

## Research Article

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# SMK3 Stress Diagnosis Survey for First-Line Management Employees at PT. X

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**Received:** August 21, 2025; **Accepted:** Sept 20, 2025; **Online:** Sept 30, 2025 | DOI: <https://doi.org/10.47353/ijema.v3i4.343>

**Abstract:** *This study aims to diagnose the level of work-related stress among first-line management employees at PT. X as part of the compliance with the Occupational Safety and Health Management System (SMK3) regulations, in accordance with Government Regulation No. 50 of 2012 and the Minister of Manpower Regulation No. 5 of 2018. A descriptive quantitative approach was employed using purposive sampling, involving 20 respondents from both the head office and branch office. The instrument used was a questionnaire based on the Ivancevich and Matteson (1980) stress scale, covering six dimensions of work stress: role ambiguity, role conflict, quantitative workload, qualitative workload, career development, and responsibility for others. The analysis revealed that the majority of respondents experienced moderate levels of work stress, with the highest prevalence found in the dimensions of career development (85%), qualitative workload (75%), and role conflict (60%). Additionally, 10% of respondents were identified as experiencing severe stress, particularly in the qualitative workload dimension. Based on these findings, an intervention plan was developed, including competency enhancement training, updated work procedures, psychological counseling, and optimization of organizational communication. This study highlights the importance of regular psychological monitoring in the workplace as a preventive effort to mitigate productivity decline and promote employee well-being.*

**Keywords:** *human resource management, organizational intervention, psychological diagnosis, SMK3, work stress.*

## Introduction

Human resources are the driving force of a company. Imagine having a well-structured system but lacking employees who are mentally and psychologically healthy—such a company would struggle to operate and grow, especially in producing goods. Human involvement plays a vital role in industry. Employees are valuable assets to the company. Although some may argue that when an employee is stressed and unproductive, the company can simply find a replacement to fill the vacant position, it is not that simple.

Many parties are affected when undesirable conditions such as excessive workload and stress occur. Not only do employees suffer, but the company also faces losses—such as incurring additional expenses to recruit new employees, handling delayed reports due to the absence or inability of staff to complete tasks, and experiencing disruptions in operations. Furthermore, the company's reputation may be impacted if employees are stressed and lack motivation. This becomes an even greater loss when long-serving employees who are considered important assets are affected—leading to decreased work motivation, discomfort in performing tasks, and various other issues.

Therefore, the government has established regulations to ensure the safety and health of workers in the workplace through Government Regulation No. 50 of 2012. This regulation mandates the implementation of an Occupational Health and Safety Management System (OHSMS) to create a safe and comfortable work environment. Additionally, the government has set standards through the Regulation of

the Minister of Manpower of the Republic of Indonesia No. 5 of 2018 concerning occupational safety and health in the workplace.

Implementing these regulations fully is not an easy task. Continuous evaluations are carried out to realize the shared goals of both the government and companies. This is also true for the company where I conducted my professional psychology internship. The company is continuously striving to ensure the safety and health of its employees. Referring to Government Regulation No. 50/2012, criterion 7.2.2 addresses the monitoring and measurement of the work environment, covering physical, chemical, biological, ergonomic, and psychological factors.

Psychological factors within a company play a critical role in supporting the sustainability and growth of industry, from managing human resources to ensuring the mental well-being of employees in the workplace. A current issue in the company where I am undertaking my professional psychology internship is that no psychological assessments have ever been conducted on employees in the work environment. These assessments should address stress levels, which are divided into six aspects: role ambiguity, role conflict, quantitative and qualitative work overload, career development, and responsibility for others.

The company where I am conducting my professional internship has not yet carried out psychological assessments required for the Ministry of Manpower (Kemnaker) reports related to the Occupational Health and Safety Management System (SMK3), specifically the psychological factor component.

To address this, the company and the HSE (Health, Safety, and Environment) division assigned me to assist in reviewing the psychological condition of employees in the workplace, particularly to assess stress levels, which must include work attitude, role ambiguity, and role conflict among employees. In addition to fulfilling SMK3 reporting requirements from Kemnaker, this effort also demonstrates a commitment to ensuring employee well-being, safety, and protection of one of the company's most valuable assets, its people.

The analysis method used by the Case Presenter (CP) is the Fishbone Analysis technique. The Fishbone or Ishikawa diagram is a structured approach that enables more detailed analysis in identifying the root causes of problems, non-conformities, or gaps within the company. This analysis is employed to determine why the company has not previously conducted a psychological stress diagnosis survey, which led to a warning letter from the Department of Manpower (Depnaker) due to incomplete WLKP reports that are submitted periodically by the company. The results of the Fishbone Analysis are presented in the following diagram:

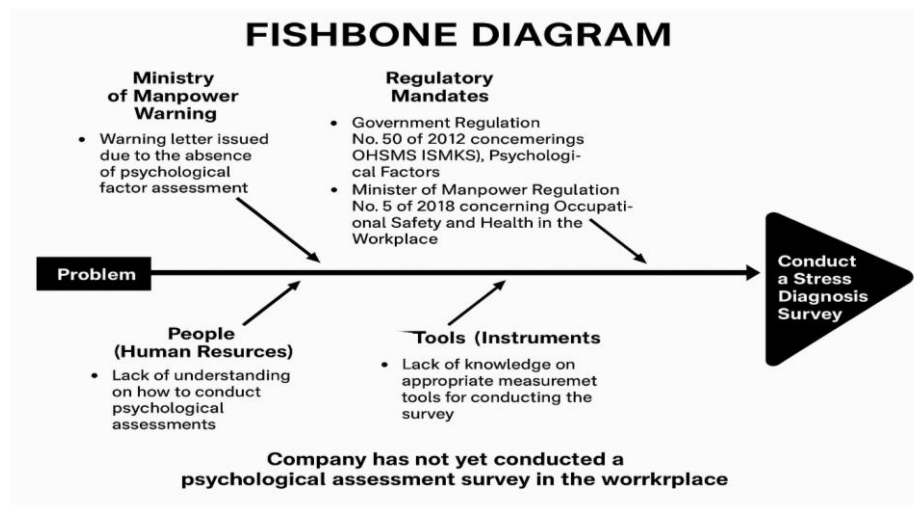


Image: Fishbone diagram

Based on the Fishbone analysis diagram above, it is evident that several issues arise from both internal and external factors, resulting in the psychological assessment not being carried out in accordance with the standards set by the Ministry of Manpower (Kemnaker).

Therefore, based on the background of the problems described above, the formulation of the problem and the objective of this review focus on the psychological assessment within the company environment.

## Method

To facilitate the implementation of the stress diagnosis survey within the company, various approaches can be used. The sampling method employed in this study is non-probability sampling using purposive sampling technique, which refers to a sampling technique based on the researcher's judgment in selecting samples that are considered appropriate and representative (Sugiyono, 2010). This survey is conducted specifically for supervisors within the company, as they are considered to have a sufficient level of representativeness. Therefore, the total number of respondents in this survey consists of 20 employees who hold positions as first-line management, such as supervisors or those in equivalent roles.

The research instrument used in the work motivation assessment survey is a questionnaire. According to Saifuddin Azwar (2005), the characteristics of a scale as a psychological measurement tool are that the stimuli consist of statements or questions that do not directly reveal the attributes being measured. Instead, they reflect behavioral indicators of the attributes, which are translated into items. The subjects' responses are not classified as right or wrong answers. The alternative answer categories on this scale consist of seven options, namely:

**Table 1.** Explanation of Response Alternatives

Response Alternative	Explanation
1	If the condition described NEVER causes stress
2	If the condition described VERY RARELY causes stress
3	If the condition described RARELY causes stress
4	If the condition described SOMETIMES causes stress
5	If the condition described OFTEN causes stress
6	If the condition described VERY OFTEN causes stress
7	If the condition described ALWAYS causes stress

The assessment tool used in this survey is a questionnaire based on the instrument developed by Ivancevich and Matteson (1980). This work stress measurement tool is also included as an attachment in the Ministry of Manpower Regulation No. 5 of 2018, page 205, concerning the standard psychological assessment of stress diagnosis surveys. It is designed to determine the extent to which various job conditions become sources of stress for individuals. The instrument covers six key dimensions: role ambiguity, role conflict, quantitative overload, qualitative overload, career development, and responsibility for others. The blueprint of this measurement tool is presented as follows:

**Table 2.** Explanation of Dimensions, Items, and Scores

Dimension	Items	Score Code
Role Ambiguity	1 + 7 + 13 + 19 + 25	TP
Role Conflict	2 + 8 + 14 + 20 + 26	KP
Quantitative Overload	3 + 9 + 15 + 21 + 27	BBKuan
Qualitative Overload	4 + 10 + 16 + 22 + 28	BBKual
Career Development	5 + 11 + 17 + 23 + 29	PK

Dimension	Items	Score Code
Responsibility for Others	6 + 12 + 18 + 24 + 30	TJO
<b>Total</b>	<b>30 items</b>	

The research subjects whose work stress levels were assessed consist of 20 individuals in first-line management positions, equivalent to supervisors in each division—10 from the head office and 10 from the branch office.

The data analysis method used in this study is Descriptive Statistics. Descriptive statistics is a method used to analyze data by describing or illustrating the data as it is, without intending to draw conclusions or generalizations that apply to the broader population (Sugiyono, 2010).

The categorization of work stress levels in this study is based on the levels indicated by the stress scale used, which include the following:

**Table 3.** Explanation of Score, Stress Level, and Required Intervention

Score	Stress Level	Improvement/Intervention Needed
1–9	Mild	Not required
10–24	Moderate	Required
25–35	Severe	Highly required

The scores are obtained by summing all item scores across the dimensions listed in Table 2.

## Results and Discussion

**Table 5.** Results of Work Stress Diagnosis Survey by Dimension

No	Name	Dimension	Score	Category
1	DS	TP	7	Mild
		KP	12	Moderate
		BBKuan	8	Mild
		BBKual	15	Moderate
		PK	5	Mild
		TJO	10	Moderate
2	W	TP	21	Moderate
		KP	19	Moderate
		BBKuan	19	Moderate
		BBKual	25	Severe
		PK	22	Moderate
		TJO	21	Moderate
3	CR	TP	9	Mild
		KP	9	Mild
		BBKuan	8	Mild
		BBKual	15	Moderate
		PK	15	Moderate
		TJO	14	Moderate
4	BTD	TP	19	Moderate
		KP	20	Moderate

No	Name	Dimension	Score	Category
5	AI	BBKuan	19	Moderate
		BBKual	19	Moderate
		PK	19	Moderate
		TJO	16	Moderate
		TP	5	Mild
		KP	5	Mild
		BBKuan	13	Moderate
		BBKual	13	Moderate
		PK	7	Mild
		TJO	5	Mild
		TP	13	Moderate
		KP	11	Moderate
6	BA	BBKuan	12	Moderate
		BBKual	12	Moderate
		PK	11	Moderate
		TJO	7	Moderate
		TP	14	Moderate
		KP	12	Moderate
7	S	BBKuan	12	Moderate
		BBKual	15	Moderate
		PK	12	Moderate
		TJO	17	Moderate
		TP	6	Mild
		KP	7	Mild
8	Su	BBKuan	9	Mild
		BBKual	11	Moderate
		PK	10	Moderate
		TJO	6	Mild
		TP	5	Mild
		KP	5	Mild
9	SS	BBKuan	5	Mild
		BBKual	5	Mild
		PK	5	Mild
		TJO	5	Mild
		TP	5	Mild
		KP	8	Mild
10	L	BBKuan	6	Mild
		BBKual	7	Mild
		PK	10	Moderate
		TJO	8	Mild
11	T	TP	22	Moderate
		KP	25	Severe
		BBKuan	20	Moderate

No	Name	Dimension	Score	Category
12	AS	BBKual	25	Severe
		PK	22	Moderate
		TJO	13	Moderate
		TP	19	Moderate
		KP	19	Moderate
		BBKuan	21	Moderate
		BBKual	22	Moderate
		PK	18	Moderate
		TJO	22	Moderate
		TP	14	Moderate
13	AMI	KP	11	Moderate
		BBKuan	21	Moderate
		BBKual	16	Moderate
		PK	11	Moderate
		TJO	9	Mild
		TP	10	Moderate
		KP	20	Moderate
14	Sut	BBKuan	10	Moderate
		BBKual	18	Moderate
		PK	12	Moderate
		TJO	21	Moderate
		TP	21	Moderate
		KP	17	Moderate
		BBKuan	20	Moderate
15	WS	BBKual	19	Moderate
		PK	24	Moderate
		TJO	26	Severe
		TP	20	Moderate
		KP	21	Moderate
		BBKuan	18	Moderate
		BBKual	20	Moderate
16	SRT	PK	21	Moderate
		TJO	23	Moderate
		TP	13	Moderate
		KP	9	Mild
		BBKuan	14	Moderate
		BBKual	22	Moderate
		PK	14	Moderate
17	TP	TJO	13	Moderate
		TP	19	Moderate
		KP	19	Moderate
		BBKuan	18	Moderate
		BBKual	24	Moderate
		PK	14	Moderate
		TJO	13	Moderate
18	CCR	TP	19	Moderate
		KP	19	Moderate
		BBKuan	18	Moderate
		BBKual	24	Moderate

No	Name	Dimension	Score	Category
19	SB	PK	18	Moderate
		TJO	21	Moderate
		TP	23	Moderate
		KP	21	Moderate
		BBKuan	15	Moderate
		BBKual	21	Moderate
		PK	14	Moderate
		TJO	21	Moderate
20	JUF	TP	5	Mild
		KP	5	Mild
		BBKuan	6	Mild
		BBKual	5	Mild
		PK	11	Moderate
		TJO	6	Mild

Based on the analysis conducted by the Competent Person (CP) regarding employee work stress at PT X, involving 20 employees, the findings show that employees experience varying levels of work-related stress—mild, moderate, and severe. These levels were measured across six key dimensions: role ambiguity, role conflict, quantitative and qualitative overload, career development, and responsibility for others. The results can be further described as follows based on each stress category:

**Table 6.** Analysis Results of Work Stress Diagnosis Survey

Dimension	Mild (n)	Mild (%)	Moderate (n)	Moderate (%)	Severe (n)	Severe (%)
Role Ambiguity (TP)	7	35%	13	65%	0	-
Role Conflict (KP)	7	35%	12	60%	1	5%
Quantitative Overload	5	25%	15	75%	0	-
Qualitative Overload	3	15%	15	75%	2	10%
Career Development (PK)	3	15%	17	85%	0	-
Responsibility for Others (TJO)	6	30%	13	65%	1	5%

Based on the data presented in the table above, the overall level of work-related stress within the company can be categorized as moderate. This applies across various aspects such as role ambiguity, role conflict, qualitative and quantitative workload, career development, and responsibility for others. However, certain factors—specifically role conflict, qualitative overload, and responsibility for others—show indications of contributing to high levels of stress in some individuals.

An individual's level of stress does not solely reflect a mismatch between personal interests and job roles; it may also indicate *eustress*, which refers to positive stress that challenges and motivates individuals in their work. To help reduce workload and stress levels, it is advisable to provide clear guidance and thorough explanations regarding job responsibilities, duties, and rights.

The work environment demonstrates a strong sense of familial connection, which can serve as a foundation for solidarity and foster a supportive atmosphere for all employees. Furthermore, a high level of work motivation can significantly contribute to the company's sustainability and enhance employee productivity in the future.



Tenure within the company is often an indicator of an employee's loyalty, and a healthy work environment, along with strong interpersonal relationships within the company, can help reduce negative emotions associated with the workplace.

High levels of role conflict, qualitative overload, and responsibility for others are strongly correlated with severe stress. In addition to training programs, actions that can be taken include conducting evaluations of each aspect of the job, particularly those measured in the six indicators of the Stress Diagnosis Survey (SDS).

Role conflict tends to contribute significantly to elevated stress levels. This occurs when there is a perceived mismatch between the role expectations imposed on an employee and their personal orientations, interests, or values, often shaped outside the organization. Vague or unclear instructions may further exacerbate role conflict, leading to confusion about task priorities.

Role conflict can be mitigated through effective communication between supervisors and subordinates. Clear, measurable, and well-directed instructions can offer the necessary guidance to perform tasks efficiently. A second important factor is time management, where individuals must be able to allocate their time effectively to avoid role-related conflicts. For instance, this includes balancing the responsibilities of being a leader and a team member, or managing dual roles as a father at home and a professional employee at work who serves as a role model for others.

Qualitative overload may occur when employees perceive their tasks as too difficult to perform. This can be addressed by providing clear explanations of their job descriptions and by reviewing the results of a Workload Analysis. In addition, it is essential to assess the work environment itself to determine whether it contributes to stress. Providing appropriate training can also help reduce the impact of qualitative overload.

Responsibility for others refers to the individual's sense of obligation toward their work environment, including those who report to them, their subordinates' career development, and the need to guide, support, and make decisions on their behalf. This stressor can be managed through open discussions to understand to what extent the individual perceives responsibility for others as a source of stress. It is important to note that not all stress is negative—eustress can serve as a positive motivator, prompting individuals to take greater responsibility for others. Therefore, constructive dialogue may help uncover solutions that positively contribute to both personal well-being and the company's overall growth.

The individuals within this organization show strong potential and a clear willingness to grow and be guided. With proper development, they can become valuable assets who can be relied upon to support the company's success.

### Proposed Intervention Plan

Based on the results of the stress diagnosis survey, there are several aspects that require immediate attention or intervention. The proposed intervention plans for each aspect are as follows:

**Table 7.** Proposed Intervention Plan by Dimension/Aspect

No.	Dimension	Survey Findings	Proposed Intervention
1	Role Ambiguity (RA)	Lack of sufficient information to perform job tasks	Development and updating of SOPs, competency-based training
2	Role Conflict (RC)	Instructions from superiors differ from actual field conditions	Improve communication between supervisors and subordinates through clear, measurable, and directed instructions
3	Quantitative Overload	Employees feel they have too many tasks to complete	Conduct a workload analysis



No.	Dimension	Survey Findings	Proposed Intervention
4	Qualitative Overload	Employees feel certain tasks are too difficult to complete	Clarify job descriptions, conduct evaluations, and provide appropriate training
5	Career Development	Employees feel their job and potential are not developing	Implement performance appraisals and offer training aligned with job roles and competencies
6	Responsibility for Others	Employees feel heavily responsible for others and struggle with decision-making	Provide employee counseling

## Conclusion

Based on the results of the stress diagnosis survey conducted in accordance with the Ministry of Manpower standards, it can be concluded that overall, employees experience a moderate level of stress within the company environment. Certain dimensions are identified as contributors to stress and are considered to require follow-up actions, namely role conflict (5%), qualitative overload (10%), and responsibility for others (5%). From interviews conducted, it was found that the employees have relatively long tenures and sometimes feel bored with their work, but they perceive the work environment as quite positive due to the close relationships they have developed with their colleagues. They also expressed a strong desire to continue growing and to be guided so that they can become reliable assets to the company.

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