

The Impact of Leadership Style and Organizational Culture on Job Satisfaction in Human Resource Development

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ABSTRACT

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This study aims to analyze the influence of organizational culture and leadership style on job satisfaction in the context of human resource development in Surabaya. Using a quantitative approach with an explanatory survey design, the study involved 30 respondents from various industrial sectors in Surabaya who were selected through purposive sampling techniques. The research instrument used the Organizational Culture Inventory (OCI), Multifactor Leadership Questionnaire (MLQ), and Job Descriptive Index (JDI) with Cronbach's Alpha reliability of 0.923, 0.897, and 0.934, respectively. Multiple linear regression analysis showed that organizational culture and leadership style had a significant effect on job satisfaction with an R^2 value of 0.563 ($p < 0.001$). Organizational culture had a greater influence ($\beta = 0.428$, $p < 0.01$) than leadership style ($\beta = 0.321$, $p < 0.01$). Hierarchy culture dominates organizational culture (mean=4.02), while transformational leadership is the most dominant leadership style (mean=3.97). The co-workers dimension (mean=3.91) showed the highest level of satisfaction, while promotion (mean=3.38) showed the lowest satisfaction. The findings indicate the importance of integrating organizational culture development with leadership development programs to optimize employee job satisfaction as the foundation for sustainable human resource development.

Keywords: job satisfaction, leadership style, organizational culture, human resource development

INTRODUCTION

In an era of increasingly competitive globalization, organizations are required to optimize human resources (HR) as a strategic asset that determines long-term success. Employee job satisfaction is a crucial indicator in assessing the effectiveness of HR management, as it is directly correlated with productivity, organizational commitment, and employee retention rates (Putri, Salma, & Ismail, 2024). Recent research shows that job satisfaction is not only depend on compensation aspects, but is significantly influenced by the dynamics of organizational culture and the leadership style applied (Nurlina, 2022). This phenomenon is becoming increasingly relevant in the context of metropolitan cities such as Surabaya, where talent competition and employee expectations for a conducive work environment continue to increase.

Organizational culture, defined as a shared system of norms, values, and beliefs, fundamentally influences employee behavior and attitudes (Egitim, 2022). It is learned as a pattern of basic assumptions that groups develop to address external adaptation and internal integration challenges, becoming validated and transmitted to new members as an appropriate way to understand feelings, thoughts, and perceptions. Empirical evidence suggests that organizations with strong cultures, marked by distinct behavioral norms, experience elevated employee satisfaction and commitment (Shoaib & Pathan, 2023). Furthermore, a positive and inclusive organizational culture fosters an environment conducive to effective leadership, which, in turn, reinforces and sustains the desired organizational culture.

A leader's style in influencing, motivating, and guiding members towards organizational goals directly influences the level of employee job satisfaction. Transformational leadership, in particular, has demonstrated a strong positive correlation with employee job satisfaction (Bass, 1985). Organizational administrators' leadership behaviors, adapted to achieve organizational missions, consequently affect employee job satisfaction, underscoring the importance of understanding the nexus between job satisfaction, leadership behavior, and organizational culture within the

framework of sustainable HR development (Gebreheat, Teame, & Costa, 2023). Existing research has identified various organizational culture dimensions, including innovation, results, people, team, detail, stability, and aggressiveness orientation, as influential factors on job satisfaction (Arabeche et al., 2022; Shakib, 2024). Additionally, contemporary leadership styles, including transactional, transformational, and ethical leadership, have varying effects on employee motivation and satisfaction, resulting in complex interactions that require careful analysis.

The geographical and demographic context of Surabaya as a business and industrial center in East Java provides unique characteristics in organizational dynamics and HR management. As a metropolitan city with a heterogeneous population and a high level of business competition, Surabaya faces special challenges in managing employee job satisfaction. Research conducted in various industrial sectors in Surabaya showed significant variations in the implementation of organizational values and leadership approaches, which impact the level of employee job satisfaction and productivity (Davidescu, Apostu, Paul, & Casuneanu, 2020). This locality factor is important because East Java's local culture that emphasizes harmony, mutual cooperation, and hierarchical respect can interact with formal organizational culture and influence the effectiveness of certain leadership styles.

Human resource development in the modern context is no longer seen as a mere administrative function, but as a strategic partnership that contributes directly to the organization's competitive advantage. In studies conducted by (Abdallat, Suifan, Oklah, Sweis, & Sweis, 2020) and (Adiguzel, Ozcinar, & Karadal, 2020), they underlined the importance of efficient human resource development by thoroughly understanding the various factors that impact job satisfaction, which serves as an indicator of employee performance. In this case, organizational culture and leadership style play a role as enablers that facilitate or hinder the HR development process. Organizations that successfully integrate a culture that supports learning and growth with an inspiring and empowering leadership style tend to have more effective HR development programs and higher levels of employee job satisfaction.

The complexity of the relationship between job satisfaction, leadership style, and organizational culture are increasingly apparent when considering generational differences in the modern workforce (Huynh & Hua, 2020). In his research, it was identified that millennials and Gen Z have different expectations of organizational culture and leadership styles compared to previous generations. The younger generation tends to prioritize an organizational culture that supports work-life balance, communication transparency, and participative leadership style. This phenomenon enhances the analysis of how organizational culture and leadership style impact job satisfaction, particularly in Surabaya where the workforce is increasingly comprised of digital natives.

The challenge in measuring and analyzing the influence of leadership style and organizational culture on job satisfaction also lies in the complexity of these constructs. Organizational culture is a multi-dimensional phenomenon that includes visible (artifacts) to invisible (underlying assumptions) aspects, while leadership styles can vary not only between leaders, but also in different situations (situational leadership). Job satisfaction itself is an affective construct that is influenced by various individual and contextual factors. (Akpa, Asikhia, & Nneji, 2021) emphasizes the importance of using a multi-method and multi-source approach in analyzing these complex relationships to gain accurate understanding and comprehensive.

The practical implications of this research are particularly relevant for HR and organizational management practitioners in Surabaya. An in-depth understanding of how leadership style and organizational culture affect job satisfaction can assist organizations in designing more effective HR development strategies. This includes the design of culture transformation programs, leadership development, and employee engagement initiatives that are aligned with local characteristics and workforce expectations in Surabaya. (Shah et al., 2021) In his research, it shows that organizations that successfully align culture, leadership, and HR development strategies have significantly higher employee satisfaction scores and retention rates.

Based on the identified research gaps and the existing practical urgency, this study aims to comprehensively analyze the influence of organizational culture and leadership style on job satisfaction in the context of human resource development in Surabaya. This study is expected to make a theoretical contribution in enriching the literature on human resource management and organizational behavior, as well as providing practical insights for organizations in Surabaya in optimizing employee job satisfaction through the management of organizational culture and effective leadership style. This research aims to serve as a reference for developing sustainable HR strategies and achieving sustainable competitive advantage for contemporary organizations through comprehensive contextual analysis.

LITERATURE REVIEW

Organizational culture

Organizational culture is a crucial concept in organizational behavior, characterized as a set of underlying assumptions acquired by a group to address challenges of external adaptation and internal integration, then imparted to new members (Schein & Schein, 2018). This learned pattern encompasses collective learning and the transmission of an organization's unique values. Structurally, organizational culture consists of three interacting levels: artifacts, which are the visible manifestations such as architecture and observable behaviors; espoused values, which are explicit philosophies, goals, and strategies; and underlying assumptions, the unconscious perceptions, beliefs, and feelings that drive values and actions. Categorizes organizational culture into four typologies through the Organizational Culture Assessment Instrument (OCAI): clan culture (emphasizing flexibility and internal focus with teamwork and employee development), adhocracy culture (oriented towards flexibility and external focus with innovation and adaptability), market culture (prioritizing external control and results-orientation), and hierarchy culture (emphasizing internal control and efficiency with stability) (Fanya, Kadiyono, & Ashriyana, 2021).

Empirical studies shows that organizational culture significantly influences various organizational outcomes (Detert, Treviño, & Sweitzer, 2008). In its longitudinal study, it found that a strong organizational culture correlates positively with long-term financial performance, higher employee retention rates, and increased customer satisfaction. Organizational culture also serves as an informal coordination mechanism that can reduce monitoring costs and improve operational efficiency through shared understanding and common goals among organizational members.

Leadership style

The concept of leadership style has undergone a paradigmatic evolution from a trait-based approach to behavioral and situational leadership theories. Bass & Riggio, (2006) define leadership style as a pattern of behavior shown by a leader when influencing group activities in an effort to achieve preset goals. This definition emphasizes the behavioral and relational aspects of leadership that can be learned and developed.

Transformational leadership, as articulated by Bass, (1985) and further developed, is characterized by four dimensions: mentorship, fostering creativity, visionary communication, and role modeling. A meta-analysis conducted by Avolio et al., (2013) revealed that transformational leadership significantly impacts follower motivation, satisfaction, and performance. In contrast, transactional leadership uses contingent rewards and exception-based management. Lack of decision-making and responsibility characterizes laissez-faire leadership.

Job satisfaction

Job satisfaction refers to a positive emotional state that arises as a result of a person's evaluation of their job or work experience, with an emphasis on the evaluative and affective aspects that are subjective and personal (Locke, 1976). According to Hackman & Oldham, (1980) Job Characteristics Model, job satisfaction is influenced by five key characteristics: autonomy, feedback, task significance, task identity, and skill variety. These characteristics impact psychological states such as knowledge of responsibility, results, and experienced meaningfulness. The Job Descriptive Index (JDI) developed by Tasios & Giannouli, (2011) measures job satisfaction across five dimensions: the nature of supervision quality, promotion opportunities, the work itself, pay, and interactions with coworkers. Adams, (1963) proposed Equity Theory, which posits that job satisfaction is affected by social comparisons. Perceived inequities in input-outcome ratios relative to referent others may result in dissatisfaction. Herzberg's Two-Factor Theory differentiates between motivational elements, such as success and recognition that enhance contentment, and hygienic variables, including remuneration and working circumstances, which avert displeasure but do not foster satisfaction.

Organizational cultural relations and job satisfaction

The correlation job satisfaction and organizational culture is elucidated by several theoretical frameworks. Social Exchange Theory posits that a supportive organizational culture fosters reciprocal relationships, wherein employees are motivated to contribute positively in response to favorable treatment by the organization. Specifically, clan cultures, characterized by their focus on employee development and team collaboration, are associated with enhanced job satisfaction due to their fulfillment of psychological safety and belonging needs. Furthermore, The Person-Environment Fit Theory posits that the alignment between organizational culture and individual values is a significant determinant of job satisfaction (Kristof-Brown, Schneider, & Su, 2023) It found that Individual and organizational value congruence is associated with higher levels of organizational commitment, job satisfaction, and intention to stay. A market culture that emphasizes achievement and competitiveness will be more satisfying for individuals who have a high achievement orientation, while a hierarchy culture will be more suitable for individuals who value structure and stability.

The relationship of leadership style and job satisfaction

Leader-Member Exchange (LMX) Theory offers a framework for comprehending the correlation between leadership style and job satisfaction. Transformational leaders who show individualized consideration and intellectual stimulation tend to develop high-quality LMX relationships that are positively correlated with follower satisfaction.

Self-Determination Theory (SDT) explains that transformational leadership behaviors meet three basic psychological needs: autonomy (through empowerment and participative decision making), competence (through skill development and challenging assignments), and relatedness (through supportive relationships and team building). Fulfillment of these three needs results in sustainable intrinsic motivation and high job satisfaction. Research Kristof-Brown et al., (2023) shows that transformational leadership has an indirect effect on job satisfaction through the mediation of psychological empowerment and work engagement.

Interaction of organizational culture and leadership style

Contingency leadership theories posit that leadership style effectiveness is contingent upon situational factors, such as organizational culture. Transactional leadership, characterized by clear expectations and contingent rewards, may be more effective in a hierarchy culture compared to a clan culture, which favors participatory and developmental leadership approaches. According to Schein & Schein, (2018), leaders not only have an impact on the culture of their organizations, but they also have the ability to create and modify it through their behaviors and decisions. Cultural Leadership Theory states that effective leaders are those who are able to understand and adapt to the culture of their organization while also being able to influence cultural change when necessary. O'Reilly & Tushman, (2013), identify that successful leaders are those who can become cultural ambassadors who strengthen the positive aspects of the existing culture while introducing new values and practices that support organizational transformation.

Research hypothesis

This study's hypothesis is predicated on a review of the literature and prior research:

H1: Organizational culture has a positive and significant effect on employee job satisfaction.

H2: Leadership style has a positive and significant effect on employee job satisfaction.

H3: Organizational culture and leadership style simultaneously have a positive and significant effect on employee job satisfaction.

Frame of mind

The research framework integrates theories suggesting organizational culture and leadership style are independent variables influencing job satisfaction as a dependent variable. Market, adhocracy, comprising clan, organizational culture, and hierarchy dimensions, interacts with leadership styles including laissez-faire leadership, transformational, and transactional, to shape employee work experience. This suggests that organizational culture and leadership style not only directly impact job satisfaction but also interact to foster a supportive work environment. The dynamics highlight how culture and leadership act as complementary forces in molding employee experience and organizational results.

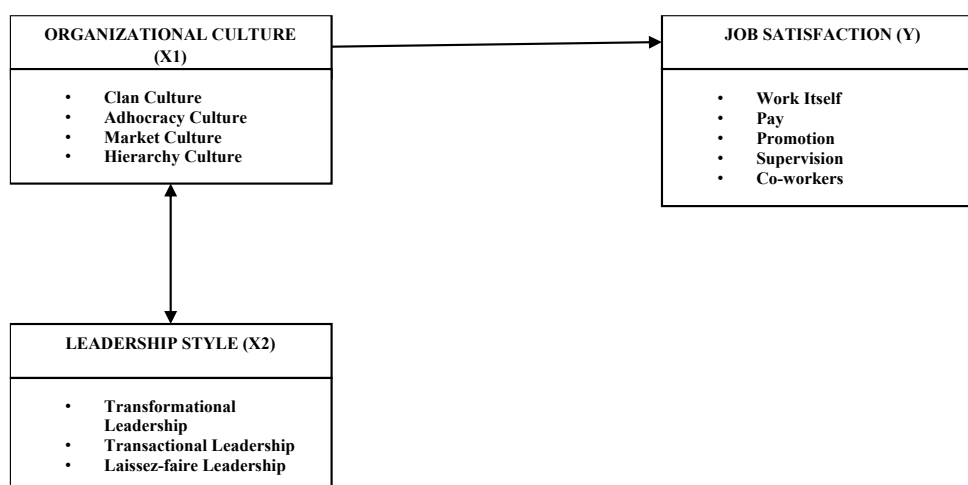


Figure 1. Research model

METHODS

Research design and population

This study employs a quantitative methodology utilizing an explanatory survey research design, aimed at analyzing and elucidating the causal relationship between leadership style and organizational culture variables as independent variables, in relation to job satisfaction as the dependent variable. The quantitative approach was selected for its ability to objectively and systematically measure phenomena, enabling generalizable findings through standardized instruments and rigorous statistical analysis. This study's design facilitates empirical hypothesis testing, offering a detailed understanding of the strength and direction of relationships between variables within the context of human resource development in Surabaya-based organizations.

The study's population comprises employees across various industrial sectors in Surabaya, particularly those who have worked for their current company for at least a year in order to become familiar with its organizational culture and leadership style. A purposive sampling technique was employed, selecting permanent employees from staff to middle management levels, aged 23-55, with a minimum of 12 months of tenure. The number of samples set was 30 respondents, which according to statistical theory is the minimum number for the normal distribution in parametric analysis. The distribution of respondents will be sought to be representative by involving various industrial sectors in Surabaya, including manufacturing, services, trade, and information technology, to obtain adequate variety in organizational cultural experiences and leadership styles.

Measurements

This study defines organizational culture as a shared system of values, norms, beliefs, and assumptions that influence member behavior. It uses the Organizational Culture Inventory (OCI), based on Cameron and Quinn's framework, to measure four dimensions: clan, adhocracy, market, and hierarchy cultures, each on a 5-point Likert scale. Leadership style, characterized as the pattern of leader behavior impacting subordinates, is assessed via the Multifactor Leadership Questionnaire (MLQ), adapted from Bass and Avolio. Respondents assess the frequency of observed behaviors using a 5-point Likert scale.

The research instrument is a structured questionnaire comprising four sections. The initial section gathers informed consent and demographic data, including age, gender, education level, length of service, and organizational position. The second section comprises 24 items measuring organizational culture across six items per dimension. The third section contains 20 items to assess leadership style, with proportional distribution across its dimensions. The fourth section includes 25 items for job satisfaction, five items per dimension. Construct validity will be assessed by Confirmatory Factor Analysis (CFA), supported by item loading factor examination for convergent validity. Reliability will be measured using Cronbach's Alpha, with a target of 0.7 for acceptable internal consistency. Before data collection, 10 primary sample respondents will pre-test the instrument's clarity and comprehensibility.

Data collection procedure

Data was collected via direct survey, with questionnaires personally distributed to respondents at their workplaces. This method was selected to achieve a high response rate and enable researchers to clarify any unclear questions. The data collection spanned four weeks, involving visits to authorized organizations in Surabaya. Participants were allotted ample time to finish the questionnaires and were assured that their identities and responses would remain confidential. The research ethics protocol included informed consent, detailing the potential risks, study's purpose, data collection methods, benefits for participants, and their right to withdraw. Data security was maintained, with collected information exclusively used for academic research. Quality assurance included verification of questionnaire completeness and data accuracy before database entry for analysis.

Data analysis

The analysis of data was performed utilizing the most recent version of SPSS, following a structured three-stage process. The first stage involved descriptive analysis to characterize respondents and variable distributions through calculations of mean, median, mode, standard deviation, and frequency analysis. The second stage focused on classical assumption testing, including normality (Kolmogorov-Smirnov), linearity (scatter plot, ANOVA), multicollinearity (VIF), and heteroscedasticity (Glejser test). If normality assumptions were unmet, particularly with the small sample size ($n=30$), non-parametric alternatives like Spearman correlation would be used. The third stage comprised inferential analysis to test hypotheses, utilizing Pearson correlation (or Spearman for abnormal data) is utilized to evaluate relationships between variables, while multiple linear regression ($Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \epsilon$) is employed to analyze the influence of organizational culture (X_1) and leadership style (X_2) on job satisfaction (Y). Bootstrap resampling techniques were applied to bolster the robustness of results for the limited sample size. Interpretation of results for hypothesis testing was performed at a significance level of $\alpha = 0.05$, with effect size

determined using Cohen's guidelines. Findings were presented comprehensively via tables, graphs, and narratives to elucidate their implications for human resource management.

RESULTS

Respondent characteristics

The data collected from 30 respondents employed across different organizations in Surabaya provided a comprehensive demographic overview of the employee population in the city. The respondents' ages varied between 23 and 41 years, with a range of 23 to 41 years, suggesting a workforce primarily in their career prime. The gender breakdown included 14 females (46.7%), and 16 males (53.3%), indicating a balanced representation. In terms of education, 4 respondents (13.3%) were educated in D3, 20 respondents (66.7%) were educated in S1, and 6 respondents (20%) were educated in S2, indicating a relatively high level of education in accordance with the characteristics of the professional workforce in Surabaya. The distribution of tenure showed wide variation from 1 to 16 years with an average of 6.1 years, while the position consisted of 18 staff (60%), 8 supervisors (26.7%), and 4 managers (13.3%). Respondents were spread across four main sectors, namely manufacturing (8 respondents, 26.7%), services (8 respondents, 26.7%), IT (7 respondents, 23.3%), and trade (7 respondents, 23.3%) (Table 1).

Table 1 Demographic characteristics of respondents (n=30)

Characteristic	Category	Frequency	Percentage
Age	23-30 years	18	60.0%
	31-35 years old	7	23.3%
	36-41 years old	5	16.7%
Gender	Man	16	53.3%
	Woman	14	46.7%
Education	D3	4	13.3%
	S1	20	66.7%
	S2	6	20.0%
Tenure	1-5 years	17	56.7%
	6-10 years	8	26.7%
	>10 years	5	16.6%
Position	Staff	18	60.0%
	Supervisor	8	26.7%
	Manager	4	13.3%
Sector	Manufacturing	8	26.7%
	Service	8	26.7%
	IT	7	23.3%
	Trade	7	23.3%

Descriptive analysis results

The analysis of organizational culture variables revealed that hierarchy culture attained the highest score, with a mean of 4.02 (SD=0.74). This was followed by market culture, which had a mean of 3.89 (SD=0.79), clan culture with a mean of 3.78 (SD=0.87), and finally, adhocracy culture, which recorded a mean of 3.54 (SD=0.92) (Table 2). These findings indicate that organizations in Surabaya tend to adopt a clear hierarchical structure with an emphasis on control, stability, and operational efficiency. This aligns with the traits of Indonesian organizational culture, which places importance on formal structures and hierarchical relationships (Fanya et al., 2021).

In the dimension of leadership styles, transformational leadership showed the highest score with a mean of 3.97 (SD=0.68). This was succeeded by transactional leadership, which had a mean of 3.64 (SD=0.81), while laissez-faire leadership lagged behind with a mean of 2.43 (SD=0.89). Modern leaders globally are increasingly adopting transformational leadership, characterized by providing a clear vision, stimulating intellect, and offering individualized attention to subordinate development, to inspire and motivate employees (Bass & Riggio, 2006). Low scores on laissez-faire leadership indicate that leaders in those organizations are less likely to adopt a passive leadership style or avoid responsibility.

Table 2 Descriptive statistics of research variables

Variable	Dimension	Mean	Std. Deviation	Min	Max
Organizational Culture	Clan Culture	3.78	0.87	2.17	4.83

Leadership Style	Adhocracy Culture	3.54	0.92	1.83	4.67
	Market Culture	3.89	0.79	2.33	4.83
	Hierarchy Culture	4.02	0.74	2.67	4.92
	Transformational	3.97	0.68	2.80	4.90
	Transactional	3.64	0.81	2.20	4.80
Job Satisfaction	Laissez-faire	2.43	0.89	1.20	4.20
	Work Itself	3.72	0.83	2.20	4.80
	Pay	3.51	0.94	1.80	4.80
	Promotion	3.38	0.97	1.60	4.80
	Supervision	3.85	0.76	2.40	4.80
	Co-workers	3.91	0.71	2.60	4.80

Job satisfaction analysis revealed that the co-workers dimension scored highest ($M=3.91$, $SD=0.71$), followed by supervision ($M=3.85$, $SD=0.76$), work itself ($M=3.72$, $SD=0.83$), pay ($M=3.51$, $SD=0.94$), and promotion ($M=3.38$, $SD=0.97$). These findings indicate that employees in Surabaya are most satisfied with interpersonal relationships at work and the quality of supervision they receive. A relatively low score on the promotion dimension indicates concerns regarding career development opportunities, which can be an area of concern for organizational management in improving the promotion and career development system of employees.

Validity and reliability test results

The research instruments were tested and yielded satisfactory results for all variables regarding their validity and reliability. Construct validity was established through CFA, where all items demonstrated a loading factor exceeding 0.5. The KMO measure demonstrated a strong suitability for factor analysis, with values of 0.847 for organizational culture, 0.823 for leadership style, and 0.856 for job satisfaction. Bartlett's Test of Sphericity confirmed data suitability for factor analysis ($p < 0.001$). Cronbach's Alpha revealed excellent internal consistency for organizational culture (0.923), leadership style (0.897), and job satisfaction (0.934), all exceeding the 0.7 threshold (Nunnally & Bernstein, 1994).

Table 3 Instrument validity and reliability test results

Variable	Number of Items	SME	Bartlett's Test	Cronbach's Alpha	Status
Organizational Culture	24	847	$p < 0.001$	923	Valid & Reliable
Clan Culture	6	-	-	881	Valid & Reliable
Adhocracy Culture	6	-	-	874	Valid & Reliable
Market Culture	6	-	-	867	Valid & Reliable
Hierarchy Culture	6	-	-	856	Valid & Reliable
Leadership Style	20	823	$p < 0.001$	897	Valid & Reliable
Transformational	10	-	-	894	Valid & Reliable
Transactional	5	-	-	823	Valid & Reliable
Laissez-faire	5	-	-	812	Valid & Reliable
Job Satisfaction	25	856	$p < 0.001$	934	Valid & Reliable
Work Itself	5	-	-	887	Valid & Reliable
Pay	5	-	-	901	Valid & Reliable
Promotion	5	-	-	894	Valid & Reliable
Supervision	5	-	-	876	Valid & Reliable
Co-workers	5	-	-	869	Valid & Reliable

Classical assumption test results

Regression analysis assumptions were tested and met prior to conducting the analysis. A Kolmogorov-Smirnov test indicated that residuals were normally distributed ($p=0.156$, >0.05). Linearity was established through scatter plots and ANOVA, revealing a significant linear relationship between independent and dependent variables ($F=24.67$, $p < 0.001$). Multicollinearity was absent, as evidenced by VIF values for organizational culture and leadership style both being 1.367 (below the threshold of 10). The Glejser test for heteroscedasticity showed no significant heteroscedasticity ($p=0.423$, >0.05), confirming constant residual variance.

Correlation analysis

Pearson's correlation analysis identified significant positive associations between all primary study variables. Organizational culture and job satisfaction showed a strong positive correlation ($r=0.672$, $p < 0.01$), while leadership

style and job satisfaction exhibited a moderate to strong positive relationship ($r=0.584$, $p<0.01$). Furthermore, organizational culture and leadership style exhibited a positive correlation of 0.519 ($p<0.01$), suggesting their mutual positive influence on organizational dynamics.

Dimensional correlation analysis revealed significant relationships with job satisfaction. Clan culture exhibited the strongest positive correlation ($r=0.623$, $p<0.01$) with the measured outcome, followed by market culture ($r=0.591$, $p<0.01$), adhocracy culture ($r=0.487$, $p<0.05$), and hierarchy culture ($r=0.445$, $p<0.05$) (Table 4). These findings are consistent with literature linking collaborative, employee-centric, and results-oriented cultures to higher job satisfaction (Cameron & Quinn, 2011). In terms of leadership, transformational leadership exhibited the strongest positive correlation with job satisfaction ($r=0.634$, $p<0.01$), while transactional leadership followed with a correlation of ($r=0.456$, $p<0.05$). Laissez-faire leadership displayed a negative correlation ($r=-0.287$, $p<0.05$), indicating that passive leadership styles tend to decrease employee job satisfaction.

Table 4 Correlation matrix between research variables

Variable	1	2	3	4	5	6	7	8	9	10
Organizational Culture	1									
Clan Culture	.856**	1								
Adhocracy Culture	.798**	.523**	1							
Market Culture	.831**	.587**	.456**	1						
Hierarchy Culture	.734**	.398*	.367*	.523**	1					
Leadership Style	.519**	.467**	.398*	.456**	.323	1				
Transformational	.498**	.523**	.387*	.434*	.298	.892**	1			
Transactional	.378*	.334	.298	.356	.267	.789**	.567**	1		
Laissez-faire	-.234	-.298	-.156	-.267	-.189	.456**	-.123	.298	1	
Job Satisfaction	.672**	.623**	.487**	.591**	.445*	.584**	.634**	.456*	-.287	1

**Note: * $p<0.05$, $p<0.01$

Multiple regression analysis

The analysis using multiple linear regression demonstrated a model that is statistically significant and exhibits robust predictive capabilities regarding job satisfaction. The model achieved an R^2 of 0.563, suggesting that 56.3% of the variance in job satisfaction can be explained by organizational culture and leadership style, while the remaining 43.7% is linked to factors that have not been explored. The Adjusted R^2 of 0.531 suggests the model's robustness against sample size and variable count. The regression model was statistically significant, as indicated by an F-test result of 17.42 with a p -value <0.001 . (Table 5).

Table 5 Multiple linear regression analysis results

ANOVA	Sum of Squares	Df	Mean Square	F	Sig.
Regression	11.203	2	5.602	17.42	.000**
Residual	8.687	27	.322		
Total	19.890	29			

**Note: * $p<0.05$, $p<0.01$

Regression coefficient analysis reveals that organizational culture has a more significant impact on job satisfaction than leadership style, with organizational culture exhibiting a standardized beta coefficient of 0.428 ($t=3.967$, $p<0.01$). In contrast, leadership style yielded a standardized beta coefficient of 0.321 ($t=2.845$, $p<0.01$), suggesting a statistically significant but less pronounced effect compared to organizational culture. The Durbin-Watson value of 1.876 confirms the absence of autocorrelation in the residual model, validating the analytical outcomes.

Table 6 Regression coefficient analysis

Coefficients	B	Std. Error	Beta	t	Sig.	VIVID
(Constant)	847	397		2.134	.042*	
Organizational Culture	428	108	.428	3.967	.001**	1.367
Leadership Style	321	113	.321	2.845	.008**	1.367

**Note: * $p<0.05$, $p<0.01$

Hypothesis testing

The study employed statistical inference for hypothesis testing, using a significance level of $\alpha = 0.05$ and multiple linear regression analysis to evaluate hypotheses.:

Hypothesis 1 (H1): Organizational culture has a positive and significant effect on employee job satisfaction.

Analysis revealed a positive and significant influence of organizational culture on employee job satisfaction. The organizational culture regression coefficient (β_1) was 0.428, with a t-count of 3.967 and a significance level of $p < 0.01$. The t-calculated value (3.967) exceeded the t-table value (2.052), and the significance ($p < 0.05$) led to the acceptance of the hypothesis (H1).

Hypothesis 2 (H2): Leadership style has a positive and significant effect on employee job satisfaction.

The analysis revealed that leadership style had a regression coefficient of $\beta_2 = 0.321$, with a t-count value of 2.845. The t-calculated value (2.845) surpassed the t-table value (2.052), and the significance level was $p < 0.01$, which is less than $p < 0.05$. These statistical results led to the acceptance of hypothesis H2, confirming that leadership style has a positive and significant effect on employee job satisfaction.

Hypothesis 3 (H3): Organizational culture and leadership style simultaneously have a positive and significant effect on employee job satisfaction.

The results of the F test showed an F-count value = 17.42 with a significance of $p < 0.001$. The F test results were significant ($F = 17.42$, $p < 0.001$). The F-calculation (17.42) exceeded the F-table value (3.35) with a significance of $p < 0.05$, supporting the acceptance of H3. The overall regression model was significant with an R^2 of 0.563, indicating that organizational culture and leadership style accounted for 56.3% of job satisfaction variations.

DISCUSSION

This study investigates the interrelationship between leadership style, organizational culture, and job satisfaction in Surabaya-based organizations. It highlights a substantial positive influence of organizational culture on job satisfaction, with a beta coefficient of 0.428 ($p < 0.01$). This result is consistent with the theoretical postulations of (Barkhuizen & Gumede, 2021), which identify organizational culture as the foundational psychological element impacting an employee's work experience. Specifically, the prevalence of hierarchical culture within the surveyed organizations mirrors broader Indonesian cultural tendencies that favor formal structures, defined hierarchies, and organizational stability. Despite these characteristics, the findings indicate a positive relationship between this hierarchical culture and job satisfaction, implying that employees derive a sense of security and certainty from clear organizational structures.

An interesting finding was the highest correlation between clan culture and job satisfaction ($r=0.623$), which was consistent with the research (Nanjundeswaraswamy, 2021) which shows that a culture that emphasizes internal cohesion, flexibility, and concern for employees tends to produce positive outcomes for employees. This indicates that although hierarchy culture is dominant, elements of clan culture such as teamwork, mutual care, and employee development remain important factors in increasing job satisfaction. Market culture also showed a strong correlation ($r=0.591$), suggesting that an orientation to healthy results and competitiveness can increase employee job satisfaction, especially regarding goal achievement and recognition of performance.

The analysis reveals that leadership style positively and significantly impacts job satisfaction, evidenced by a beta coefficient of 0.321 ($p < 0.01$). Transformational leadership is the dominant style observed, with a mean score of 3.97, which corresponds to the expectation that leaders should inspire, motivate, and develop their subordinates. A robust correlation of 0.634 was identified between job satisfaction and transformational leadership, reinforcing existing research that points to positive outcomes stemming from individualized consideration, intellectual stimulation, and inspirational motivation. Conversely, laissez-faire leadership exhibits a negative correlation ($r=-0.287$) with job satisfaction, consistent with findings that passive leadership styles lead to uncertainty, lack of direction, and reduced motivation (Han & Stieha, 2020). These results are particularly pertinent to Indonesian culture, where employees typically seek clear guidance and support from leadership.

The correlation of 0.519 between leadership style and organizational culture indicates a reinforcing relationship between these two variables, which collectively influence job satisfaction. This aligns with the contingency leadership model, which asserts that a leadership style's efficacy depends on the corporate environment, which includes the current culture. In the context of a dominant hierarchy culture, transformational leadership is able to provide balance by introducing inspirational and developmental elements that can increase employee engagement without disrupting the established formal structure.

The analysis of the work satisfaction dimension revealed an important finding where co-workers (mean=3.91) and supervision (mean=3.85) showed the highest scores, indicating that the relational aspect of work is the main source of satisfaction for employees in Surabaya. These findings are in line with the characteristics of Indonesia's collectivist culture where interpersonal relationships and social harmony have high values (Sahertian & Jawas, 2021). A relatively low score on promotion (mean=3.38) indicates concerns related to the career development system, which can be an area of improvement for organizations to increase talent retention and employee engagement.

This study's findings align with the job characteristics model, indicating that job characteristics, influenced by leadership support and organizational culture, significantly impact job satisfaction. Furthermore, the findings are consistent with social exchange theory, which proposes that job satisfaction arises from positive employee-organization and employee-leader interactions (Mohsen Bahmani Oskooee & Ian Wooton, 2020). A supportive organizational culture and effective leadership create a positive psychological contract, which in turn increases employee job satisfaction.

Practically, human resource management professionals in Surabaya and Indonesia can benefit greatly from the insights provided by the findings of the study. First, the dominance of hierarchy culture indicates that organizations in Surabaya still adopt a relatively formal and hierarchical structure. While this shows a positive correlation with job satisfaction, organizations need to consider integrating elements of clan culture such as team building, mentoring programs, and employee development initiatives to further improve job satisfaction. Second, the high transformational leadership score shows that leaders in Surabaya have begun to adopt modern leadership styles that are more inspirational and developmental, but still need continuous improvement in terms of cognitive engagement and personalized attention. Third, the low score in the promotion dimension in job satisfaction indicates the need to improve the career development and succession planning system. Organizations are advised to implement clear career pathways, regular performance reviews, and leadership development programs to address these concerns. Fourth, the inverse relationship between job satisfaction and laissez-faire leadership provides a warning to organizations to avoid a leadership style that is too passive or hands-off, especially in the context of Indonesian culture where employees tend to expect clear guidance from their superiors.

Theoretically, this study enhances the existing literature on organizational behavior, particularly within the framework of Indonesian culture. The finding that hierarchy culture can still produce high job satisfaction when combined with transformational leadership provides new nuances to the debate between traditional and modern organizational practices. This research also strengthens the theory of cultural contingency in leadership effectiveness, showing that the effectiveness of leadership styles is highly dependent on the organizational and national cultural context.

This study possesses multiple limitations that must be acknowledged in the analysis of the data. First, the small sample size (N=30) hampers the ability to generalize the results, although the bootstrap resampling method was used to strengthen the overall findings. Further research is recommended with larger sample sizes to enhance external validity and statistical power. Second, longitudinal study will give a better knowledge of the dynamics of interactions between variables over time, as cross-sectional design limits the capacity to establish firm causal inferences. Third, this study exclusively encompassed organizations in Surabaya, so generalizations to other cities in Indonesia need to be done carefully considering the possibility of differences in regional characteristics. Fourth, the use of self-report questionnaires can cause common method bias even though efforts have been made to minimize such bias through careful instrument design and rigorous statistical analysis. Further research can use multiple source data or mixed-method approaches to overcome these limitations.

CONCLUSION

This study, informed by an analysis of data from 30 respondents within an organization in Surabaya, successfully demonstrates a significant relationship between leadership style and organizational culture and their impact on job satisfaction levels. The regression model shows that 56.3% of job satisfaction variations may be attributed to the interplay of these two variables, with organizational culture having a greater influence ($\beta=0.428$) than leadership style ($\beta=0.321$). These findings indicate that investing in organizational culture development and leadership development is an effective strategy to increase employee job satisfaction. The dominance of hierarchy culture and transformational leadership in the organizations studied reflects the transition from traditional organizational models to more modern and adaptive ones. The positive relationship between group culture and job satisfaction suggests that the relational and developmental dimensions of organizational culture significantly influence employee well-being. Conversely, the negative relationship between leadership style, laissez-faire, and job satisfaction levels indicated the risks associated with a lack of leadership in an organization.

For practitioners, this study recommends the implementation of an integrated approach in human resource management that combines culture development initiatives with leadership development programs. Organizations are advised to adopt a hybrid culture model that combines the stability of the hierarchy culture with the supportive elements of the clan culture. In terms of leadership, continuous development programs for transformational leadership capabilities need to be prioritized, while laissez-faire tendencies need to be minimized through effective leadership coaching and performance management systems. For researchers, this study opens up opportunities for further research with a larger sample, longitudinal design, and exploration of additional mediator or moderator variables such as organizational commitment, employee engagement, or work-life balance. The development of a more comprehensive theoretical model that considers contextual factors such as industry type, organizational size, or technological adoption can also make a more significant contribution to the literature on organizational behavior in Indonesia.

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