

The Role of Work Stress in Mediating the Effects of Organizational Culture and Leadership on Job Satisfaction at PT. Samawood Utama Works Industry

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ABSTRACT

This study aims to analyze the influence of organizational culture and leadership on work stress and its impact on employee job satisfaction at PT. Samawood Utama Work Industry. The background of this research is based on the phenomenon of employee dissatisfaction, indicated by protests against unilateral termination policies and a weak promotion system, as well as inconsistencies in previous research findings related to the relationships among organizational culture, leadership, work stress, and job satisfaction in Indonesia's manufacturing sector. This research employs a quantitative approach using path analysis on a sample of 75 employees selected through a census method. Data were collected through a questionnaire that had been tested for validity and reliability. The results show that organizational culture has a negative and significant effect on work stress, and leadership also has a significant negative effect on work stress. Both organizational culture and leadership positively and significantly influence job satisfaction, both directly and indirectly through work stress as a mediating variable. Work stress itself has a significant negative effect on job satisfaction. Mediation testing using the Sobel method indicates that work stress partially mediates the relationship between organizational culture and job satisfaction (Sobel value = 2.00 > 1.96), as well as between leadership and job satisfaction (Sobel value = 2.15 > 1.96), suggesting that both indirect effects are statistically significant. Simultaneously, organizational culture and leadership significantly influence work stress, and all three variables (organizational culture, leadership, and work stress) significantly affect job satisfaction, with a coefficient of determination reaching 87.7%. These findings underscore the importance of strengthening a positive organizational culture, enhancing leadership quality, and managing work stress integratively to improve employee job satisfaction in the manufacturing industry.

INTRODUCTION

Every company requires resources that support the continuity of its operations, particularly natural resources and human resources. Natural resources are used as raw materials to be processed into semi-finished or finished products. To ensure that the management of natural resources is carried out effectively and efficiently, companies require skilled workers.

In recent years, the Human Resources (HR) function has undergone significant changes closely related to the vision, strategy, structure, and processes within organizational systems. To sustain this transformation, HR professionals need to develop and demonstrate new competencies to fulfill their roles and responsibilities. This change is unprecedented, and to increase company value, many HR functions are directed toward reducing costs, improving service quality, strengthening alignment with business needs, and improving company performance.

In achieving its objectives, a company relies heavily on sound management, including leadership, organizational culture, compensation, and employee job satisfaction. Without effective leadership, a company cannot carry out its activities properly, because leaders play an important role in achieving optimal employee performance. Organizational culture and leadership style are two crucial components in shaping job satisfaction and reducing work stress, particularly in the manufacturing sector. In a manufacturing work environment that demands efficiency and an organized structure, effective communication systems and adaptive leadership are key to ensuring operational continuity and productivity. Research conducted by (H. Sutia et al., 2022) in a food manufacturing company in Indonesia showed that organizational culture and leadership style significantly affect job satisfaction, which ultimately has a positive impact on employee performance.

Similar results were also found by (Wachid, 2025) in a study conducted in the paper manufacturing industry in Tangerang. The study showed that organizational culture, leadership style, and work-life balance simultaneously and partially affect job satisfaction. The context of the paper industry is considered similar to that of PT. Samawood, which also operates in the manufacturing sector. Nevertheless, inconsistencies have been found in previous research findings, particularly regarding the relationship between work stress and job satisfaction. Several findings indicate that although the organizational culture and leadership implemented are supportive, high work pressure without supportive work-life balance policies can negatively affect job satisfaction (Wachid, 2025). This reflects a phenomenon gap, namely differences in empirical findings that may be caused by organizational characteristics and differences in work culture among manufacturing companies.

From a theoretical perspective, most studies in the manufacturing sector remain limited to relationships involving only two or three variables, such as organizational culture and job satisfaction or leadership and job satisfaction. An approach integrating the four variables—organizational culture, leadership style, work stress, and job satisfaction—into a single structural analysis model is still rarely found. For example, although the study by (H. Sutia et al., 2022)

examined the relationship between organizational culture and leadership and job satisfaction, it did not examine the role of work stress or the possible mediation mechanism. Similarly, in the study by (Wachid, 2025), although work-life balance was included as a variable, work stress was not explicitly analyzed as an intervening variable. This condition creates a theoretical gap, namely the limited literature providing a comprehensive model to explain the relationships among these variables, particularly in the context of the manufacturing industry in Indonesia.

PT. Samawood Utama Work Industry is one of the companies operating in the manufacturing sector. There are still indications of a low promotion system at PT. Samawood Utama Work Industry. This is indicated by several reviews from former employees of PT. Samawood Utama Work Industry obtained online. The layoffs that occurred at PT. Samawood Utama Work Industry were reportedly related to the company's plan to cooperate with a third party for employee selection, which would certainly affect workers who wished to have permanent employment. Some time ago, a demonstration occurred in which employees felt that they had been subjected to unilateral layoffs, which of course affected employee job satisfaction at PT. Samawood Utama Work Industry.

LITERATURE REVIEW

Organizational Culture

Organizational culture is a shared perception held by members of an organization and constitutes a shared system of meaning (Robbins & Judge, 2013). According to Luthans (Andayani & Tirtayasa, 2019), "Organizational culture is the basic pattern taught to employees from the time of recruitment so that they can feel, think, and act correctly from day to day." (Sutrisno, 2019) states that "Organizational culture can be defined as a set of values, beliefs, assumptions, or norms that have long been in effect, agreed upon, and followed by organizational members as guidelines for behavior and solving organizational problems."

The indicators of organizational culture (Sulaksono, 2019) are innovation in risk-taking, attention to detail in work, result orientation, teamwork orientation, aggressiveness at work, and maintaining work stability.

Leadership

Leadership is an aspirational force, a force of spirit, and a creative moral force capable of influencing members to change their attitudes so that they conform to the leader's wishes. The behavior of a group or organization becomes aligned with the leader's will and aspirations through the leader's interpersonal influence over subordinates. (Sugiono & Lumban Tobing, 2021) state that "leadership is the activity of influencing people so that they are willing to cooperate to achieve the desired goals." In another book, Davis in (Arifin, 2012) states that "leadership is the ability to persuade people to achieve definite goals with enthusiasm." (Normi, 2018) states that "leadership is the ability possessed by a person to influence other people to work toward achieving goals and objectives."

Leadership is essentially the process of influencing others. The indicators of leadership according to Bass and Solio in (Arif, 2010) are as follows:

1. Charisma refers to transformational leadership behavior in which followers strive to work harder than expected. Intellectual stimulation is an effort to support followers in becoming more innovative and creative, in which leaders encourage followers to question assumptions and generate new ideas
2. Individual consideration means that transformational leaders give special attention to the needs of each individual to achieve and develop, by acting as coaches, advisers, teachers, facilitators, trusted persons, and counselors.
3. Inspirational motivation refers to the way leaders use various symbols to focus efforts or actions and express goals in simple ways.

Work Stress

Stress is a consequence of any action or environmental situation that places excessive psychological and physical demands on an individual. Stress is not something unusual or unrelated to normal conditions experienced by normal people, and not all stress is negative (Sunyoto, 2008). According to Handoko (2008:200), work stress is a state of tension that affects a person's emotions, thought processes, and condition. Excessive stress can threaten a person's ability to cope with the environment. As a result, employees may develop various stress symptoms that can interfere with their work. These symptoms involve both physical and mental health. People experiencing stress may become nervous and experience chronic anxiety. According to Robbins (2006), employee work stress is a condition arising from the interaction between people and their work and characterized by changes in people that force them to deviate from their normal functioning. Suprihanto et al. (2003) state that from an organizational perspective, management may not be concerned if employees experience mild work stress.

The indicators of work stress according to Nur et al. (2016) consist of four aspects: job content, working conditions, employment conditions, and social relations at work.

Job Satisfaction

According to Wibowo (Harahap & Khair, 2019), "Job satisfaction is the level of a person's feelings of pleasure as a positive evaluation of their work and work environment." According to Danang (Rosmaini & Tanjung, 2019), "Job satisfaction is an individual characteristic, so people have different levels of satisfaction according to the value system that applies to them." According to Handoko and Asad as cited in (Umar, 2001), "job satisfaction is an assessment or reflection of an employee's feelings toward their work. This is reflected in employees' positive attitudes toward their work and everything they encounter in their work environment."

To measure job satisfaction, Robbins & Judge (2013) identified five indicators: the work itself, pay, promotion, supervision, and coworkers.



Figure 1. Conceptual Framework

METHODOLOGY

This study used a quantitative descriptive approach conducted at PT Samawood from April to July 2025. The research variables consisted of leadership (X1), organizational culture (X2), work stress (Z), and job satisfaction (Y). The study population consisted of 75 employees, all of whom were included as the sample using a saturated sampling technique. Data were collected through questionnaires, interviews, and literature studies. The research instrument used a 1–5 Likert scale. Validity testing was conducted on 30 employees using an r -table value of 0.361, and all items were declared valid. Reliability testing used Cronbach's Alpha, and all variables had values above 0.60 and were therefore considered reliable. Data analysis was conducted using descriptive analysis, classical assumption tests consisting of normality, multicollinearity, and heteroscedasticity tests, as well as path analysis to determine the relationships among variables. Furthermore, the coefficient of determination (R^2) was used to determine the ability of the independent variables to explain variations in the dependent variable.

RESEARCH RESULT

The study involved 75 respondents. The results of the classical assumption tests showed that the data were normally distributed, with a Kolmogorov-Smirnov value of $0.200 > 0.05$; no multicollinearity occurred because all VIF values were < 10 ; and no symptoms of heteroscedasticity were found because the significance values of all variables were > 0.05 .

Table 1. Summary of the Relationships Among Organizational Culture (X1), Leadership (X2), and Work Stress (Z) on Job Satisfaction (Y)

Variable Effect	Direct Causal Effect	Indirect Causal Effect (a×b)	Total	Coefficient	SE	Sobel Test
Organizational Culture → Work Stress	0.56		0.56	0.56	0.157	
Leadership → Work Stress	1.165		1.165	1.165	0.244	
Organizational Culture → Job Satisfaction	0.355	0.102	0.457	0.355	0.109	2.0
Leadership → Job Satisfaction	0.38	0.213	0.593	0.38	0.179	2.15
Work Stress → Job Satisfaction	0.183		0.183	0.183	0.076	

The analysis showed that organizational culture and leadership simultaneously had a significant effect on work stress ($F = 251.012$; Sig. = 0.000).

The R^2 value of 0.875 indicates that 87.5% of the variation in work stress can be explained by organizational culture and leadership. Partially, organizational culture had a negative and significant effect on work stress (Sig. = 0.001), and leadership also had a negative and significant effect on work stress (Sig. = 0.000).

Furthermore, organizational culture, leadership, and work stress simultaneously had a significant effect on job satisfaction ($F = 168.822$; Sig. = 0.000), with an R^2 value of 0.877. Partially, organizational culture had a positive and significant effect on job satisfaction ($\beta = 0.401$; Sig. = 0.002), leadership had a positive and significant effect ($\beta = 0.276$; Sig. = 0.038), while work stress had a negative and significant effect on job satisfaction ($\beta = -0.284$; Sig. = 0.018).

The Sobel test results showed that work stress acted as a mediating variable in the relationship between organizational culture and job satisfaction, with a Sobel value of 2.00, and in the relationship between leadership and job satisfaction, with a Sobel value of 2.15. Both values were greater than 1.96, indicating that the indirect effects were statistically significant.

DISCUSSION

The Effect of Organizational Culture on Work Stress

The results showed that Organizational Culture had a significant effect on Work Stress ($p = 0.000 < 0.05$). Organizational culture plays an important role in shaping employees' perceptions, attitudes, and behavior in the workplace. A healthy culture, characterized by values such as openness, support, and mutual respect, can create a comfortable and psychologically safe work environment. Kim and Jung (2022) found that participatory organizational culture significantly reduced stress levels and role conflict among healthcare service staff in South Korea. Similar research by Peterson and Wilson (2002) also confirmed that a work culture that values collaboration and work-life balance have a positive effect on reducing employee stress. The results of this study show that Organizational Culture has a significant effect on Work Stress ($p = 0.000 < 0.05$).

The Effect of Leadership on Work Stress

The test results showed that leadership had a significant effect on Work Stress ($p = 0.000 < 0.05$), indicating that leadership plays an important role in managing employees' psychological pressure.

This finding is consistent with the study by Aslan et al. (2025), which analyzed various forms of leadership, such as Charismatic, Democratic, and Autocratic leadership, in relation to work stress among 523 respondents. They found that charismatic leadership directly reduced stress by improving a conducive work climate, whereas authoritarian leadership increased stress and employees' feelings of being trapped. Thus, inspirational and supportive forms of leadership – such as transformational or democratic leadership – are effective in reducing work stress by creating a positive climate.

The Effect of Organizational Culture on Job Satisfaction

The results showed that organizational culture had a positive and significant effect on employee job satisfaction, with a significance value of $0.000 < 0.05$. The direct effect coefficient of organizational culture on job satisfaction

was 0.355, while the indirect effect through work stress as a mediating variable was 0.102, resulting in a total effect of 0.457. The Sobel test value of 2.00 (> 1.96) indicates that the indirect effect was statistically significant. This means that a strong organizational culture not only directly affects job satisfaction but also affects it through the level of work stress experienced by employees.

A positive organizational culture creates an emotionally and structurally supportive work environment through role clarity, open communication, recognition of achievements, and career development opportunities. All of these elements contribute to creating a conducive atmosphere and increasing employees' intrinsic motivation. Within Herzberg's Two-Factor theory, an organizational culture containing these elements can be categorized as a "motivator" that encourages job satisfaction. In addition, the Person-Organization Fit approach (Kristof-Brown et al., 2005) explains that the fit between employees' personal values and organizational values strengthens psychological attachment, which directly affects job satisfaction.

The Effect of Leadership on Job Satisfaction

This study also found that leadership had a significant effect on employee job satisfaction, with a significance value of $0.000 < 0.05$. The direct effect coefficient of leadership on job satisfaction was 0.380, while the indirect effect through work stress was 0.213, resulting in a total effect of 0.593. The Sobel test value of 2.15 (> 1.96) indicates that the indirect effect was significant, so it can be concluded that work stress partially mediated the effect of leadership on job satisfaction. This means that effective leaders not only directly increase job satisfaction but also reduce stress, which subsequently increases job satisfaction. Good leadership is characterized by a leader's ability to inspire a shared vision, provide clear direction, support employees personally, and create a work climate that encourages active participation. The transformational leadership model (Danuri, 2019) explains that leaders who can mobilize subordinates through collective motivation, intellectual stimulation, and individual consideration create meaningful relationships between leaders and subordinates. These relationships form an important foundation for shaping employee job satisfaction, both psychologically and functionally.

The Effect of Work Stress on Job Satisfaction

The test results showed that Work Stress had a significant effect on Job Satisfaction, with a significance value of $0.024 < 0.05$. This finding indicates that the higher the level of stress experienced by employees, the lower their level of job satisfaction. Poorly managed work stress can cause concentration problems, emotional exhaustion, reduced productivity, frustration, and discomfort in the work environment.

According to the Job Demands-Resources (JD-R) model developed by (Bakker & Demerouti, 2007a), stress arises when job demands, such as heavy workloads, time pressure, and role conflict, exceed the resources available to individuals, such as social support, job autonomy, or role clarity. This imbalance depletes energy and triggers burnout, which directly contributes to lower job satisfaction and organizational loyalty.

The Effect of Organizational Culture & Leadership on Work Stress

Simultaneous testing through regression analysis showed that Leadership and Organizational Culture jointly had a significant effect on Work Stress. The F-test significance value of $0.000 < 0.05$ with an R Square value of 0.875 indicates that 87.5% of the variation in Work Stress can be explained by the combination of the two variables. This shows that leadership and organizational culture are not merely independent factors but complement each other in shaping employees' psychological conditions in the workplace.

Good leadership can serve as a source of protection against work pressure by providing clear direction, emotional support, and effective resolution of interpersonal conflicts. At the same time, a supportive organizational culture strengthens the social system in which employees work, builds a sense of belonging, and creates an emotionally stable work climate.

This finding is supported by (House, 1996) through Path-Goal Theory, which states that effective leadership can reduce work obstacles and adapt the environment to individual needs so that work goals can be achieved more comfortably. Supportive leaders strengthen employees' perceptions of control over their work, thereby reducing stress.

The Effect of Organizational Culture, Leadership & Work Stress on Job Satisfaction

The F-test results showed that Leadership, Organizational Culture, and Work Stress simultaneously had a significant effect on Job Satisfaction, with a significance value of $0.000 < 0.05$ and an R Square value of 0.877. This means that these three variables jointly explain 87.7% of the variation in employees' Job Satisfaction, which represents a very high proportion in the context of social and organizational science. This finding emphasizes that a combination of effective leadership style, healthy organizational culture, and well-managed work stress is a major factor in shaping perceptions of job satisfaction within an organization.

From a theoretical perspective, these results are supported by the Multifactorial Model of Job Satisfaction, which states that job satisfaction is not determined by a single element but by the interaction of various organizational conditions and individual psychological factors. In this model, leadership acts as an agent of change and provides direction (Schein, 2010c), organizational culture acts as an ecosystem of values that shapes behavior and norms, and work stress acts as an indicator of mental health that directly affects employees' experiences (Bakker & Demerouti, 2007b).

CONCLUSIONS AND RECOMMENDATIONS

1. Organizational Culture has a significant effect on Work Stress, with a significance value of $p = 0.000 < 0.05$ and a negative regression coefficient. This means that a positive organizational culture will reduce the level of work stress. A supportive, open, and communicative culture helps create a psychologically healthy work environment.
2. Leadership also has a significant effect on Work Stress, with $p = 0.000 < 0.05$ and a negative direction of effect. This indicates that the better the quality of leadership, the lower the stress experienced by employees. Leaders who

provide clear direction and pay attention to their subordinates' conditions are able to reduce work pressure.

3. Organizational Culture has a significant effect on Job Satisfaction, both directly and indirectly through Work Stress. The direct effect is indicated by a significance value of $p = 0.000 < 0.05$ and a positive direction of effect, meaning that a strong organizational culture increases employee job satisfaction. Meanwhile, the indirect effect through Work Stress was also significant based on the Sobel test, with a Z value of $2.00 > 1.96$, indicating that Work Stress partially mediates the relationship. Thus, organizational culture can increase job satisfaction both directly and by first reducing work stress.
4. Leadership has a significant effect on Job Satisfaction, both directly and indirectly through Work Stress. Directly, the effect is significant with $p = 0.000 < 0.05$ and a positive regression coefficient, indicating that effective leadership increases job satisfaction. Indirectly, the Sobel test yielded a Z value of $2.15 > 1.96$, indicating partial mediation by Work Stress. Thus, good leadership not only directly increases job satisfaction but also does so through the reduction of work stress.
5. Work Stress has a significant effect on Job Satisfaction, with $p = 0.024 < 0.05$ and a negative direction of effect. The higher the level of stress, the lower the job satisfaction experienced. Therefore, effective stress management is an important strategy for improving job satisfaction in the company.
6. Simultaneously, Leadership and Organizational Culture have a significant effect on Work Stress, with $p = 0.000 < 0.05$ and an R Square value of 0.875. This means that 87.5% of the variation in work stress can be explained jointly by the two variables.
7. Likewise, Leadership, Organizational Culture, and Work Stress simultaneously have a significant effect on Job Satisfaction, with $p = 0.000 < 0.05$ and an R Square value of 0.877. This means that the three variables jointly explain 87.7% of the variation in job satisfaction. This finding reinforces the importance of strengthening organizational culture, improving leadership quality, and managing stress as an integrated strategy to create optimal job satisfaction at PT. Samawood Utara Work Industri.

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