

EMPLOYEE RETENTION IN PHARMACEUTICAL INDUSTRY: ROLE OF LEADERSHIP COMMUNICATION AND TRANSFORMATIONAL LEADERSHIP THROUGH JOB SATISFACTION

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ABSTRAK

Industri farmasi menghadapi tantangan krusial dalam mempertahankan karyawan dengan keahlian tinggi, di mana kompetensi mereka secara langsung memengaruhi pengembangan produk, kepatuhan terhadap regulasi, serta proses validasi. Karena adanya persyaratan sertifikasi khusus dan keterbatasan alih pengetahuan, tingkat turnover karyawan dapat mengganggu jadwal operasional serta meningkatkan biaya perekrutan dan pelatihan ulang. Di wilayah Jabodetabek, persaingan talenta yang ketat dan tingginya mobilitas tenaga kerja semakin memperbesar risiko tersebut. Penelitian ini bertujuan untuk mengkaji pengaruh komunikasi pemimpin dan kepemimpinan transformasional terhadap retensi karyawan, dengan kepuasan kerja terhadap pemimpin sebagai variabel mediasi. Pendekatan kuantitatif digunakan dengan melibatkan 155 karyawan industri farmasi di Jabodetabek yang dipilih melalui teknik purposive sampling, dan data dianalisis menggunakan PLS-SEM dengan bantuan perangkat lunak SmartPLS 4.0. Hasil penelitian menunjukkan bahwa komunikasi pemimpin tidak berpengaruh langsung terhadap retensi karyawan, namun memiliki pengaruh tidak langsung yang signifikan melalui kepuasan kerja terhadap pemimpin. Sementara itu, gaya kepemimpinan transformasional memiliki pengaruh langsung maupun tidak langsung terhadap retensi karyawan, yang mengindikasikan bahwa kepemimpinan yang mampu menginspirasi, memberikan dukungan emosional, dan memotivasi karyawan berkontribusi positif terhadap niat karyawan untuk tetap bertahan dalam organisasi. Selain itu, tingkat kepuasan karyawan terhadap pemimpin berfungsi sebagai jembatan psikologis yang krusial dalam menentukan bagaimana komunikasi pemimpin dan perilaku transformasional diterjemahkan menjadi retensi karyawan yang lebih kuat di sektor farmasi. Oleh karena itu, implikasi penelitian ini menekankan pentingnya bagi perusahaan farmasi untuk meningkatkan kejelasan, empati, dan konsistensi komunikasi para pemimpin, serta menumbuhkan perilaku kepemimpinan transformasional seperti kemampuan menginspirasi, dukungan individual, dan keteladanan sebagai kompetensi inti kepemimpinan guna menjaga stabilitas tenaga kerja di industri yang sangat kompetitif.

Kata kunci: Komunikasi Pemimpin, Gaya Kepemimpinan Transformasional, Kepuasan Kerja, Retensi Karyawan, Industri Farmasi

ABSTRACT

The pharmaceutical industry faces a critical challenge in retaining highly skilled employees, whose expertise directly impacts product development, regulatory compliance, and validation processes. Due to specialized certification requirements and limited knowledge transferability, employee turnover can disrupt operational timelines and increase costs for rehiring and retraining. In the Greater Jakarta area (Jabodetabek), intense talent competition and high workforce mobility further amplify this risk. This study examines how leadership communication and transformational leadership influence employee retention, with job satisfaction toward the leader positioned as a mediating variable. A quantitative approach was used, involving 155 pharmaceutical employees in Jabodetabek selected through purposive sampling, and the data were analyzed using PLS-SEM via SmartPLS 4.0. The findings reveal that leader communication does not have a direct effect on employee retention, however, it demonstrates a significant indirect effect through job satisfaction toward the leader. Meanwhile, transformational leadership style has both direct and indirect effects on employee retention, indicating that leadership which inspires, provides emotional support, and motivates employees positively contributes to their intention to remain with the organization. Moreover, employees' level of satisfaction with their leader functions as a critical psychological bridge that determines how leadership communication and transformational behaviors translate into stronger retention in the pharmaceutical sector. Therefore, the implications point to the need for

pharmaceutical companies to improve leaders' communication clarity, empathy, and consistency, while also cultivating transformational behaviors, such as inspiration, individualized support, and role modeling as core leadership competencies to maintain workforce stability in a highly competitive industry.

Keywords: *Leader Communication, Transformational Leadership Style, Job Satisfaction, Employee Retention, Pharmaceutical Industry*

1. INTRODUCTION

Background

Employee retention has become a critical issue in the pharmaceutical industry, especially in maintaining operational continuity and company stability. Skilled employees play a major role in company performance, and losing them can reduce overall work efficiency (Khan, 2021). Low retention rates often lead to higher turnover, rising recruitment costs, and repeated training processes, all of which can slow down company performance (Darko *et al.*, 2024). This issue is increasingly concerning, particularly highlighted by LinkedIn (2023), which found that 93% of global organizations worry about potential employee resignations.

Employee retention is important for companies across Indonesia, but the issue becomes especially visible in the Jabodetabek region, which serves as part of the nation's economic backbone and concentrates a large share of industrial activity (Caraka *et al.*, 2021). The area also has very high daily worker mobility, with Jakarta drawing commuters from surrounding cities, which makes talent movement faster and competition for skilled employees more intense (Setyawan *et al.*, 2022). Most pharmaceutical headquarters, R&D facilities, and regulatory activities are also located in the Jabodetabek region. This is supported by the close proximity to regulators such as BPOM and related ministries located in the same area. It is common for employees with technical expertise in production, quality control, regulatory affairs, or R&D to switch to competitors offering better benefits, work culture, or leadership support. When this happens, companies not only lose manpower but also face workflow disruption, especially since many pharmaceutical roles require specific certifications and specialized training that cannot be replaced quickly.

Pharmaceutical companies heavily rely on employee retention because many positions demand technical expertise and certified competencies that take time to develop. Data shows that 5–10% of employees in this sector consider leaving their jobs (Gracita & Anindita, 2023). As noted by Torrington *et al.* (2017), the costs of turnover arise each time an employee leaves, including recruitment spending, training time, and the loss of experience that employees develop over time. Since these consequences occur regardless of the size of the turnover rate, even a modest level such as 5–10% can still have a significant effect, especially in positions where expertise and continuity are critical as in the pharmaceutical industry. In the pharmaceutical industry, where product development is long-term and highly regulated, employee turnover can delay product commercialization, increase operational costs, and even affect the company's ability to meet key targets. Therefore, employee retention is not just an HR concern, it is a strategic priority that directly impacts business sustainability and innovation competitiveness. These challenges are reflected in several key phenomena, as shown in Figure 1.

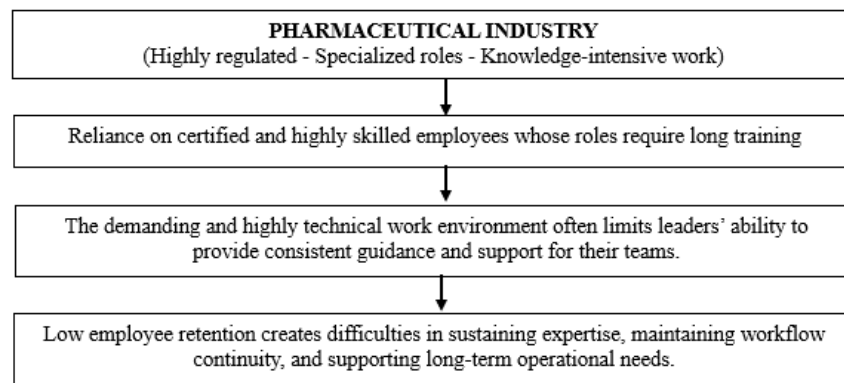


Figure 1. Employee Retention Phenomena in the Pharmaceutical Industry
Source: Author's data

Research on employee retention shows that organizational and relational factors strongly shape employees' decisions to stay. Employer branding, for example, has been shown to indirectly enhance retention through mechanisms such as job satisfaction and employees' sense of belonging to the organization (Bharadwaj et al., 2022). Similarly, Ndiango *et al.* (2024) revealed that employee recognition also positively influences retention, and this relationship is mediated by job satisfaction. Retention is also reinforced when employees feel genuinely satisfied and emotionally engaged with their work (Jena & Nayak, 2023). Beyond psychological attachment, stability-related factors such as job security further contribute to retention, especially when employees perceive their workplace as emotionally and professionally fulfilling (Ullah et al., 2022).

Leadership style and leader communication also play important roles in retention. The work environment shaped by leaders, including how they communicate and support their teams—has been found to influence employees' willingness to remain in an organization, particularly when employees already feel satisfied in their roles (Halim et al., 2021). Supportive internal communication, career guidance from leaders, and transparent leadership interactions have also been identified as key contributors to improved retention. (Jaslin et al., 2025). The influence of transformational leadership has also been widely discussed. Raziq *et al.* (2021) and Sinha & Mukherjee (2024) stated that transformational leadership is significantly linked to employee retention through the mediation of job satisfaction and employee engagement. This is further supported by evidence suggesting that transformational leaders foster emotional fulfillment at work, which in turn strengthens employees' intention to stay (Hassi, 2019).

Echoing these findings, a PwC (2023, p.15) emphasized that “*people don't leave bad jobs, they leave bad managers,*” highlighting the critical role of leadership quality in retaining employees. Although previous studies have explored various factors influencing employee retention, leadership related constructs, such as communication and transformational leadership are often examined separately rather than as parts of a connected process. In addition, job satisfaction is commonly discussed at a general level, while satisfaction specifically directed toward the leader has received comparatively less attention as a mediating mechanism in this relationship.

To address this gap, the present study integrates leadership communication and transformational leadership into a unified analytical framework and positions job satisfaction toward the leader, not merely general job satisfaction as a mediating mechanism. Given the strategic importance of talent stability in the pharmaceutical sector and the highly competitive workforce landscape in

Jabodetabek, this research specifically investigates how leadership interactions influence retention decisions among pharmaceutical employees through their level of satisfaction with their leaders.

Problem Identification

From the background described earlier, several general issues can be identified in the the context of employee retention within pharmaceutical companies in the Jabodetabek region. First, employee retention appears to be a recurring challenge for many organizations in this sector. Second, concerns related to leadership communication may contribute to employees' reluctance to remain in their workplace. Third, differences between the leadership style applied and what employees expect could also influence their intention to stay. These identified issues serve as the foundation for the research questions examined in this study.

Research Problem

The research problems in this study focus on employee retention in pharmaceutical companies in the Jabodetabek area, specifically:

- a. Does leader communication influence employee retention?
- b. Does transformational leadership influence employee retention?
- c. Does employee job satisfaction toward their leader influence employee retention?
- d. Does leader communication influence employee job satisfaction toward their leader?
- e. Does transformational leadership influence employee job satisfaction toward their leader?
- f. Does leader communication influence employee retention through job satisfaction toward their leader?
- g. Does transformational leadership influence employee retention through job satisfaction toward their leader?

Leader-Member Exchange Theory

This study employs Leader–Member Exchange (LMX) theory as its core theoretical lens, which emphasizes that the impact of leadership is largely determined by the relational quality between a leader and each team member (Graen & Uhl-Bien, 1995). Within this framework, interactions between leaders and subordinates evolve progressively, beginning with task-based exchanges and, over time, developing into more personal and reciprocal relationships characterized by mutual trust, appreciation, and shared accountability. Existing evidence suggests that when LMX quality is high, employees are more likely to display stronger organizational attachment, feel more professionally valued, and demonstrate a greater intention to remain within the organization. This study therefore relies on LMX theory to illustrate that retention is not solely shaped by managerial authority, but by the strength of the relational bond between leaders and their employees.

Leader Communication

Leader communication represents the way leaders convey guidance, expectations, and meaning in order to drive coordinated action toward organizational objectives. This communication process involves not only the delivery of information, but also the ability to motivate, influence, and align employees with a shared direction (Johnson & Hackman, 2018). Effective leadership communication goes beyond instruction, it requires emotional awareness, responsiveness, active listening, and openness to two-way dialogue (Barrett, 2014). When communication fails, misunderstandings can occur, leading to inefficiency and lower organizational productivity (Solaja *et al.*, 2016).

Transformational Leadership

Transformational leadership is a leadership style that relies on charisma, personal support, and emotional influence to inspire positive change and build employee confidence (Shaaban, 2017; Tarurhor et al., 2022). Transformational leaders often act as mentors, lead by example, and recognize employees based on effort and contribution (Wirdah & Mirawati, 2022). This leadership style aims to foster commitment, encourage innovation, and strengthen employees' sense of belonging by creating a supportive environment that promotes both personal growth and shared organizational goals.

Job Satisfaction Towards Leader

Job satisfaction refers to the emotional and cognitive response employees have when their work experience meets their expectations (Kumar & Rajendran, 2020). It is also shaped by the support and guidance received from leaders, which can affect employees' comfort, motivation, and loyalty. Job satisfaction toward the leader specifically reflects how employees feel about their supervisor's leadership style, attitude, and level of support, particularly whether they feel valued, listened to, and assisted in their work. Employees are more likely to feel satisfied when they receive strong support from their leaders (García-Cabrera et al., 2023).

Employee Retention

Employee retention refers to a company's efforts to keep its employees from leaving (Krishnamoorthy & Aisha, 2022). These efforts include building a supportive work environment through policies and practices designed to meet employee needs. Retaining employees is important because losing experienced workers can disrupt operations and negatively impact organizational performance (Gorde, 2019). With the right strategies, employees are more likely to feel comfortable, valued, and willing to stay in their roles long-term.

Hypothesis and Research Model

Relationship Between Leader Communication and Employee Retention

In the pharmaceutical industry, effective leader communication is a strategic factor because employees work on long-term product development processes that require cross-department coordination. Clear, open, and supportive communication creates psychological safety, builds trust, and strengthens emotional commitment to the organization. Halim *et al.* (2021) found that leader communication has a significant direct effect on employee retention; the more effective the communication, the more likely employees are to stay. Jaslin *et al.* (2025) also showed that internal communication, including communication from leaders, positively influences employee retention.

H1: Leader communication has a significant effect on employee retention.

Relationship Between Transformational Leadership and Employee Retention

Transformational leadership reflects a leadership style that goes beyond task delegation, focusing on personal influence, motivational support, intellectual stimulation, and individualized development. Leaders who adopt this approach not only direct employees toward organizational goals but also facilitate growth by providing empowerment, encouragement, and necessary resources (Tarurhor *et al.*, 2022). In the pharmaceutical industry, which is fast-paced and innovation-driven, transformational leadership helps build stronger organizational attachment through a clear vision and self-development support. Goens & Giannotti (2024) identified a meaningful association between transformational leadership and increased retention. These findings are reinforced by Sinha & Mukherjee (2024) and Hassi (2019), who verified the positive effect of transformational leadership on employees' decision to stay.

H2: Transformational leadership has a significant effect on employee retention.

Relationship Between Job Satisfaction Towards Leader and Employee Retention

An employee's decision to remain in an organization is strongly shaped by psychological comfort in the workplace, especially the level of satisfaction they associate with their direct leader. In high-regulation industries such as pharmaceuticals, heavy compliance demands, time-intensive development cycles, and performance pressure can easily weaken retention if employees feel unsupported at the interpersonal level. Prior evidence shows that positive job satisfaction significantly increases the likelihood of employees staying with an organization (Jena & Nayak, 2023; Ullah et al. (2022) and that satisfaction functions as a reliable predictor of retention intention (Ndiango et al, 2024).

H3: Job satisfaction towards the leader has a significant effect on employee retention.

Relationship Between Leader Communication and Job Satisfaction Towards Leader

Communication from leaders shapes more than information flow—it determines the emotional tone and relational quality of the workplace. In environments that demand precision, cross-unit coordination, and minimal error margins like the pharmaceutical sector, the way leaders communicate can directly influence how respected, understood, and supported employees feel. Studies highlight that leadership communication contributes meaningfully to improved job satisfaction by fostering trust and constructive work climates (Heuss & Datta, 2023). This is reinforced by findings showing that satisfaction rises when leaders maintain clarity, responsiveness, and interpersonal openness (Sutiyatno, 2022).

H4: Leader communication has a significant effect on job satisfaction towards the leader.

Relationship Between Transformational Leadership and Job Satisfaction Towards Leader

Transformational leaders elevate workplace morale by stimulating intrinsic motivation, providing individualized encouragement, and acknowledging employee contributions. This leadership approach is especially valuable in long-cycle industries such as pharmaceuticals, where project fatigue and routine complexity can reduce workplace enthusiasm. Research indicates that employees report substantially higher satisfaction when guided by leaders who reinforce meaning, autonomy, and personal development (Paais & Pattiruhu, 2020; Maheshwari, 2021). Broader leadership studies also confirm that leadership style plays a critical role in shaping satisfaction outcomes (Muttalib et al., 2023).

H5: Transformational leadership has a significant effect on job satisfaction towards the leader

Relationship Between Leader Communication and Employee Retention Through Job Satisfaction Towards Leader

Leader communication affects retention not only directly but also indirectly by increasing job satisfaction. Supportive and transparent communication improves job satisfaction toward the leader, which, in turn, increases retention. Halim *et al.* (2021) confirmed that job satisfaction mediates the relationship between leader communication and retention, meaning that communication influences retention through higher job satisfaction.

H6: Leader communication has a significant effect on employee retention through job satisfaction towards the leader.

Relationship Between Transformational Leadership and Employee Retention Through Job Satisfaction Towards Leader

Transformational leaders motivate, encourage, and support employees, leading to higher job satisfaction toward the leader, which then drives retention. Raziq *et al.* (2021) and Waseem *et al.*

(2023) found that job satisfaction partially mediates the relationship between transformational leadership and retention. Tanuwijaya & Jakaria (2022) also concluded that transformational and transactional leadership affect retention through job satisfaction as a partial mediator.

H7: Transformational leadership has a significant effect on employee retention through job satisfaction towards the leader

Based on the relationships among these variables, the research model is illustrated in Figure 2. This figure illustrates that leadership communication and transformational leadership influence employee retention, both directly and through job satisfaction toward the leader. The model highlights that employees are more likely to stay when they experience effective communication, supportive leadership, and greater satisfaction with their leader.

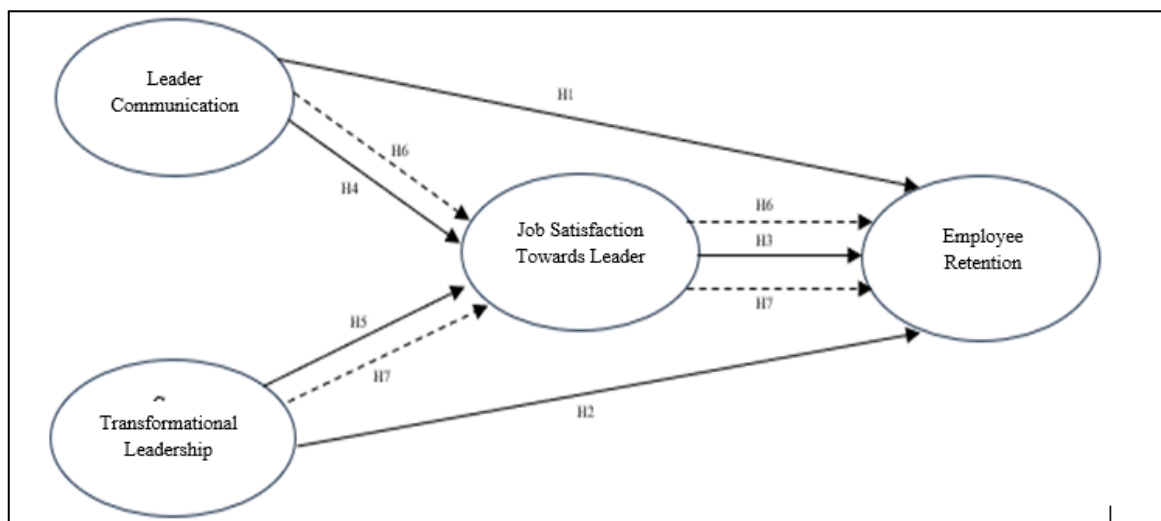


Figure 2. Research Model
Source: Author's data

2. RESEARCH METHOD

This research employs a quantitative descriptive design, using primary data obtained through a structured online questionnaire distributed to individuals employed in multiple pharmaceutical companies across the Jabodetabek region. Respondents were determined through a purposive sampling strategy under a non-probability sampling framework, ensuring that participants were selected based on criteria directly aligned with the study's analytical focus, rather than random selection. To ensure relevant industry exposure, only employees with a minimum tenure of one year in the pharmaceutical sector as of 2025 were included in the sample. The study refers to the sample size guidelines proposed by Hair *et al.* (2014), who recommend a minimum of 50 respondents, with stronger statistical robustness achieved when surpassing 100 participants. Additionally, they suggest a sample size equivalent to at least five times the total number of measurement indicators. Since this research model consists of 23 indicators, the minimum sample requirement was calculated as 115 respondents.

Each variable indicator was measured using a 5-point Likert scale, where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. The data were processed using SmartPLS 4.0 with the Structural Equation Modeling (SEM) method based on Partial Least Square (PLS). Data analysis consisted of outer model evaluation through construct validity and reliability testing, followed by inner model analysis to test the relationships between variables.

The operational definitions and measurement indicators were adapted from previous studies and are presented in Table 1 below.

Table 1. Operationalization of Research Variables

Variable	Code	Indicator	Reference
Leader Communication (KP)	KP1	My supervisor gives useful explanations about my tasks	Mayfield & Mayfield (2007)
	KP2	My supervisor gives clear instructions when I face work problems.	
	KP3	My supervisor shows support for my work.	
	KP4	My supervisor supports my professional development.	
	KP5	My supervisor gives guidance on how to adapt to the company culture.	
Transformational Leadership (KTF)	KTF1	My supervisor shows confidence that our goals can be achieved.	Rowold (2005)
	KTF2	My supervisor encourages the team to stay motivated when facing challenges.	
	KTF3	My supervisor encourages the team to take responsibility for their opinions and decisions.	
Job Satisfaction Towards Leader (KK)	KK1	I have a strong sense of connection with my colleagues at work., including my supervisor.	Macdonald & MacIntyre (1997)
	KK2	I enjoy working in this company because I have a good relationship with my supervisor.	
	KK3	I feel safe and comfortable at work because of the support my supervisor provides.	
	KK4	I believe the management and my supervisor genuinely care about my work.	
	KK5	Overall, I feel that this job suits me well thanks to my supervisor's guidance.	
	KK6	I have a positive and professional relationship with my supervisor.	
	KK7	I feel comfortable with the work environment, including my relationship with my supervisor.	
Employee Retention (RK)	RK1	I enjoy working in this company.	Kyndt <i>et al.</i> (2009)
	RK2	If another company offered me a more appealing opportunity, I would consider taking it.	
	RK3	Looking back, I might have chosen to build my career at a different organization.	
	RK4	It is unlikely that I will still be employed at this company in the next five years.	
	RK5	I see a long-term future for myself in this company.	
	RK6	Working at this company gives me a sense of satisfaction.	
	RK7	There is a possibility that I will change companies within the next three years.	
	RK8	The work I do is personally meaningful to me.	

3. RESULT AND DISCUSSION

From the online questionnaire distribution, a total of 155 respondents met the research criteria, which required participants to work in pharmaceutical companies in the Jabodetabek area and have a minimum of one year of work experience. A summary of the respondents' demographic characteristics is displayed Table 2.

Table 2. Respondent Characteristics
Source: Processed from questionnaire data

Characteristics	Frequency	Percentage
Pharmaceutical Industry Location		
Jakarta	85	55%
Bogor	9	6%
Depok	6	4%
Tangerang	29	19%

Bekasi	26	17%
Work Experience		
1 – 3 years	92	59%
3 – 5 years	26	17%
> 5 years	36	24%

Outer Model Analysis Result

The outer model analysis was conducted by testing the validity and reliability of the research constructs. Construct validity was assessed through convergent and discriminant validity testing. Convergent validity was evaluated by examining the factor loading values of each indicator and the Average Variance Extracted (AVE) for each variable. The recommended threshold for validity is factor loading ≥ 0.7 and AVE ≥ 0.5 (Piaw, 2023; Sihombing *et al.*, 2024). In this study, all indicators showed factor loading values above 0.7, indicating that each indicator is valid and suitable for measuring the constructs. The factor loading results are shown in Figure 3. Additionally, the AVE values for all variables were greater than 0.5, confirming that each construct meets the requirement for convergent validity. The AVE results for each variable are presented in Table 3.

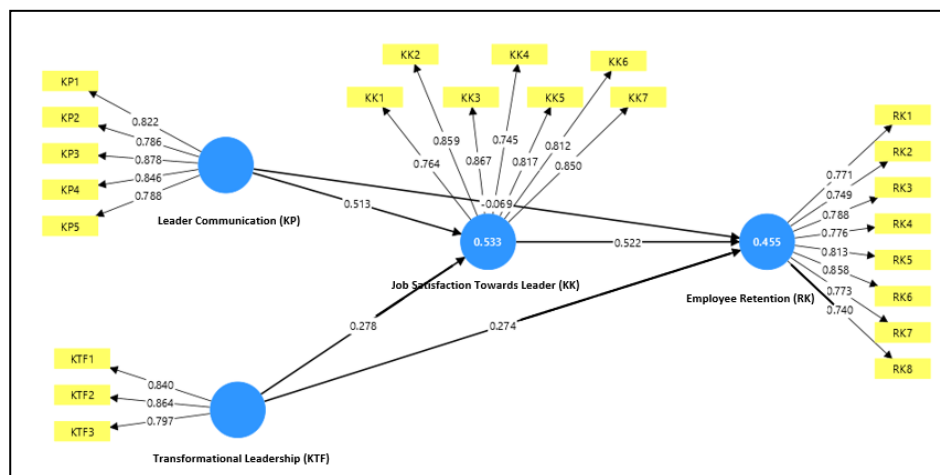


Figure 3. Model with Loading Factor
Source: Processed from questionnaire data

Table 3. AVE (Average Variance Extracted) Value
Source: Processed from questionnaire data

Variable	Average Variance Extracted	Remark
Transformational Leadership (KTF)	0.695	Valid
Leader Communication (KP)	0.680	Valid
Job Satisfaction Towards Leader (KK)	0.668	Valid
Employee Retention (RK)	0.615	Valid

The discriminant validity of the measurement model was evaluated through three approaches, namely the Fornell–Larcker criterion, cross-loading comparison, and the Heterotrait–Monotrait ratio (HTMT). According to the Fornell–Larcker standard, a construct can be considered distinct from others when the square root of its AVE value exceeds its correlation coefficients with other latent variables (Sihombing *et al.*, 2024). In addition, the cross-loading method confirms discriminant validity when each indicator demonstrates the strongest loading on its intended construct rather than on other constructs in the model (Hair *et al.*, 2017). The HTMT index

further supports discriminant validity when the ratio between constructs remains below the 0.90 threshold (Henseler et al., 2015). The findings of this study indicate that all constructs meet the required criteria across the three assessment methods, demonstrating sufficient discriminant validity as summarized in Table 4, Table 5, and Table 6.

Table 4. Forner Larcker Test Result
Source: Processed from questionnaire data

	KTF	KP	KK	RK
KTF	0.834			
KP	0.624	0.817		
KK	0.675	0.701	0.825	
RK	0.554	0.645	0.428	0.784

Table 5. Cross Loading Test Result
Source: Processed from questionnaire data

Indicator	KTF	KK	KP	RK
KK1	0.350	0.764	0.427	0.419
KK2	0.419	0.859	0.522	0.565
KK3	0.533	0.867	0.612	0.582
KK4	0.528	0.745	0.522	0.527
KK5	0.645	0.817	0.672	0.598
KK6	0.520	0.812	0.596	0.464
KK7	0.517	0.850	0.607	0.499
KP1	0.517	0.622	0.822	0.350
KP2	0.545	0.484	0.786	0.338
KP3	0.574	0.673	0.878	0.450
KP4	0.584	0.501	0.846	0.417
KP5	0.568	0.579	0.788	0.422
KTF1	0.840	0.447	0.485	0.477
KTF2	0.864	0.556	0.538	0.501
KTF3	0.797	0.554	0.665	0.405
RK1	0.423	0.621	0.462	0.771
RK2	0.448	0.395	0.334	0.749
RK3	0.462	0.545	0.429	0.788
RK4	0.356	0.350	0.253	0.776
RK5	0.435	0.518	0.342	0.813
RK6	0.463	0.552	0.421	0.858
RK7	0.469	0.434	0.300	0.773
RK8	0.403	0.550	0.424	0.740

Table 6. HTMT Value Test Result
Source: Processed from questionnaire data

	KTF	KK	KP	RK
KTF				
KK	0.723			
KP	0.815	0.761		
RK	0.653	0.685	0.524	

A variable is considered reliable if it has a Cronbach's Alpha value above 0.70 and a Composite Reliability (Rho_C) value above 0.70 (Taherdoost, 2018). In this study, all variables met these criteria, indicating good reliability based on both Cronbach's Alpha and Composite Reliability (Rho_C) values, as shown in Table 7 below.

Table 7. Cronbach Alpha and Composite Reability Value
Source: Processed from questionnaire data

	<i>Cronbach's alpha</i>	<i>Composite reliability (rho_c)</i>
Transformational Leadership (KTF)	0.781	0.872
Job Satisfaction Towards Leader (KK)	0.917	0.934
Leader Communication (KP)	0.882	0.914
Employee Retention (RK)	0.911	0.927

Inner Model Analysis Result

The structural model (inner model) was assessed to determine the strength, direction, and explanatory power of the relationships among the study variables. This evaluation was carried out by analyzing the R^2 (coefficient of determination) to measure predictive strength and the path coefficients to observe the influence between constructs. The outputs of the R^2 and path coefficient assessments are displayed in Table 8 and Table 9.

Table 8. *R square* (R^2) Test Result
Source: Processed from questionnaire data

	<i>R-square</i>
Job Satisfaction Towards Leader (KK)	0.533
Employee Retention (RK)	0.455

The findings in Table 8 indicate that the combined influence of leader communication, transformational leadership, and job satisfaction toward the leader accounts for 45.5% of the variability in employee retention, meaning that 54.5% of retention outcomes are shaped by other factors not examined in this model. In addition, leader communication and transformational leadership collectively contribute to 53.3% of the changes in job satisfaction toward the leader, while the remaining 46.7% is affected by external variables beyond the scope of this study.

Table 9. Path Coefficient Result
Source: Processed from questionnaire data

	KTF	KK	KP	RK
KTF		0.278		0.274
KK				0.522
KP		0.513		-0.069
RK				

Based on Table 9, transformational leadership shows a positive relationship with both job satisfaction toward the leader and employee retention. Leader communication has a positive relationship with job satisfaction, but shows a negative relationship with employee retention. Meanwhile, job satisfaction toward the leader is positively associated with employee retention.

Hypothesis Testing Result

The research hypotheses were tested using the bootstrapping method, by examining the t-statistics and p-values to determine the significance of the relationships between the variables. A relationship is considered statistically significant when the t-statistic ≥ 1.96 and the p-value ≤ 0.05 at a 5% significance level (Hair *et al.*, 2017; Sihombing *et al.*, 2024). The results of the hypothesis testing are presented in Table 10.

Table 10. Hypothesis Testing Result
Source: Processed from questionnaire data

	<i>T statistics</i>	<i>P values</i>	Remark
H1: Leader Communication (KP) -> Employee Retention (RK)	0.635	0.525	Rejected
H2: Transformational Leadership (KTF) -> Employee Retention (RK)	2.969	0.003	Accepted
H3: Job Satisfaction Towards Leader (KK) -> Employee Retention (RK)	6.038	0.000	Accepted
H4: Leader Communication (KP) -> Job Satisfaction Towards Leader (KK)	6.237	0.000	Accepted
H5: Transformational Leadership (KTF) -> Job Satisfaction Towards Leader (KK)	3.167	0.002	Accepted
H6: Leader Communication (KP) -> Job Satisfaction Towards Leader (KK) -> Employee Retention (RK)	4.026	0.000	Accepted
H7: Transformational Leadership (KTF) -> Job Satisfaction Towards Leader (KK) -> Employee Retention (RK)	2.737	0.006	Accepted

The results show that leader communication does not have a significant effect on employee retention ($t = 0.635$; $p = 0.525$), meaning H1 is rejected. This indicates that communication practices such as delivering instructions or work-related information are not strong enough on their own to encourage employees to stay, especially when they are not supported by satisfying work experiences. This finding contrasts with previous studies by Jaslin *et al.* (2025) and Halim *et al.* (2021) which found that leader communication significantly influences retention. The difference suggests that in the pharmaceutical industry—with its demanding workload and long-term development processes—communication alone is not enough to retain employees unless it also contributes to job satisfaction or emotional comfort in the workplace.

The analysis further shows that transformational leadership has a significant effect on employee retention ($t = 2.969$; $p = 0.003$), meaning H2 is accepted. This indicates that leaders who provide inspiration, individual attention, and intrinsic motivation are more likely to strengthen employee loyalty. This result aligns with findings from Goens & Giannotti (2024) and Sinha & Mukherjee (2024), who noted that transformational leadership builds emotional connection, enhances commitment, and reduces employees' intention to leave.

In addition, job satisfaction toward the leader shows a significant effect on employee retention ($t = 6.038$; $p = 0.000$), therefore H3 is accepted. This means that the more satisfied employees feel with their leader, the more likely they are to remain in the company. This outcome is consistent with Jena & Nayak (2023) and Ullah *et al.* (2022), who emphasized that job satisfaction directly contributes to higher retention. This suggests that when employees feel valued, supported, and emotionally comfortable with their leader, they become less inclined to seek opportunities elsewhere.

The findings also indicate that leader communication significantly influences job satisfaction toward the leader ($t = 6.237$; $p = 0.000$), hence H4 is accepted. This confirms that communication is not just a way to deliver information, but also plays an important role in building interpersonal trust and appreciation, which ultimately enhances job satisfaction. These results support studies by Sutiyatno (2022) and Heuss & Datta (2023), which found that effective communication strengthens workplace relationships and creates a positive work atmosphere.

Furthermore, transformational leadership significantly influences job satisfaction toward the leader ($t = 3.167$; $p = 0.002$), meaning H5 is accepted. This demonstrates that leaders who offer vision, encouragement, and personal support can shape a psychologically satisfying work environment. This outcome is in line with Paais & Pattiruhu (2020), Maheshwari (2021), and

Muttalib *et al.* (2023), all of whom confirmed the positive role of transformational leadership in increasing job satisfaction.

Although leader communication did not directly influence retention, the results reveal that it does affect retention significantly through job satisfaction ($t = 4.026$; $p = 0.000$), therefore H6 is accepted. This finding means that communication contributes to retention only when it first increases employees' satisfaction toward their leader. This is consistent with penelitian Halim *et al.* (2021), who stated that communication becomes meaningful for retention when employees feel more satisfied because of it.

The analysis also shows that transformational leadership has a significant effect on employee retention through job satisfaction ($t = 2.737$; $p = 0.006$), therefore H7 is accepted. This confirms that transformational leadership not only influences retention directly but also has a stronger effect when it enhances job satisfaction first. This finding supports Waseem *et al.* (2023) and Raziq *et al.* (2021), who explained that job satisfaction serves as a key link between transformational leadership and employee retention, where employees who feel more satisfied with their leader are more motivated to stay.

This study shows that leader communication and transformational leadership work together in shaping employee retention, both directly and through job satisfaction toward the leader. When leaders communicate openly and encourage two-way interaction, employees are more likely to feel heard and supported, which strengthens their satisfaction with their leaders. This sense of satisfaction plays an important role in encouraging employees to stay with the organization. Likewise, transformational leadership that is reflected in leaders who inspire, set positive examples, and show genuine concern for their team helps increase employee retention, especially when it enhances employees' satisfaction toward their leaders.

These findings also support Leader–Member Exchange (LMX) Theory, which emphasizes that leadership success depends on the quality of the relationship built between leaders and employees. When leaders communicate clearly, provide support, show genuine concern, and inspire through transformational behaviors, the relationship becomes stronger and more meaningful. According to LMX, job satisfaction toward the leader becomes the emotional bridge that encourages employees to stay, making retention not just a structural outcome, but a relational one.

4. CONCLUSION AND RECOMMENDATION

Based on the findings, it can be concluded that leader communication does not directly influence employee retention, but it does have an indirect effect through job satisfaction toward the leader. This means that communication only contributes to retention when it successfully increases employees' sense of satisfaction and comfort with their leader. On the other hand, transformational leadership shows a significant influence on retention both directly and indirectly, indicating that leaders who inspire, motivate, and provide personal support are more likely to build emotional bonds that encourage employees to stay. Both leader communication and transformational leadership were also proven to improve job satisfaction toward the leader, and among all variables, job satisfaction toward the leader emerged as the strongest predictor of employee retention. This confirms that job satisfaction plays a central bridging role, connecting leadership communication and transformational leadership to employee retention in the pharmaceutical industry.

Pharmaceutical companies are encouraged to strengthen leaders' communication skills by promoting communication that is clear, empathetic, and open, as quality communication has been shown to improve job satisfaction, which ultimately supports employee retention. Leaders should also consistently practice transformational leadership behaviors, such as providing inspiration, acting as role models, and giving individual support, as this leadership style has proven to influence retention both directly and through increased job satisfaction. Additionally, companies should treat job satisfaction as a strategic HR priority, considering it demonstrated the greatest impact on employee decisions to remain in the organization.

Academically, this study has several limitations that should be considered when interpreting the findings. The research focuses on pharmaceutical companies in the Jabodetabek region, which may limit the applicability of the results to other industries or geographical contexts. In addition, the use of a non-probability sampling technique restricts the generalizability of the findings to a broader employee population. This study also concentrates on three main variables: leader communication, transformational leadership, and job satisfaction toward the leader while other potential factors influencing employee retention were not examined. Future research is therefore encouraged to employ probability sampling methods, extend the scope to different industries and regions, and incorporate additional variables to provide a more comprehensive understanding of employee retention.

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