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## **ANALYSIS OF THE EFFECT OF WORK STRESS AND WORK ENVIRONMENT ON EMPLOYEE PERFORMANCE (CASE STUDY IN PT INDOFOOD CBP SUKSES MAKMUR, TBK PLANT TANJUNG API-API PALEMBANG)**

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### **ABSTRACT**

#### **KEYWORDS**

work stress, work  
environment, performance

The purpose of this study was to obtain empirical evidence by analyzing the effect of work stress and work environment on employee performance at PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang. The sample in this study were employees of PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang with a population of 169 people. The sampling technique in this study was random sampling as many as 119 respondents. The analysis technique used is multiple linear regression analysis. The results of this study indicate that 1) work stress has a positive and significant effect on employee performance; 2) The work environment has a positive and significant effect on employee performance at PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang. Suggestions that can be submitted include 1) Need to evaluate in providing a workload that is in accordance with the jobdesk and responsibilities; 2) It is necessary to renew the room arrangement for the convenience of being in the workspace; 3) It is necessary to evaluate the addition of the number of human resources to reduce high stress due to workloads that exceed responsibilities

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### **INTRODUCTION**

For many companies, the era of the Industrial Revolution 4.0 is an absolute and unavoidable phenomenon. Companies must have a strategy that can change and innovate deals with all companies and businesses that have been built not squeezed by age and hampered development. The company must already have an integrated roadmap so that the direction of business development is clearly visible. Today the Indonesian government has also led a strategy that paved the way for Indonesia Industry 4.0. If it is associated with companies, issuing this strategy map is predicted as a solution to accelerate the development of national industries in this digital era (Desra, 2019).

The industrial revolution was first introduced by Prof. Klaus Schwab, founder and executive chairman of the World Economic Forum, in his book. He said that the era of the Industrial Revolution 4.0 will change most of human life. This revolution gave birth to super computers, self-driving vehicles, intelligent robots, the development of fully automated digital world neurotechnology and others. Now the reality of the world can be connected to the virtual world through the help of the internet. This causes various changes in human life, especially in the business world (Desra, 2019).

Technological advances in it have changed the face of the world's industry drastically. Improving the quality of human resources becomes very dominant for improvement, with the incessant changes in life to become completely digital, robots may

replace human work (World Economic Forum, 2018). But the dominance of robots will not occur in all sectors. Robots are still not able to take over work related to human interaction and knowledge (Borland, 2017). Therefore, companies need to prepare human resources to remain reliable in achieving success.

Employees should be encouraged to continuously learn and improve their knowledge of technology. Because the workforce is expected to be able to apply today's control technology to move forward. This is supported by the government's plan to overhaul the curriculum in Indonesia. Then Indonesian education places more emphasis on Science, Engineering Technology, Arts, mathematics and vocational schools (. Using digital technology as expected by the government, companies are able to use digital technologies such as Big Data, Autonomous Robots, Cybersecurity, Cloud, and Augmented Reality. This is a manifestation of three smart solutions in the face of the industrial revolution 4.0, smart foundations (legal entities in the field of education), smart processes, and smart connectivity. Companies must have a strategy of building a smart IT foundation and building a smart IT connectivity system. If successful overall this will be very helpful to improve work efficiency in the company. Even with the application of this technology, the company will be able to save costs around 12-15%.

In 2020 PT. Indofood CBP Sukses Makmur Tbk Tanjung Api-Api Palembang Plant will implement a robotic system which is the 2018 budget capex budget, in this case the impact is the efficiency of the packing section workforce in three shifts of the production process (warehouse department) of approximately 12 drafting staff The fall of goods from production to the finished good warehouse will be replaced by the industrial robotic system 4.0, the era of the industrial revolution for manufacturing businesses is very fast and will change in line with the company's goal to achieve efficiency. For developing countries like Indonesia, industry 4.0 can help simplify the production supply chain, which is very much needed to deal with increasing labor costs.

Resource development is basically an improvement in employee performance that reflects the employee's ability to work, which means that the performance of each employee is valued and measured according to the criteria determined by the company. Therefore, the company expects employees to excel and be able to create conducive conditions to improve performance with good targets, so that employees do not experience stress or fatigue, boredom and laziness. If increased stress can result in decreased employee performance, decreased performance can result in losses in the company.

The performance of an employee is not only measured by the level of success of his work but the increase in employee performance is also obtained from the pattern of the environment in which he works. Performance is a result achieved by employees in their work according to certain criteria that apply to a job (Robbins & Judge, 2017). According to Siagan in Setiawan (2014: 147), employee performance is influenced by several factors, namely: salary, work environment, organizational culture, work stress and work motivation, work discipline, job satisfaction, communication and other factors..

Employees will be able to achieve maximum performance if the employee has high achievement motivation, this motivation must come from oneself apart from the work environment. Work stress is a dynamic condition in which an individual is faced with an opportunity, demand or resource related to environmental conditions, organizational conditions and to a person (Robbins & Judge, 2017: 597). Unhealthy work

environment conditions can cause employees to be easily stressed, not enthusiastic to work, come late, and vice versa if the work environment is healthy, employees must be enthusiastic, not burdened, easy to concentrate.

**Table 1**  
**Employee Delay in PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang in 2018-2021**

No	Years	Total Number of Delays (Minutes)
1	2018	5.224
2	2019	3.659
3	2020	1.696
4	2021	3.230

Data Source: PT Indofood CBP Sukses Makmur, Tbk Plat Tanjung Api-api Palembang  
(Based on the Company's Operational Calendar)

Based on the data in Table 1 above, it can be seen data on employee delays in 2018 to 2021 with a total of 424 employees at the Tanjung Api-Api plant. It can be seen that in 2018 the highest total number of minutes of employees who were late was 5,224 minutes, this is certainly an evaluation for the HRD Department to provide this late report to the Head of the Department for evaluation, for those who are late more than three times, a warning letter will be given. So that the following year is expected to reduce the total delay. In addition, the authors conducted interviews with several staff of the accounting department, this happened because of the influence of lateness with work stress and work environment. Employees are less efficient in completing work, employees are always pressed for time to complete work, work environment and pressure and intimidation.

**Table 2**  
**Indications of Low Performance of Employees of PT Indofood CBP Sukses Makmur, Tbk Plat Tanjung Api-api Palembang**

No	Employee Indication	Low Performance	Number of people
1	Employees are less effective in completing work		75%
2	Employees feel pressed for time to complete work		75%
3	Work environment		60%
4	Pressure and intimidation		70%

Source: Employee Interview Results of PT Indofood Sukses Makmur, Tbk Plant Cape of Fire, 2020

Data supporting work stress with excessive workloads, in 2020 the HR department will review each department to make WLA (work load analysis) especially the Accounting and Admin sections of each department, this is to review whether the frequency of activities that have been carried out is normal or not, this is a review of the work that is daily, weekly and monthly viewed with the total time needed in the process.

Work load is the effort that must be expended by someone to meet the demands of the job.

**Table 3**  
**Review of Work Load Analysis Department of PT Indofood CBP Sukses Makmur, Tbk Plate Tanjung Api-api Palembang**

Month	Department	Number of employees	Average Monthly Time Requirement (Minutes)	Normal Time Month (Minutes)	Excess Time Actual (Minutes)	In
Juli	Staff Accounting	16	12.000	9.600	2.400	
Juli	Admin Manufacturing	6	11.000	9.600	1.400	

Source: Employee Review Results of PT. Indofood Sukses Makmur (Tbk), Palembang Cape of Fire- Api,2020 (Internal)

Based on the data in Table 3, it can be seen that the monthly time needed by employees is on average there is an excess of time needed in actual work, meaning that work load analysis can help review work whether additional workers can be proposed, to reduce the level of excessive workload, based on the results of the review of the actual amount of excess time required under normal circumstances or not.

Another factor that affects employee performance is the work environment. The conditions of the work environment greatly affect employee job satisfaction, where the work environment is an environment in which employees work and can influence them in carrying out their assigned tasks. A good work environment will provide personal comfort and raise employee morale so that they can do their jobs well. The environment is the institutions or outside forces that have the potential to affect organizational performance (Robbins & Coulter, 2017).

The company's physical condition that is not yet conducive (narrow room) is considered a factor in improving employee performance. A safe and comfortable work environment will improve employee performance, so that they will also be able to work better, so that the results desired by the company will be achieved properly. A non-conducive work environment can cause discomfort and allow employees to work less than optimally, the work environment can also affect employee emotions. If the employee does not like the work environment in which he works, then the employee will feel uncomfortable in his workplace to carry out activities so that the working time used is not effective and the employee's work performance will decrease, as well as in the relationship between employees in the company.

**Table 4**  
**Percentage of Work Environment Expected by Employees of PT Indofood CBP Sukses Makmur Tbk, Tanjung Api-Api Plant Palembang**

Work environment	Target	Results
Employee Relations	100%	80%
Movement Room/Block	100%	78%
Noise	100%	78%

Source: Internal Data of PT. Indofood Sukses Makmur (Tbk), Palembang Tanjung Fire- Fire, 2020

Based on the data in Table 4 above, the work environment has not reached the target, one of which is an indicator of space for movement where the results are still 78% not reaching 100%. and the narrowness of the room greatly affects and supports employees in carrying out their responsibilities and completing their duties.

**Table 5**  
**Review of the Influence of Performance Quality Key Performance Individual Indicators on Employees of PT Indofood CBP Sukses Makmur, Tbk Tanjung Api-api Palembang Plant**

Department	Performance Assessment Indicators (KPI)	Work Target	weight	Score
THR (Admin)	Canteen payment data accuracy	25%	20%	Weight Not Reached
Warehouse	SPB input data rate	25%	20%	Weight Not Reached
Purchasing	Incomplete supplier data	25%	20%	Weight Not Reached
Marketing	The operational cost form is incomplete and incorrect	25%	20%	Weight Not Reached

Source: Result of Internal Review of PT. Indofood Sukses Makmur (Tbk), Palembang Cape of Fire- Fire, 2020

Previous studies examining the effect of work stress on employee performance include those conducted by (Nelsi, 2021); (Rezeki & Hidayat, 2021); (Pratiwi, 2021); (Ulfa, 2020); shows the results that work stress has a positive and significant effect on employee performance. Different results are shown by research results from (Saleem, Malik, & Qureshi, 2021); (Kumar, 2021); (Ningsih, 2021); (Sitepu, 2020); (Daniel, 2019) shows the results that work stress has a positive and significant effect on employee performance. Different results are shown by research results from.

The influence of work environment factors also affects employee performance. Previous research that examines the effect of work stress on employee performance conducted by (L'opez-Cabarcos, V'azquez-Rodríguez, & Qui'no'a-Pi'neiro, 2021); (Hidayati, Perizade, & Widiyanti, 2019); (Nisakurohma & Sunuharyo, 2018); (Moulana, Sunuharyo, & Utami, 2017); (Priyanto, 2018) shows the results that the work environment has a positive and significant effect on employee performance. Different results are shown by research results from (Paramarta & Astika, 2020); (Febbyani & Masman, 2020) shows the results that the work environment has a positive and



insignificant effect on employee performance. Different research results are also shown in research from (Arianindita, 2021); (Sabilalo, Kalsum, Nur, & Makkulau, 2020) which shows that the work environment has a negative and insignificant effect on employee performance.

Based on the background of the problems described previously, the formulation of the research problem is obtained, namely work stress and work environment as well as the results or conclusions of several different studies on the factors that affect employee performance (research gap). This is shown from the findings that are not uniform regarding the differences in the effect of work stress and work environment on employee performance.

In this study, further testing was carried out on empirical findings regarding the independent variables of work stress and work environment on employee performance at PT Indofood CBP Sukses Makmur, Tbk. Tanjung Api-Api Palembang Plant. Based on the above background, it encourages researchers to conduct research with the title "Analysis of the Effect of Work Stress and Work Environment on Employee Performance (Case Study At PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang)".

## METHOD RESEARCH

The design of this study is a causal research because it aims to examine the cause and effect relationship between two variables, namely the independent variable work stress and work environment and one dependent variable, namely the performance of employees at PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang.

This study uses qualitative data in the form of a questionnaire statement which is quantified by using a Likert scale which is shown to measure attitudes, opinions and perceptions of a person or group of people about social phenomena (Sugiyono, 2016).

The population in this study were all employees of PT. Indofood CBP Sukses Makmur Tbk Plant Tanjung Api-Api Palembang as many as 169 people.

The sample is a part of the population that the researcher wants to study. According to Uma Sekaran, (2017). The sample is part of the number and characteristics possessed by the population. In this study the method used to determine the number of samples is using the Slovin formula using a tolerance of 5%.

The primary data in this study were collected using data collection methods through questionnaires distributed to employees of PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang in 2021 as many as 119 employees. The questionnaire in this study is a statement related to the variables of work stress and work environment on employee performance at PT Indofood CBP Sukses Makmur, Tbk Plat Tanjung Api-api Palembang.

## RESULTS AND DISCUSSION

Based on the research that has been done, in Table 1 it can be seen that the general description of the respondent's profile as a whole is as follows:

**Table 1**  
**Overview of Research Respondents Profile**

No.	Respondent Profile	Frequency	Persentase
1	Gender		

		(Person)	(%)
	Man	74	62,2
	Woman	45	37,8
	<b>Total</b>	<b>119</b>	<b>100</b>
2	<b>Age (Year)</b>	<b>Frequency (Person)</b>	<b>Persentase (%)</b>
	17 – 25	43	36,1
	26 – 35	44	37
	36 – 45	19	16
	46 – 55	11	9,2
	> 55	2	1,7
	<b>Total</b>	<b>119</b>	<b>100</b>
3	<b>Education</b>	<b>Frequency (Person)</b>	<b>Persentase (%)</b>
	SMA	12	10,1
	Diploma	23	19,3
	S1	73	61,3
	S2/ S3	11	9,2
	<b>Total</b>	<b>119</b>	<b>100</b>
4	<b>Length of work (Year)</b>	<b>Frequency (Person)</b>	<b>Persentase (%)</b>
	< 1	3	2,5
	1 – 5	61	51,3
	6 – 10	31	26,1
	> 10	24	20,2
	<b>Total</b>	<b>119</b>	<b>100</b>
5	<b>Marital status</b>	<b>Frequency (Person)</b>	<b>Persentase (%)</b>
	Not married yet	49	41,2
	Marry	70	58,8
	<b>Total</b>	<b>119</b>	<b>100</b>
6	<b>Departement</b>	<b>Frequency (Person)</b>	<b>Persentase (%)</b>
	HR	15	12,6
	Accounting	12	10,0
	Marketing	20	16,8
	Warehouse	30	25,2
	QC	10	8,4
	Produksi	32	26,9
	<b>Total</b>	<b>119</b>	<b>119</b>

Sumber Data: Diolah dari Kuesioner, 2022

Based on Table 1 above, it can be seen that the profile characteristics of the employees of PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang who have filled out this research questionnaire. Based on gender, respondents who

dominate are male respondents, as many as 74 people, with a percentage of 62.2%. While the minority of respondents are female respondents, as many as 45 people, with a percentage of 37.8%.

Based on age, respondents who dominate are respondents aged between 26-35 years as many as 44 people, with a percentage of 37%. While the minority of respondents are respondents with the age category > 55 years as many as 2 people with a percentage of 1.7%.

Based on education, respondents who dominate are respondents with undergraduate education as many as 73 people with a percentage of 61.3%. While the minority of respondents are respondents with a Masters/S3 education as many as 11 people with a percentage of 9.2%.

Based on the length of work, respondents who dominate are respondents with a length of work for 1 - 5 years as many as 61 people, with a percentage of 51.3%. While the minority of respondents are respondents with a length of work for < 1 year as many as 3 people with a percentage of 2.5%.

Based on marital status, respondents who dominate are respondents with married marital status as many as 70 people, with a percentage of 58.8%. While the minority of respondents are respondents with unmarried marital status as many as 49 people with a percentage of 41.2%.

### **Respondents' Responses Based on Research Variables**

Based on the calculation results, the independent variable is work stress (X1) and work environment (X2) and the dependent variable is employee performance (Y). Furthermore, the calculation results obtained are categorized into three categories, namely:

**Tabel 1**  
**Tabel Interpretasi**

<b>Interpretation</b>	<b>Persentase (%)</b>
Well	100 – 76
Pretty good	75 - 56
Not good	<55

Source: Arikunto, 2010

The following is the frequency of respondents' responses to the indicator items of these variables, which will be explained as follows:

### **Respondents' Responses Based on Work Stress Variables (X1)**

Respondents' responses related to work stress variables will provide an overview of the extent of work stress at PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang. The work stress variable is represented by ten question items. In the work stress variable (X1), the questions on the questionnaire were filled out by all employees at PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang. The respondents' opinions on the work stress variable items can be explained in Table 3 below:

**Tabel 2**  
**Tanggapan Responden Berkaitan dengan Variabel Stress Kerja (X1)**



Variable	Pernyataan	1		2		3		4		5		Total (%) Score 4+5
		STS	%	TS	%	N	%	S	%	SS	%	
A. EXTRAORGANIZATIONAL STRESSOR												
X1.1	Conflicts that occur in the family carry over in completing work	2	1.70	6	5.00	28	23.50	38	31.90	45	37.80	
X1.2	The latest technology upgrade is not available so it makes it slow to complete the work	0	0.00	12	10.1	23	19.30	43	36.10	41	34.50	
Average Extraorganizational Stressor Dimension (%)			0.85		7.55		21.40		34.00		36.15	70.15
Interpretation		Pretty good										
B. ORGANIZATIONAL STRESSOR												
X1.3	The lack of clarity in the organizational structure makes it impossible to know to whom to report the results	2	1.70	6	5.00	34	28.60	33	27.70	44	37.00	
X1.4	The boss takes the time and attention to other problems in the future era of work	0	0.00	6	5.00	29	24.40	37	31.10	47	39.50	
X1.5	My boss is always involved in decision making	0	0.00	5	4.20	31	26.10	39	32.80	44	37.00	
Average Dimensions of Organizational Stressors (%)			0.56		4.73		26.36		30.53		37.83	68.36
Interpretation		Pretty Good										
C. STRESSOR KELOMPOK												
X1.6	I can complete the set target well	0	0.00	4	3.40	22	18.50	44	37.00	49	41.20	
X1.7	Job appraisal is carried out routinely and professionally	1	0.80	2	1.70	22	18.50	40	33.60	54	45.40	

Mean Dimensions of Group Stressors (%)	0.40	2.55	18.50	35.30	43.30	78.60
Interpretation	Good					

<b>D. INDIVIDUAL STRESSOR</b>												
X1.8	Excessive workload affects health and emotional disorders	3	2.50	8	6.70	26	21.80	52	43.70	30	25.20	
X1.9	The workload every day is so much to be resolved so as to cause complaints from outside parties/customers	2	1.70	12	10.1	35	29.40	21	17.60	49	41.20	
X1.10	At work, employees are always chased by time to complete the job well	2	1.70	13	10.9	35	29.40	32	26.90	37	31.10	
Average Individual Stressor Dimensions (%)			1.96		9.23		26.86		29.40		32.50	61.90
Interpretation		Pretty Good										

Data Source: Processed from Questionnaire, 2022

The results of the distribution of respondents' responses to statements on the work stress variable (X1) consisting of 10 questions covering extra-organizational stressors, organizational stressors, group stressors, and individual stressors are shown in Table 4.3. Respondents' responses to the extra-organizational stressor dimension showed that the percentage of answers Strongly Disagree (0.85%), Disagree (7.55%), Neutral (21.40%), Agree (34.00%) and Strongly Agree (36.15%). This shows that the work stress felt by employees at PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang which includes family and technology that still affects employees. However, with the presence of respondents who stated "Strongly Disagree" and "Disagree", then there are indications that some employees still feel work stress in the work environment. Work stress is a person's response to external conditions that cause physical, biological and behavioral deviations from employees in the company. External conditions that are not good will increase stress levels if left unchecked will disrupt the work process. Companies must be able to eliminate or reduce stress levels (Luthan, 2011)

Respondents' responses to the organizational stressor dimension showed the percentage of answers Strongly Disagree (0.56%), Disagree (4.73%), Neutral (26.36%), Agree (30.53%) and Strongly Agree (37.83 %). This shows that the organizational stressor at PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang on employee performance. The level of stress felt by employees is influenced by the organizational structure, clear supervision and involvement in decision making that will have an impact on the performance of employees. However, with there are still

respondents who stated "Strongly Disagree" and "Disagree", then there are indications that some employees feel stress that comes from the organization itself. One of the causes of an organizational nature is the organizational structure so that it can cause conflict in the relationship between employees, specialization, and a less supportive environment. Other things in organizational design that can also cause stress include the level of differentiation within the company and the existence of centralization which causes employees not to have the right to participate in decision making. (Luthan, 2011)

Respondents' responses to the group stressor dimension with the percentage of answers Strongly Disagree (0.40%), Disagree (2.55%), Neutral (18.50%), Agree (35.30%) and Strongly Agree (43.30 %). This shows that group stressors still affect the work results of employees at PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang. The level of stress caused by the work group environment on work results and a good social support system and management's attention to the work of employees. However, with there are still respondents who stated "Strongly Disagree" and "Disagree", then there are indications that some employees feel that group stressors still affect employees in carrying out their duties, obligations and responsibilities. Lack of group cohesiveness or togetherness will cause stress and lack of social support for individuals, this situation will create stress (Luthan, 2011).

Respondents' responses to the individual stressor dimension with the percentage of answers Strongly Disagree (1.96%), Disagree (9.23%), Neutral (28.86%), Agree (29.40%) and Strongly Agree (32.50 %). This shows that individual stressors can still affect the work results of employees at PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang. The level of stress caused by the workload in internal and external factors as well as a busy work schedule. However, with there are still respondents who stated "Strongly Disagree" and "Disagree", then there are indications that some employees feel that individual stressors still affect employees in carrying out their duties, obligations and responsibilities. At the individual level . the dimensions of the situation and individual dispositions can affect stress. Personality traits, perceptions of personal control, learned helplessness, psychological endurance, resistance to individual pressure greatly affect stress (Luthan, 2011)

Based on the overall results of respondents' responses to the work stress variable (X1), it can be concluded that of the four dimensions of work stress, the largest percentage for the answers "Agree" and "Strongly Agree" is 78.60%, namely the group stressor dimension. While the lowest percentage is on the individual dimension, which is 61.90%. This means that work stress at PT Indofood CBP Sukses Makmur, Tbk Tanjung Api-api Palembang Plant is considered to have been able to overcome several indications that cause stress to employees even though the group stressor dimension shows good results. However, in this case the work stress felt by employees will have an impact on the level of employee performance towards the company. Strategies to deal with stress can be applied to individuals and organizations, individual strategies by applying time management techniques, sports, social network expansion, organizational training strategies, increasing employee involvement, improving communication, improving communication (Robbin & Judge, 2017)

#### **Respondents' Responses Based on Work Environment Variables (X2)**

Respondents' responses related to work environment variables will provide an overview of the extent of the work environment at PT Indofood CBP Sukses Makmur,

Tbk Plant Tanjung Api-api Palembang. The work environment variable is represented by ten question items. In the work environment variable (X2), the questions on the questionnaire were filled out by all employees at PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang. The respondents' opinions on the work environment variable items can be explained in Table 4 below:

**Table 4**  
**Respondents Response Related to Work Environment Variables (X2)**

Variable	Statement	1		2		3		4		5		Total (%)
		STS	%	TS	%	N	%	S	%	SS	%	
A. PHYSICAL WORK ENVIRONMENT												
X2.1	Room work me have temperature cool and cold until me feel calm in working	0	0.00	6	5.00	22	18.50	50	42.00	41	34.50	
X2.2	There is control of the engine sound to avoid noise	1	0.80	2	1.70	38	31.90	57	47.90	21	17.60	
X2.3	Illumination and lighting arrangement in the place work I enough , so no hinder I work	0	0.00	3	2.50	35	29.40	44	37.00	37	31.10	
X2.4	Circulation air in place work I mine quality cool air _ so that feel comfortable for work	0	0.00	3	2.50	29	24.40	47	39.50	40	33.60	
X2.5	Coloring in place work I work no boring and comfortable	5	4.20	2	1.70	32	26.90	55	46.20	25	21.00	
Dimensions Average Environment Work Physical (%)		1.00		2.68		26.22		42.52		27.56		70.08
Interpretation		Enough Well										
B. NON PHYSICAL WORKING ENVIRONMENT												
X2.6	Structure given work _ in accordance with experience and skills employee	1	0.80	2	1.70	12	10.10	32	26.90	72	60.50	
X2.7	Employee given not quite enough answer for complete all assigned task _	0	0.00	3	2.50	24	20.20	47	39.50	45	37.80	

X2.8	Employee cooperate with good fellow other employees	0	0.00	3	2.50	26	21.80	47	39.50	43	36.10
X2.9	braid good communication – fellow employee	0	0.00	1	0.80	23	19.30	56	47.10	39	32.80
X2.10	a solid team work within the work team	0	0.00	1	0.80	24	20.20	50	42.00	44	37.00
<b>Dimensions Environment Non - Physical Work (%)</b>		<b>0.16</b>		<b>1.66</b>		<b>18.32</b>		<b>39.00</b>		<b>40.84 79.84</b>	
<b>Interpretation</b>		<b>Well</b>									

Source: Processed from Questionnaires, 2022

The results of the distribution of respondents' responses to statements on the work environment variable (X2) consisting of 10 questions covering the physical work environment and non-physical work environment are shown in Table 4. The results on the dimensions of the physical work environment indicate that the percentage of answers Strongly Disagree (1%), Disagree (2.68%), Neutral (26.22%), Agree (42.52%) and Strongly Agree (27.56 %). This shows that the work environment on the dimensions of the physical work environment for employees at PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang is quite good. Employees feel that temperature, noise, lighting, air quality and workspace design have been provided in accordance with employee standards and needs so that employees can be more comfortable in carrying out their work activities which will have an impact on better employee performance. However, with some respondents stating "Strongly Disagree" and "Disagree", there are indications that some employees still do not feel the physical work environment at PT Indofood CBP Sukses Makmur, Tbk Tanjung Api-api Palembang Plant still does not provide facilities other supports. Physical work environment factors are also factors that affect work performance. temperature can maximize work productivity, sound can reduce work performance, lighting affects smooth work, air quality can affect employee personal health. (Robbins, 2017)

The results of respondents' responses to the dimensions of the non-physical work environment showed the percentage of answers Strongly Disagree (0.16%), Disagree (1.66%), Neutral (18.32%), Agree (39%) and Strongly Agree (40, 84%). This shows that the non-physical work environment at PT Indofood CBP Sukses Makmur, Tbk Tanjung Api-api Palembang Plant is good. Employees feel that the work structure, responsibilities given, cooperation between groups, smooth communication and relationships between groups that have been well established have an impact on a harmonious work environment for fellow employees. However, with some respondents stating "Strongly Disagree" and "Disagree", there are indications that some employees still do not feel the non-physical work environment at PT Indofood CBP Sukses Makmur, Tbk Tanjung Api-api Palembang Plant is still not established. well. The non-physical work environment cannot be captured directly with the human senses but can be felt through relationships with

fellow employees, subordinates, superiors and superiors to subordinates. (Sedarmayanti, 2017)

Based on the results of the overall respondents' responses to the work environment variable (X2), it can be concluded that of the two dimensions of the work environment, the largest percentage for the answers "Agree" and "Strongly Agree" is 79.84%, namely the dimensions of the non-physical work environment. While the lowest percentage is in the dimensions of the physical work environment that is equal to 70.08%. This shows that the work environment at PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang Plant is considered good enough, but needs to be re-optimized in terms of providing other supporting facilities. The consequences when employees are dissatisfied at work are the behavior of leaving the organization, issuing aspirations (voice), loyalty by waiting for conditions to improve, neglect with increasing error rates, delays including absenteeism. (Robbins, 2017)

### Respondents' Responses Based on Employee Performance Variables (Y)

Respondents' responses related to employee performance variables at PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang. Employee performance variables are represented by ten question items. In the employee performance variable (Y) the questions on the questionnaire were filled out by all employees at PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang. The respondents' opinions on employee performance variable items can be explained in Table 5 below:

**Tabel 3**  
**Respondents Response**

Respondents Response												
Variable	Statement	1		2		3		4		5		Total (%)
		STS	%	TS	%	N	%	S	%	SS	%	Value 4+5
A. QUALITY												
Y.1	Employee this have accuracy in work as proof quality work	4	3.40	2	1.70	21	17.60	40	33.60	52	43.70	
Y.2	Employee this have k tidy results profession as as assessment quality good job _	0	0.00	1	0.80	17	14.30	38	31.90	63	52.90	
Y.3	This employee could complete the jobdesk task right time	0	0.00	0	0.00	12	10.10	29	24.40	78	65.50	
Dimensions (%)	Average Quality	0.00		0.83		14.00		29.96		54.03		83.99
Interpretation											Well	
B. QUANTITY												
Y.4	Employee this j amount results work generated in	1	0.80	1	0.80	19	16.00	34	28.60	64	53.80	



	accordance with standard profession											
Y.5	This employee is able to achieve performance appraisal according to KPI	0	0.00	6	5.00	20	16.80	31	26.10	62	52.10	
<b>Dimensions</b>	<b>Average</b>	<b>Quantity</b>	<b>0.40</b>	<b>2.90</b>	<b>16.40</b>	<b>27.35</b>	<b>52.95</b>	<b>80.30</b>				
<b>Interpretation</b>												<b>Well</b>

#### Associated with Employee Performance Variables (Y)

<b>C. EFFECTIVENESS</b>												
Y.6	Employees complete work without missing deadlines	3	2.50	5	4.20	26	21.80	24	20.20	61	51.30	
Y.7	Employees are able to do tasks outside the additional jobdesk	5	4.20	13	10.9	41	34.50	26	21.80	34	28.60	
<b>Dimensions</b>	<b>Average</b>	<b>3.35</b>	<b>7.55</b>	<b>28.15</b>	<b>21.00</b>	<b>39.95</b>	<b>60.95</b>					
<b>Interpretation</b>												<b>Enough Well</b>
<b>D. INDEPENDENCE</b>												
Y.8	Employee this complete all Duty in limit specified time _	4	3.40	1	0.80	27	22.70	37	31.10	50	42.00	
Y.9	Employee this have attitude work reliable	1	0.80	3	2.50	31	26.10	40	33.60	44	37.00	
Y.10	Employee this capable identify point something problem	9	7.60	2	1.70	21	17.60	39	32.80	48	40.30	
<b>Dimensions</b>	<b>Average</b>	<b>3.93</b>	<b>1.66</b>	<b>22.13</b>	<b>32.50</b>	<b>39.76</b>	<b>72.26</b>					
<b>Interpretation</b>												<b>Enough Well</b>

Data Source: Processed from Questionnaire, 2022

The results of the distribution of respondents' responses to statements on the employee performance variable (Y) consisting of 10 questions covering quality, quantity, effectiveness and independence are shown in Table 5 as a whole. The results on the quality dimension show that the percentage of answers Strongly Disagree (0%), Disagree (0.83%), Neutral (14%), Agree (29.96%) and Strongly Agree (54.03%). This shows that the performance of employees at PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang includes the work produced, the skills possessed, the knowledge possessed is in accordance with the jobdesk given to employees. The quality of employee performance can be measured on the employee's perception of the quality of the work

produced and the perfection of the task on the skills and abilities of employees. The quality of work can be described from the level of good and bad work results of employees in completing work. (Robbins, 2016)

Respondents' responses on the quantity dimension with a total percentage of answers Strongly Disagree (0.40%), Disagree (2.90%), Neutral (16.40%), Agree (27.35%) and Strongly Agree (52.95 %). This shows that the performance of employees at PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang includes the level of work achievement, being able to understand routine tasks, which means that employees really understand what their responsibilities are in accordance with the jobdesk provided by the company. Quantity is the amount produced expressed in terms of the number of units, the number of activity cycles completed (Robbins, 2016)

Respondents' responses on the effectiveness dimension with a total percentage of answers Strongly Disagree (3.35%), Disagree (7.55%), Neutral (28.15%), Agree (21%) and Strongly Agree (39.95%). This shows that the performance of employees at PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang includes being fast in completing work and being able to complete work on time, which means that employees are able to provide feedback to the company by completing all tasks and responsibilities in accordance with time limit that is the company's provisions. Effectiveness is the extent to which the use of organizational resources (manpower, money, technology and raw materials) is maximized with the intention of increasing the results of each unit in the use of resources (Robbins, 2016).

Respondents' responses to the independence dimension with a total percentage of answers Strongly Disagree (3.93%), Disagree (1.66%), Neutral (22.13%), Agree (32.50%) and Strongly Agree (39.76 %). This shows that the performance of employees at PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang includes being able to do the work that is their responsibility, focusing on completing work, being able to determine and set work priorities, which means that employees really understand what the task is. and its responsibilities to deliver results in line with company expectations. Independence is the level of a person who will later carry out his work functions without receiving assistance, guidance from or supervisors. (Robbins, 2016)

Based on the overall results of respondents' responses to the employee performance variable (Y) it can be concluded that of the four dimensions, the largest percentage for the answers "Agree" and "Strongly Agree" is 83.99%, namely on the quantity dimension. While the lowest percentage is on the dimension of effectiveness, which is 60.95%. Performance is the achievement of employee results in a process of carrying out their duties in accordance with the responsibilities given. Increasing employee performance will have a positive impact on the company, so that employees have a good and optimal level of performance in achieving company goals. Employee performance increases or decreases can be seen from the quality of work, quantity, accuracy, effectiveness, and independence in work. This means that employees who are independent, that is when doing work do not need to be supervised and can carry out their own functions without assistance, guidance, or supervisors. (Robbins, 2016)

## CONCLUSION

Based on the results of research and analysis that has been done, it can be concluded that work stress has a positive and significant effect on employee performance at PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang.

The work environment has a positive and significant effect on employee performance at PT Indofood CBP Sukses Makmur, Tbk Plant Tanjung Api-api Palembang.

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