of the work environment, there are still obstacles such as misunderstandings and occupational safety risks that need to be considered further. This shows that there is a gap between ideal conditions and actual conditions in the company.

Previous research has also shown that the work environment and work discipline have a positive and significant impact on employee performance, both individually and simultaneously. Tiara et al. (2025), Nur et al., (2025) stated that work discipline has a positive and significant influence on employee performance, and research conducted by Kinasih et al., (2025), states that a conducive environment can increase employee productivity and work comfort.

The difference in the previous researcher's findings shows that there are still research gaps related to the differences in variables and objects used and need to be researched more deeply, based on the empirical conditions obtained from the results of the pre-survey and this study was conducted to analyze the influence of work environment and work discipline on the Continuous Professional Development of employees of PT Samudra Utama Narapati.

2. Research methods

This study uses a quantitative method with a descriptive approach. The data used consists of primary data and secondary data. Primary data were obtained through questionnaires and observations. Secondary data were obtained from scientific journals, books, and research relevant to the research topic. Data collection was carried out through the distribution of questionnaires to employees of PT Samudra Utama Narapati using Skla Likert 1-5, observation and literature review. The frame of thought is presented in the following image:



Picture 1 framework

The research population of 54 employees consisted of permanent employees and non-permanent employees, samples were taken using saturated samples. Data analysis was carried out using the Partial Least Square-Structural Equation Modeling (PLS-SEM) approach with the help of SmartPLS 4.0. in two main stages, namely the evaluation of the outer model including the test of

convergent validity, discriminant validity, and reliability, and the evaluation of the inner model including the R-Square, Path Coefficient, indirect effect, and effect size tests.

3. Results and Discussion

Observation Results

The results of observations show that the physical work environment in general has supported productivity, which is characterized by a wide spatial layout, adequate air circulation, optimal lighting, and controlled noise. Office space has better thermal comfort than production and packing areas that tend to be hot due to machine activity and the density of goods. Minor challenges were found in the cleanliness of the work area due to residual packaging materials and exposure to chemical aromas that have the potential to interfere with breathing comfort. Nevertheless, the psychosocial aspect (relationships between employees) is harmonious and conducive. From the aspect of K3, the company has mitigated work risks through the provision of personal protective equipment (PPE) as well as emergency response facilities such as fire extinguishers and P3K.

In the discipline of the job, employees seem to have a fairly good level of discipline. This can be seen from the timely and not late attendance and the use of appropriate attributes. The implementation of Continuing Professional Development (CPD) is still in the basic category and oriented towards daily operational needs. CPD activities include division-based mentoring, pre-employment briefings, monthly performance evaluations, and occupational safety training (fire management). Especially for technicians, the development of insights is facilitated through participation in machine technology exhibitions. However, the company's CPD program has not been comprehensively structured for the long term, and it still does not involve advanced training, certification programs, and ongoing external training.

Measurement model testing (outer model)

a. Convergent Validity

In testing the validity of convergence, there are two criteria that can be evaluated, namely using the loading factor value and the Average Variance Extracted (AVE) value.

1. Loading Factor

This test is performed to measure the correlation between indicators and variables. The limit of the eligibility (validity) value used is >0.70 ; Indicators that do not meet these criteria should be excluded from subsequent analysis.

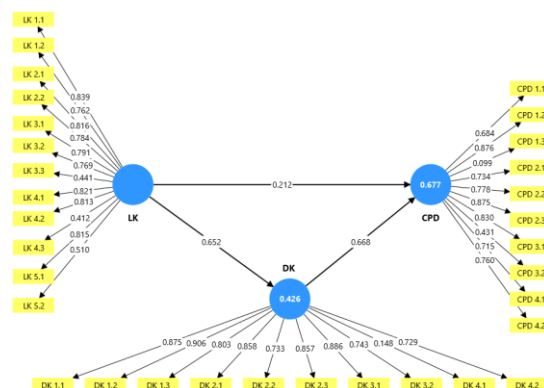


Figure 1 loading factor test

Based on the results of the data processing above, it shows that the instruments LK 3.3, LK 4.3, LK 5.2, DK 4.1, CPD 1.1, CPD 1.3, and CPD 3.2 have a value of > 0.70 which means that they do not meet the criteria so the instrument must be removed and retested. The following are the results of the Loading Factor phase 2 test:

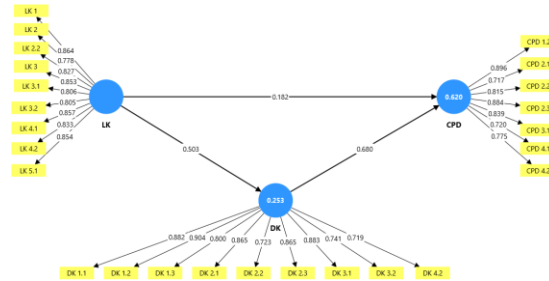


Figure 2 Phase 2 loading factor test

In the second stage of testing, all variable statements of work environment, work discipline, and Continuous Professional Development have a loading factor value of > 0.70 so that all statements are said to be valid. This shows that The used successfully improved the correlation between the indicator score and the construct, thereby strengthening the validity of the measurement model.

1. Average Variance Extracted (AVE)

If the value of the Average Variance Extracted (AVE) is greater than 0.50, then the variable is considered valid. Here are the results of the table:

Table 1 Convergent Validity of AVE results

Variabel		AVE	Remarks
Work	Envi- ronment	0.691	Valid
Work	Disci- pline	0.678	Valid
CPD		0.655	Valid

SmartPLS data processing source, 2026

The results of the AVE test showed that all variables were declared valid because they had a > 0.05 .

a. Validitas diskriminan

Discriminant Validity serves to ensure that a construct or variable in a model

Measurements really measure different aspects and don't overlap. To assess the validity of discriminants, three methods were used, namely Heterotrait-Monotrait Ratio (HTMT), Fornell-Larcker and Cross Loading

1. Uji HTMT

Table 2 HTMT Test

Variabel		CPD	DK	PAGE
CPD				
Work	Disci- pline	0,792		
Work	envi- ronment	0,544	0,504	

SmartPLS data processing source, 2026

Based on the results of the calculation of the discriminant validity test using the Heterotrait Monotrait Ratio (HTMT) method, it shows that all variable values are below the limit of 0.90. This means that this research has met discriminant validity.

2. Fornell Larcker, Criterion

Table 3 Fornell Larcker Test, Criterion

Variabel	CPD	DK	PAGE
CPD	0,809		
Work Discipline	0,771	0,823	
Work environment	0,524	0,504	0,831

SmartPLS data processing source, 2026

Based on the calculation of the fornell larcker test, it can be concluded that the results of the AVE square root research for each variable are greater than the correlation values between the other variables.

3. Cross Loading

An indicator is considered valid if the relationship of the indicator to its construct or variable has a higher cross loading value compared to the relationship with another construct. The following are the results of data processing with cross loading as follows:

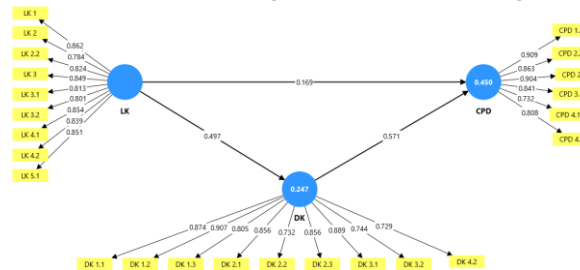


Figure 3 Cross loading test results

Based on the results of the cross loading test, it is known that most of the indicators on the variables of work environment, work discipline, and Continuous Professional Development (CPD) have a higher correlation value with their own variables compared to other variables.

2. Reliability Test

Reliability tests are used to ensure the accuracy, consistency, and precision of the instrument in measuring constructs by testing Cronbach's Alpha and Composite Reliability.

Tabel 4 Result Fornell Lacker Criteria

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)
Y	0.919	0.925	0.937

X2	0.940	0.948	0.950
X1	0.944	0.945	0.953

SmartPLS data processing source, 2026

It is known that Cronbach's Alpha and Composite Reliability values > 0.70 , so it can be concluded that all variables are reliable and suitable for use in further research.

Structural Model Testing (Inner Model)

1. R-Square

Table 5 R-Square result

Variabel	R-Square	R-Square adjusted
Y	0,450	0,428
X2	0,247	0,233

SmartPLS data processing source, 2026

These results show that 45% of CPD variables can be influenced by work environment and work discipline, while the remaining 55% are influenced by other variables outside of the one studied. In addition, the work discipline variable was influenced by the work environment variable by 24.7%, while the rest was influenced by other variables outside the variables studied.

2. Path Coefficients

This process uses the bootstrapping method, then the results will be presented in the form of a T-Statistic or P-Value, a hypothesis that is acceptable and significant if the P-Value is < 0.05 and the T-Statistic value is > 1.96 . The following test results are presented in the table below:

Table 6 Path Coefficients

	Original Sample (O)	Sample Mean (M)	(STDEV)	T-Statistic	P-Value
LK - > CPD	0,169	0,168	0,108	1,560	0,119
DK - > CPD	0,571	0,580	0,109	5,244	0,000
LK - > DK	0,497	0,497	0,160	3,102	0,002

SmartPLS data processing source, 2026

Based on the results of the hypothesis test using the bootstrapping method in the table above, it can be concluded that:

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H1 : It is suspected that the variables of the work environment do not have a direct effect on the variables of Continuous Professional Development of employees of PT Samudra Utama Narapati.

H2: It is suspected that the variable of work discipline has an effect on the variable of Continuous Professional Development of employees of PT Samudra Utama Narapati.

H3 : It is suspected that the variables of the work environment have an effect on the variables of the work discipline of employees of PT Samudra Utama Narapati

3. Indirect effects

Table 7 Indirect Effects

	Original Sample (O)	Sample Mean (M)	(STDE V)	T- Statistic	P-Value
X1 -> X2 -> Y	0,284	0,292	0,121	4,514	0,019

SmartPLS data processing source, 2026

Based on the results of the test of the indirect influence of the work environment on CPD through work discipline has a positive and positive effect, as evidenced by a T-statistical value of $4.514 > 1.96$ and a P-value of $0.019 < 0.05$. So that the hypothesis was accepted. And the original value of the sample of 0.284 has a positive effect on CPD through work discipline with a weak but significant influence.

4. Uji Effect Size (F-Square)

Effect Size (f^2) is used to determine the significant contribution of a variable that affects the endogenous R^2 value. The f^2 value of 0.02 is classified as a weak effect, 0.15 as a moderate effect, and 0.35 as a strong effect. There is no effect if the value is less than 0.02 Anwar et al., (2019).

Tabel 8 Effect Size test (F-Square)

Variabel	CPD	DK	LK
Continuous Professionla Development			
Work Discipline	0,445		
Work Environment	0,039	0,329	

SmartPLS data processing source, 2026

The results of the effect size test showed that the greatest influence was found in the relationship between work discipline and CPD with an f^2 value of 0.445 which was included in the large category. The influence of the work environment on work discipline is in the medium category, and the influence of the work environment on CPD, the CPD variable is in the small category.

Discussion

1. The Influence of the Work Environment on Continuous Professional Development

The results of the study showed that the work environment had no direct effect on Continuous Professional Development, as evidenced by the original sample value or path coefficient of 0.169, the T-Statistics value of $1.560 < 1.96$, and the P-Value of $0.0119 > 0.05$.

The results of this study are in line with the research conducted by Surjanti et al., (2018). The results of the study showed that the work environment did not have a significant effect on Continuous Professional Development, however, must be mediated by work stress variables.

5. The Effect of Work Discipline on Continuous Professional Development

The results of the study showed that work discipline had a positive and significant effect on Continuous Professional Development, as evidenced by the original sample value of 0.571, T-Statistics of 5.244, > 1.96 , and P-Value of $0.000 < 0.05$.

The results of this study are in line with the research conducted by Rasiman (2023), stating that work discipline has an effect on the sustainable professional development of madrasah teachers with a score of 68.9%, it can be concluded that the higher the level of discipline possessed by educators, the greater the influence on Continuous Professional Development activities.

Forms of work discipline in PT Samudra Utama Narapati that can encourage Continuous Professional Development are, namely high attendance rates, compliance with working hours, compliance with company operational standards and completion of tasks according to predetermined time, disciplined employees tend to be more organized, committed, and responsible.

3. The influence of the work environment on work discipline

The results of the study showed that the work environment had an effect on work discipline as evidenced by the original sample value of 0.497 with a T-Statistical value of $3.102 > 1.96$ and a P-value of $0.002 < 0.05$.

The results of this study are in line with research conducted by Dwi & Pamulang (2021), proving that a good work environment at PT Resindo has a positive and significant effect on employee discipline.

One of the forms of corporate support of PT Samudra Utama Narapati in encouraging employees to remain disciplined is a safe and comfortable work environment, the provision of good work facilities lengkap, hubungan yang harmonis, dan komunikasi yang baik.

4. The influence of the work environment on Continuous Professional Development through work discipline as a mediation variable

The results of the indirect influence test showed that the work environment variable had an effect on the Continuous Professional Development variable through the work discipline variable as a mediating variable as evidenced by the original sample value of 0.284, the T-statistical value of $2.351 > 1.96$, and the P-value of $0.009 < 0.05$.

This indicates that a good work environment cannot directly encourage and support employees to carry out continuous development, but first forms better work discipline behaviors. Employees who have good discipline tend to be more responsible, obey company rules, and actively engage in development activities

This finding is in line with the research of Surjanti et al., (2018) the results of research that prove that the work environment has a significant impact on Continuous Professional Development if through mediation variables, in the study the work stress variable is the intermediary.

6. Suggestions And Conclusions

Conclusion

Based on the results of the research, the work environment and work discipline are proven to have a positive and significant influence on Continuous Professional Development, at PT Sam-

udra Utama Narapati. These results show that 45% of Continuous Professional Development can be explained by these two variables, while the remaining 55% is influenced by other factors outside the study. other variables that were not studied.

Suggestions

Therefore, companies need to improve the work environment that can encourage work discipline, create an annual training schedule, establish an Individual Development Plan (IDP), implement a reward system, and develop a well-structured continuous training program.

In addition, the researcher is further expected to expand to add other variables that can support CPD, such as motivation variables, leadership, organizational culture, as well as expand the object and number of research samples, in addition it is recommended to be able to combine quantitative and qualitative methods through in-depth interviews in order to provide a broader picture of factors that can affect Continuous Professional Development (CPD).

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