

The Effect of Transformational Leadership Style and Motivation on Nurses' Loyalty, with the Reward System as an Intervening Variable, in the Inpatient Ward of the Tangerang City General Hospital

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ABSTRACT

This research was motivated by the importance of maintaining nurse loyalty in inpatient wards to ensure consistent healthcare service quality, particularly through effective leadership, work motivation, and a reward system perceived as fair. This study aimed to analyze the effects of transformational leadership style and motivation on nurse loyalty, with the reward system serving as an intervening variable. The study employed an inferential quantitative approach by collecting data through questionnaires distributed to nurses in inpatient wards, which were then analyzed using structural equation modeling based on partial least squares (PLS-SEM). The results showed that transformational leadership style and motivation had positive effects on nurse loyalty. The reward system also had a positive effect on nurse loyalty and was found to mediate the relationship between transformational leadership style, motivation, and nurse loyalty. The managerial implications emphasize the need to strengthen inspiring and supportive leadership practices, develop collaborative work environments to enhance motivation, and implement comprehensive and transparent reward systems, including non-financial rewards, performance recognition, and career development opportunities, as strategies to increase nurse loyalty.



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INTRODUCTION

In the era of National Health Insurance (JKN) and increasingly competitive healthcare services, hospitals are required to continuously improve service quality, patient safety, and patient-centered care. These demands require hospitals not only to optimize medical facilities and service systems but also to strengthen human resource management as a strategic factor in maintaining organizational performance. Healthcare workers, particularly nurses, represent one of the most critical human resources because they interact directly with patients throughout the service process. Therefore, maintaining nurse stability, commitment, and loyalty has become an important managerial challenge, especially in inpatient units where nurses play a central role in ensuring continuity and quality of care.

Nurse loyalty reflects employees' psychological attachment, willingness to remain in the organization, compliance with organizational values, and commitment to providing

optimal contributions. From the perspective of organizational commitment, employee loyalty is represented through three dimensions: affective commitment, continuance commitment, and normative commitment (Meyer & Allen, 1991). High nurse loyalty contributes to organizational stability because nurses with strong organizational attachment tend to demonstrate greater commitment, lower turnover intention, and stronger willingness to support organizational goals. Conversely, low loyalty may disrupt service continuity, increase recruitment and training costs, and potentially affect the consistency of healthcare delivery. Therefore, understanding the factors influencing nurse loyalty is essential, particularly in hospitals experiencing workforce mobility and staffing adjustments.

At Tangerang City General Hospital, human resource data from the 2020–2024 period indicated workforce dynamics that required managerial attention. In 2022, 17 outpatient nurses resigned, with the dominant reasons related to unwillingness to accept transfers and workload conditions. In 2023, nurse turnover increased to 19 employees, consisting of 16 resignations and 3 dismissals. Furthermore, in 2024, 167 employees chose to be transferred, reflecting workforce placement dynamics and organizational restructuring. Although employee transfers represent part of human resource management policies, these conditions provide an important indication of the need to understand employee attachment, organizational commitment, and the factors influencing nursing personnel stability.

One factor that may influence nurse loyalty is transformational leadership. Transformational leadership emphasizes leaders' ability to inspire, provide a clear vision, demonstrate exemplary behavior, encourage innovation, and provide individualized consideration to employees (Bass, 1990). In healthcare organizations, transformational leaders play an important role because nurses frequently face complex workloads, emotional demands, and high responsibilities in patient care. Leaders who establish effective communication, provide support, and recognize nurses' contributions may strengthen employees' sense of belonging and organizational attachment. Previous studies have demonstrated that transformational leadership positively influences employee loyalty and organizational commitment (Ang & Edalmen, 2021) and (Marzuki, 2018). Furthermore, leadership practices, organizational climate, and working conditions have been identified as important factors affecting nurse loyalty (Sinaga et al., 2022).

Besides leadership factors, work motivation represents an internal psychological mechanism influencing nurses' willingness to remain committed to their organization. Motivation determines employees' energy, persistence, and willingness to achieve organizational objectives. Based on Maslow's hierarchy of needs theory, individuals develop stronger involvement when their fundamental, security, social, esteem, and self-actualization needs are fulfilled through organizational support and workplace conditions (Maslow, 1994). In hospital environments, nurses' motivation may be influenced by workload balance, career development opportunities, recognition, workplace relationships, and perceptions of organizational fairness. Previous studies indicate that motivation contributes to employee retention tendencies and influences loyalty within service organizations (Rahman, 2023; Zebua et al., 2025). Therefore, strengthening nurses' motivation is an important strategy for maintaining stable healthcare human resources.

Another organizational mechanism closely related to nurse loyalty is the reward system. An effective reward system functions not only as financial compensation but also as

a form of organizational appreciation for employee contributions. According to Byars and Rue (2010), reward systems consist of financial and non-financial rewards designed to attract, motivate, and retain employees. In healthcare organizations, appropriate rewards may increase nurses' perceptions of recognition, fairness, and job satisfaction, thereby strengthening their intention to remain within the organization. Previous research has shown that reward systems positively influence employee loyalty because employees tend to develop stronger commitment when their efforts are recognized and valued by the organization (Mandagi et al., 2020).

Although previous studies have examined the relationships among transformational leadership, motivation, reward systems, and employee loyalty, several limitations remain. Most previous studies have focused on direct relationships between leadership or motivation and loyalty, while limited research has investigated the mechanism through which reward systems mediate these relationships, particularly among inpatient nurses in regional hospitals experiencing workforce mobility and assignment changes. In addition, nurse loyalty is a complex organizational phenomenon influenced by interactions among leadership behavior, individual motivation, and organizational recognition mechanisms. Therefore, examining the mediating role of reward systems provides a broader understanding of how organizational factors contribute to stronger employee attachment.

The novelty of this study lies in developing an integrated model that positions the reward system as an intervening variable linking transformational leadership style and work motivation to nurse loyalty. This approach provides a deeper explanation that leadership and motivation influence loyalty not only directly but also through organizational reward mechanisms perceived by nurses. Theoretically, this study contributes to organizational behavior and healthcare human resource management literature by expanding understanding of loyalty formation through interactions between psychological and organizational factors. Practically, the findings provide evidence for hospital management in designing human resource strategies, particularly in strengthening leadership practices, improving employee motivation, and developing fair and transparent reward systems to maintain nursing workforce stability.

Based on this research gap and practical importance, this study aims to analyze the influence of transformational leadership style and motivation on nurse loyalty, both directly and indirectly through the reward system as an intervening variable among inpatient nurses at Tangerang City General Hospital.

RESEARCH METHODS

This study employed a quantitative approach with a cross-sectional design through a survey of inpatient nurses at Tangerang City Hospital conducted from August to October 2025. The research model examined the effects of Transformational Leadership Style (X1) and Motivation (X2) on Nurse Loyalty (Y), both directly and indirectly through the Reward System (Z) as an intervening variable. The research constructs were developed based on established theoretical frameworks, including transformational leadership (Bass, 1990), motivation (Maslow, 1994), organizational commitment (Meyer & Allen, 1991), and reward systems (Byars & Rue, 2010).

The study population consisted of all inpatient nurses at Tangerang City Hospital, totaling 136 individuals. The sample size was determined using the Slovin formula with a 5% margin of error, resulting in 101 respondents. The study employed non-probability sampling with a purposive sampling approach based on predetermined inclusion and exclusion criteria (Sugiyono, 2022; Sekaran & Bougie, 2016).

The research instrument was a structured questionnaire developed based on theoretical frameworks and previous studies related to transformational leadership, motivation, reward systems, and nurse loyalty (Bass, 1990; Maslow, 1994; Meyer & Allen, 1991; Byars & Rue, 2010). Transformational Leadership Style (X1) was measured through the dimensions of idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass, 1990). Motivation (X2) was measured based on the hierarchy of needs, including physiological needs, safety needs, social needs, esteem needs, and self-actualization needs (Maslow, 1994). Nurse Loyalty (Y) was measured through the dimensions of affective commitment, continuance commitment, and normative commitment (Meyer & Allen, 1991). The Reward System (Z) was measured using intrinsic and extrinsic reward dimensions (Byars & Rue, 2010). All constructs were measured reflectively using a four-point Likert scale. The questionnaires were distributed directly to respondents after informed consent was obtained.

To examine the proposed causal model, the following hypothesis was tested:

H1: Transformational Leadership Style, Motivation, and Reward System simultaneously have a positive effect on Nurse Loyalty.

H3: Motivation has a positive effect on Loyalty Nurse.

H4: Transformational Leadership Style has a positive effect on the Reward System.

H5: Motivation has a positive effect on the System Reward.

H6: Reward System Has a Positive Effect on Loyalty Nurse.

H7: The Reward System mediates the positive influence of the Transformational Leadership Style on Loyalty Nurses.

H8: The Reward System mediates the positive influence of Motivation on Nurse Loyalty.

The constellation of relationships between variables in this study is shown in Figure 1, which illustrates the influence of Transformational Leadership Style (X1) and Motivation (X2) on Nurse Loyalty (Y), either directly or indirectly through the Reward System (Z) as an intervening variable.

Data analysis was carried out in stages using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS software version 4. The initial stage included evaluation of the measurement model (outer model) through convergent validity (loading factor value and average variance extracted), discriminant validity, and internal reliability (Cronbach's alpha and composite reliability) (Ghozali, 2011; Hair et al., 2021). After the measurement model was declared adequate, the structural model (inner model) was estimated to obtain the standardized path coefficient (β), significance value, and determination coefficient (R^2), accompanied by an evaluation of the model's predictive power. The mediation test of the influence of X1 and X2 on Y through Z was carried out by bootstrapping technique at a 95% confidence interval, where the indirect effect was declared significant if the confidence interval did not cross zero.

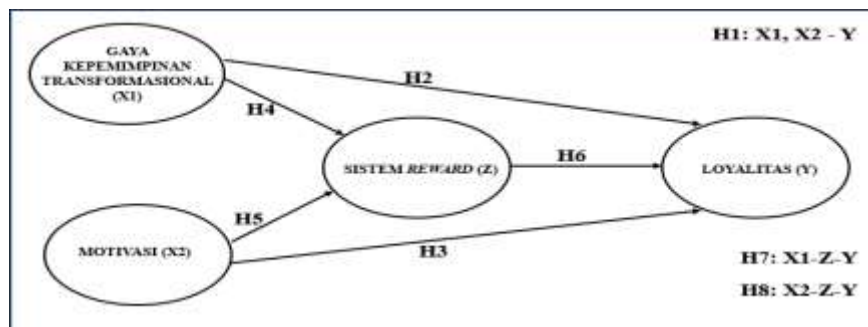


Figure 1. A very strong constellation of research models against variable variation

Source: Author's construction based on the theoretical framework of transformational leadership (Bass, 1990), motivation theory (Maslow, 1994), organizational commitment theory (Meyer & Allen, 1991), and reward system concept (Byars & Rue, 2010).

RESULTS AND DISCUSSION

This study analyzed 101 inpatient nurses at Tangerang City Hospital who met the inclusion criteria, and all questionnaires were declared complete so that the data could be used in the analysis of Partial Least Squares–Structural Equation Modeling (PLS-SEM) using SmartPLS version 4. The measurement instrument was proven to be valid and reliable based on the evaluation of the measurement model (outer model), as indicated by the loading factor value, average variance extracted (AVE) value, and Cronbach's alpha and composite reliability values adequately.

The structural model shows adequate feasibility and endogenous explainability. In general, variation in reward system can be explained by transformational leadership and motivation, while variation in loyalty can be explained by transformational leadership, motivation, and reward system. A summary of the coefficient of determination is presented in Table 1.

From the descriptive side, all research variables were in the high category based on the Three Box Method (Ferdinand, 2014). The average index of transformational leadership style was 79.2; motivation 79.4; reward system 79.4; and loyalty 80.1. In transformational leadership, the dimensions with the highest index were idealized influence (79.9) and the lowest individualized consideration (78.7), which indicated that the leader's exemplary and integrity were most strongly felt, while individual attention still relatively needed to be strengthened. In motivation, the highest dimension was the need for security (81.8), while the lowest indicator was team support (74.9; medium category), indicating the need for collaboration and social support is not evenly distributed. In the reward system, the extrinsic reward dimension (80) is slightly higher than the intrinsic reward (79), with the highest indicator of perceived incentives to encourage performance (82.7). In loyalty, the affective commitment dimension has the highest index (81.5) and the lowest normative commitment (78.2), with one normative indicator "feeling obliged to maintain commitment" in the medium category (75.4), so strengthening the internalization of organizational values is still needed. The results of the estimation of the main structural pathways are summarized in Table 2. Transformational leadership style, motivation, and reward system have a positive and significant effect on nurse loyalty. In addition, transformational leadership style and motivation have a positive and significant effect on the reward system. The mediating role of

the reward system in bridging the influence of transformational leadership style and motivation on nurse loyalty is summarized in Table 3.

Table 1. Coefficient of Determination

Endogenous Variable	R-Square
Reward System (Z)	0,968
Loyalty (Y)	0,988

Source: Primary data processed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS version 4.

Table 2. Direct Line Coefficients of Structural Models

Direct/indirect influence	Coefficient Path	P-Values	Remarks
<i>Adannya Positive Influence of Transformational Leadership Style (X1) against Loyalty (Y)</i>	0,379	0,001	Accepted
<i>There is a positive influence of Motivation (X2) on Loyalty (Y)</i>	0,601	0,000	Accepted
<i>The presence of a positive influence of Gaya Transformational Leadership (X1) to the Reward System (Z)</i>	0,343	0,025	Accepted
<i>The presence of a positive influence of Motivation (X2) against the Reward System (Z)</i>	0,620	0,000	Accepted
<i>The positive influence of the Reward System (Z) on Loyalty (Y)</i>	0,773	0,000	Accepted

Source: Primary data processed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS version 4.

Table 3. Summary of the Mediation Effects of the Reward System

Direct/indirect influence	Coefficient Path	P-Values	Remarks
<i>The Positive Influence of Transformational Leadership Style (X1) on Loyalty (Y) with the Reward system (Z)</i>	0,162	0,044	Accepted
<i>Adannya has a positive influence Motivation (X2) for Loyalty (Y) with SystemReward (Z)</i>	0,293	0,003	Accepted

Source: Primary data processed using bootstrapping analysis in Partial Least Squares–Structural Equation Modeling (PLS-SEM) with SmartPLS version 4.

The simultaneous influence of transformational leadership styles, motivations and reward systems on nurse loyalty

The results of PLS-SEM show that the structural model has adequate feasibility and prove that transformational leadership styles, motivation, and reward systems simultaneously have a significant effect on the loyalty of inpatient nurses (H1 accepted). Substantively, these findings confirm that nurse loyalty is the output of a combination of leadership behavioral

factors, individual work drive, and organizational reward mechanisms that nurses feel in their daily work experience. In other words, loyalty is not formed partially, but through an integrated process: leadership provides direction and psychological climate, motivation drives effort and engagement, while the reward system emphasizes organizational recognition of nurses' contributions so that loyalty becomes stronger and more stable.

Descriptively (Three Box Method), all variables were in the high category, which shows that nurses' perceptions of transformational leadership, motivation, reward system, and loyalty tend to be positive. However, there are still certain indicators that are relatively weaker, especially in the aspect of team support in motivation and the aspect of moral obligation in loyalty. This pattern indicates that nurses' loyalty is stronger through emotional attachment and consideration of survival benefits, while the strengthening of value-based loyalty (normative commitment) and the social support climate still have room for improvement so that loyalty is more equitable in all dimensions.

Theoretically, these simultaneous findings are consistent with Bass's (1990) transformational leadership framework which emphasizes the role of exemplarity, inspiration, intellectual stimulation, and individual attention in building subordinate attachment. At the same time, the role of motivation can be explained through Maslow's (1994) hierarchy of needs, where the fulfillment of work needs ranging from a sense of security to self-actualization encourages engagement and commitment. In this research model, the reward system is key because it acts as a reinforcement while clarifying the reciprocal relationship between contributions and rewards received, thereby strengthening loyalty through the perception of fairness and organizational recognition. Thus, although leadership and motivation shape psychological readiness and work energy, stronger loyalty requires the support of real organizational mechanisms through a clear, consistent, and perceived reward system.

These findings are in line with previous empirical evidence that transformational leadership and motivation are related to nurse loyalty, as well as that rewards play a role as a managerial instrument that strengthens retention and commitment. Kitriawaty et al. (2017) show that leadership and motivation have a positive effect on nurse loyalty, while Mandagi et al. (2020) affirm that rewards have a significant effect on employee loyalty. Thus, the results of this study strengthen the argument that increasing nurse loyalty in the inpatient setting needs to be directed towards an integrated strategy: strengthening transformational leadership practices, maintaining work motivation, and strengthening the governance of the reward system so that appreciation for nurses' contributions is truly felt and has an impact on decisions to stay and contribute in the long term.

The influence of transformational leadership styles on nurse loyalty PLS-SEM results show that

transformational leadership style has a significant effect on the loyalty of inpatient nurses (H2 accepted). Substantively, these findings confirm that leadership quality at the installation/room level is an important determinant of loyalty, as transformational leaders are able to form a more meaningful, directed, and supportive work climate. When leaders are perceived to provide examples, be able to inspire, encourage innovative thinking, and pay attention to the needs of staff, nurses tend to build stronger attachment to the organization,

demonstrate a commitment to perseverance, and are willing to contribute beyond minimum demands.

Descriptively (Three Box Method), nurses' perception of transformational leadership is in the high category, which illustrates that transformational leadership practices have been perceived relatively well by respondents. At the same time, nurses' loyalty also tends to be high, especially in terms of emotional attachment and support for organizational goals. However, there is a note that normative commitment (sense of moral obligation) is relatively weaker than other dimensions. This pattern indicates that transformational leadership is already strong in building affection-based loyalty and identification, but strengthening value-based loyalty/moral commitment still needs to be strengthened through internalization of organizational culture, policy consistency, and strengthening of a sense of belonging at the unit level.

Theoretically, these findings are in line with the concept of transformational leadership which emphasizes four main components, namely idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass, 1990). In the context of complex inpatient services that demand emotional resilience, transformational leaders play a role in building work meaning and clarity of direction, thereby strengthening affective commitment, while the role of exemplary and consistent leadership behavior builds trust as the foundation of long-term working relationships. These findings are also consistent with previous research that shows the influence of positive transformational leadership on the loyalty/commitment of health workers, including Ang & Edalmen (2021) and Marzuki (2018), thus strengthening the evidence that transformational leadership is a relevant managerial strategy to maintain the stability of nursing human resources, especially in the inpatient room.

The effect of motivation on nurse loyalty

The results of PLS-SEM show that motivation has a positive and significant effect on the loyalty of inpatient room nurses (H3 accepted). Substantively, these findings confirm that nurse loyalty is not only shaped by organizational factors, but also greatly influenced by the work drive that nurses have, both the drive to meet basic needs, a sense of security, togetherness, appreciation, and self-development. When work motivation is high, nurses tend to have stronger attachments, show a commitment to persist, and are willing to give continuous contribution to hospitals.

Descriptively (Three Box Method), nurses' motivation is in the high category, especially in aspects related to self-development and orientation to improve service quality. However, there are still relatively weaker motivational aspects in social support/team togetherness. In terms of loyalty, emotional attachment and support for organizational goals tend to be more prominent than a sense of moral obligation. This pattern indicates that strong motivation is aligned with high loyalty, but motivational consistency in the long term still requires strengthening a work climate that supports togetherness and relationships between team members so that loyalty is not only based on affection and survival benefits, but also develops into a normative commitment.

Theoretically, these results are in line with Maslow's (1994) hierarchy of needs which explains that motivation is formed through the fulfillment of tiered needs ranging from physiological needs and a sense of security to self-actualization which ultimately encourages

individuals to maintain involvement and commitment to the organization; In the context of nursing work, the fulfillment of these needs makes nurses view the organization as a place that supports job security, rewards, and opportunities to develop so that it gives rise to a tendency to persist and show loyalty. These findings are also consistent with previous research, including Rahman (2023) who shows that intrinsic motivation is related to a higher tendency to stay put, thus emphasizing that increasing nurse loyalty needs to be directed at strengthening motivation comprehensively not only through incentives, but also through meeting work needs, protecting security, recognition of performance, and opportunities for competency development while still improving team support so that motivation is stable and loyalty is stronger and more equitable in all dimensions.

The influence of transformational leadership styles on the reward system

The results of PLS-SEM show that transformational leadership style has a positive and significant effect on the reward system felt by inpatient nurses (H4 accepted). This finding means that the quality of leadership in the installation/room also determines how the reward is understood and felt by nurses, whether as a form of meaningful recognition or simply an administrative policy. When leaders are able to set an example, inspire, encourage improvement in the way they work, and pay attention to the needs of staff, nurses tend to judge the reward system more clearly, more consistently, and more relevant to their contributions.

Descriptively (Three Box Method), transformational leadership is in the high category and the reward system is also in the high category. This indicates that a positive perception of leadership practices goes hand in hand with a positive perception of the rewards applied. However, the descriptive pattern also signals that strengthening the implementation of rewards is not enough just to "exist", but is greatly influenced by the way leaders communicate rewards, provide feedback, and maintain consistency of implementation at the unit level so that it is felt evenly.

Theoretically, this relationship can be explained through transformational leadership (Bass, 1990) which emphasizes idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Transformational leaders tend to link rewards with contribution and development, reinforce expected work behaviors, and build a perception of fairness through transparency and consistency. In practice, this makes both financial and non-financial rewards more credible in the eyes of nurses because they are not only "shared", but understood as a proper appreciation for performance and commitment.

The effect of motivation on the reward system

The results of PLS-SEM show that motivation has a positive and significant effect on the reward system felt by inpatient nurses (H5 received). These findings mean that nurses with higher work motivation tend to show more consistent involvement, work quality, and effort, making it easier to capture, appreciate, and feel the functioning of the reward system implemented by the organization. On the other hand, these findings also confirm that rewards will be more meaningful when organizations are able to "lock" in the contribution driven by that motivation through a clear and consistent reward mechanism).

Descriptively (Three Box Method), nurses' motivation is in the high category, and the reward system is also in the high category. However, there is still a relatively weaker motivation aspect in team support/togetherness, while in the reward system, external reward

indicators tend to be more prominent than internal rewards. This pattern indicates that good motivation has the potential to be more optimal when supported by a work climate that strengthens team relationships and reward schemes that are not only financial, but also recognized and supported by development that is felt equally.

Theoretically, these results are in line with the Expectancy Theory (Vroom) that individuals are encouraged to make an effort when they believe that effort will result in performance and performance will be followed by valuable results. In the context of this study, motivation is the main driver of positive work behavior, while the reward system is the organizational response that emphasizes the relationship of "effort, performance, reward". Thus, the stronger the motivation of nurses, the stronger the need and sensitivity to the awards considered decent, so that the perception of the reward system becomes more positive when awards are judged according to contributions.

The effect of the reward system on nurse loyalty

The results of PLS-SEM show that the reward system has a positive and significant effect on the loyalty of inpatient nurses (H6 received). These findings confirm that nurse loyalty will be stronger when the awards received both financial and non-financial are perceived as relevant, consistent, and fair according to their contributions. In the context of inpatient work that demands preparedness, high workload intensity, and emotional stress, rewards serve as a form of organizational recognition that strengthens the sense of appreciation, job satisfaction, and the desire of nurses to stay afloat and support hospital goals.

Theoretically, the reward–loyalty relationship can be explained through the Reinforcement Theory that rewards as a positive consequence will reinforce expected work behaviors and encourage individuals to maintain contributions in the organization. In addition, Equity Theory asserts that the reward effect is highly dependent on the perception of fairness; when nurses value rewards proportionately and do not give rise to inequality between individuals/units, satisfaction and commitment increase and lead to loyalty. Thus, it is not only the "big" awards that are important, but also the transparency of the criteria, consistency of implementation, and equitable distribution of implementation.

Evidence from previous studies is also supportive: Mandagi et al. (2020) show that rewards have a significant positive effect on loyalty, especially when rewards are given fairly, transparently, and according to contributions. In line with that, Novianti (2022) stated that rewards have a significant positive effect on loyalty, and their influence can be stronger when combined with other factors such as satisfaction. This support confirms rewards as a strategic managerial instrument to retain human resources, especially in the health sector that demands emotional engagement and consistency of high performance.

The influence of transformational leadership styles on nurse loyalty through a reward system

Bootstrapping mediation analysis on the PLS-SEM model showed that the reward system mediated the influence of transformational leadership styles on nurse loyalty. The indirect pathway of transformational leadership through the reward system to loyalty proved to be significant, and at the same time the direct influence of transformational leadership on loyalty also remained significant. This means that transformational leadership not only increases loyalty directly through example, inspiration, and work support, but also works through strengthening the experience of reward that nurses feel e.g. clearer appreciation, more

consistent feedback, and more equitable perceived rewards that ultimately strengthen loyalty. Thus, the mediation hypothesis (H7) is accepted.

Descriptively, transformational leadership, reward systems, and loyalty are both in the high category. This pattern illustrates that leadership that is perceived to be strong goes hand in hand with positive reward perception, and both are related to high loyalty. That is, when leadership Transformationally translated into real, consistent, and relevant rewards, nurse loyalty tends to be more robust; nonetheless, loyalty can still be influenced by other factors outside of the model, such as work culture, team support, workload, or job satisfaction.

Theoretically, these findings are consistent with the mediation logic that intervening variables channel the influence of independent variables to dependent variables when indirect pathways are significant. In this context, transformational leadership (Bass, 1990) forms a supportive and development-oriented work climate, thereby improving the quality of implementation of perceived rewards by nurses. This mechanism is also in line with the Social Exchange Theory of positive treatment and organizational recognition that rewards in the form of commitment and Reinforcement Theory that rewards reinforce expected behaviors and attachments.

The implication is that management needs to continue to prioritize strengthening transformational leadership at the unit level, but the impact on loyalty will be greater when accompanied by strengthening reward governance (clear criteria, transparency, performance feedback, and consistency of implementation). Thus, the influence of leadership becomes more "visible" in the daily work experience of nurses and loyalty can be formed more stable.

The effect of motivation on nurse loyalty through the reward system

A bootstrapping mediation analysis on the PLS-SEM model showed that the reward system mediated the influence of motivation on nurse loyalty (H8 accepted). The indirect pathway of motivation through the reward system to loyalty proved significant, and at the same time the direct influence of motivation on loyalty also remained significant. This means that motivation not only increases loyalty directly through the internal drive to work and persevere, but also works through the reward experience that nurses receive. When motivation-driven efforts and performance are "captured" by the organization through clear, consistent, and perceived rewards, nurse loyalty becomes stronger and more stable.

Descriptively, motivation, reward system, and loyalty are both in the high category. This pattern illustrates that good work motivation goes hand in hand with positive reward perception and high loyalty. However, there is still a relatively weaker motivation aspect in team support/togetherness, as well as a relatively weaker loyalty aspect in normative commitment. This means that although the motivation-reward-loyalty relationship is strong, strengthening the team support climate and internalizing organizational values is still important so that loyalty is not only driven by work drive and reward, but also by a sense of moral obligation and belonging.

Theoretically, this finding is in line with the Expectancy Theory (Vroom) that individuals are encouraged to make an effort when they believe that effort produces performance and performance produces valuable results. In this context, motivation encourages contribution, while the reward system emphasizes the relationship between "effort, performance, reward" so that commitment and loyalty are strengthened. This finding

is also in line with Equity Theory because rewards are more effective in building loyalty when perceived as fair and proportional, and consistent between individuals/units.

The implication is that management needs to maintain nurses' motivation through meeting work needs and developing competencies, but at the same time strengthening reward governance so that this motivation is truly converted into long-term loyalty. Strengthening can be done through transparency of award criteria, consistent implementation, as well as a balance of financial and non-financial rewards (recognition, training opportunities, and career paths), so that nurses feel a real appreciation for their contribution in the inpatient room.

Research Findings

Based on the results of the Three Box Method, the most prominent variables descriptively were Motivation (X2) and Reward System (Z), both of which were in the high category and were relatively stronger than Style Transformational Leadership (X1). These findings indicate that in the work experience of inpatient nurses at Tangerang City Hospital, work encouragement and reward are the aspects closest to the daily life of nurses, so it has the potential to be the most directly related element to the formation of loyalty.

At the indicator level, transformational leadership is most strongly reflected in leadership's example in adhering to the rules, which indicates that leadership is perceived to be effective when it demonstrates integrity and sets an example for staff. The strongest motivation is reflected in the drive to improve the quality of service to patients, which confirms that nurses' motivation is largely driven by professional orientation and quality of service. The most powerful reward system is reflected in the perception that incentives drive performance improvement, which suggests that external rewards are still an important reinforcer in driving performance. Meanwhile, loyalty is most strongly reflected in a strong emotional bond with the workplace as well as a drive to support the hospital's goals, which illustrates that nurse loyalty is primarily formed from affective attachment and alignment with organizational goals.

Overall, this synthesis of findings confirms that strengthening the loyalty of inpatient nurses is more effective when focused on managing work motivation and equitable and consistent governance of the reward system, as well as being strengthened by transformational leadership that emphasizes exemplarity, clarity of direction, and support for staff performance.

CONCLUSION

Based on the research findings, transformational leadership style and motivation had positive effects on nurse loyalty, both directly and indirectly through the reward system as a mediating variable. Nurse loyalty increased when leaders acted as role models, provided support, involved nurses in decision-making processes, and implemented fair, consistent, and performance-based reward systems. Work motivation supported by the fulfillment of basic needs, a sense of security, recognition, and career development opportunities also strengthened nurse loyalty. Theoretically, this study confirmed that nurse loyalty resulted from the interaction among psychological factors, transformational leadership, and reward systems as mechanisms that linked leadership and motivation to loyalty. From a managerial perspective, hospitals are encouraged to optimize reward systems as retention strategies, strengthen transformational leadership through coaching and mentoring programs, and enhance motivation by improving working conditions and nurses' welfare.

Further research is recommended to employ qualitative, mixed-methods, or longitudinal approaches to obtain deeper insights into the factors influencing nurse loyalty. Future studies may also incorporate additional variables, such as job satisfaction, workload, work stress, organizational culture, and employee well-being, as well as conduct comparative analyses across different units or hospitals to develop a more comprehensive understanding of nurse loyalty determinants.

REFERENCES

- Ang, Y., & Edalmen, E. (2021). Pengaruh gaya kepemimpinan transformasional dan kompensasi terhadap loyalitas karyawan. *Jurnal Manajerial Dan Kewirausahaan*, 3(4), 1168–1179.
- Avolio, B. J., & Bass, B. M. (2004). Multifactor Leadership Questionnaire: Manual and sampler set (3rd ed.). Mind Garden. http://dx.doi.org/10.1207/s1532754xjpr1602_2
- Bass, B. M. (1990). Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications (3rd ed.). Free Press.
- Byars, L. L., & Rue, L. W. (2010). Human resource management (10th ed.). McGraw-Hill Education.
- Ferdinand, A. (2014). Metode penelitian manajemen (5th ed.). Badan Penerbit Universitas Diponegoro.
- Ghozali, I. (2011). Aplikasi analisis multivariate dengan program SPSS. Badan Penerbit Universitas Diponegoro.
- Hair, J. F., Jr., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). A primer on partial least squares structural equation modeling (PLS-SEM). Sage Publications.
- Irianti, A. H., & Tan, P. H. P. T. (2023). Pengaruh kepemimpinan transformasional dan budaya organisasi terhadap loyalitas melalui motivasi pada perawat di Rumah Sakit Tria Dipa Jakarta. *JMBI UNSRAT*, 10(3), 1711–1724. <https://doi.org/10.35794/jmbi.v10i3.51803>
- Kitriawaty, D., Setiawati, E. P., & Sumantri, S. (2017). Pengaruh kepemimpinan dan motivasi terhadap loyalitas perawat rumah sakit swasta tipe B di Kota Bandung. *Jurnal Sistem Kesehatan*, 3(1), 1–7. <https://doi.org/10.24198/jsk.v3i1.13964>
- Konopaske, R., Ivancevich, J. M., & Matteson, M. T. (2017). Organizational behavior and management (11th ed.). McGraw-Hill Education.
- Kusumapradja, R., Suandewi, N. P. A., & Germas, A. (2013). Analisis hubungan antara kualitas pelayanan, karakteristik pasien, dan hambatan pindah dengan loyalitas pasien rawat jalan RSUD Cibinong. *Forum Ilmiah*, 10(1), 64–74.
- Mandagi, G. M., Areros, W. A., & Sambul, S. A. P. (2020). Reward and punishment terhadap loyalitas karyawan pada PT Bank SulutGo Cabang Utama Manado. *Productivity*, 1(4), 297–300.
- Marzuki, F. (2018). Pengaruh gaya kepemimpinan transformasional dan profesionalisme kerja terhadap loyalitas karyawan di LP3I Group. *Jurnal Lentera Bisnis*, 7(1).
- Maslow, A. H. (1994). Motivasi dan kepribadian: Teori motivasi dengan pendekatan hierarki kebutuhan manusia. PT PBP.
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61–89. [https://doi.org/10.1016/1053-4822\(91\)90011-Z](https://doi.org/10.1016/1053-4822(91)90011-Z)
- Northouse, P. G. (2016). Leadership: Theory and practice (7th ed.). Sage Publications.
- Novianti, A. (2022). Pengaruh reward dan kepuasan terhadap loyalitas anggota (Studi kasus pada anggota KPRI Guyub Rukun Banjarmangu, Banjarnegara). Universitas Islam Negeri Walisongo Semarang.

- Robbins, S., & Judge, T. (2017). *Organizational behavior* (17th ed.). Pearson Education.
- Robbins, S. P., & Coulter, M. (2016). *Management*. Pearson Education Limited.
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. The Guilford Press.
<https://doi.org/10.1521/978.14625/28806>
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Sinaga, H. E., Nina, & Hafizurrachman. (2022). Pengaruh kepemimpinan, budaya kerja, lingkungan kerja, komunikasi interpersonal, beban kerja terhadap loyalitas perawat non ASN. *Journal of Ners Community*, 13(5), 534–551.
<https://doi.org/10.55129/jnerscommunity.v13i5.2180>
- Sugiyono. (2022). *Metode penelitian kuantitatif, kualitatif, dan R&D* (29th ed.). Alfabeta.
- Zebua, M. D., Musri, M. A., & Ichsan, R. N. (2025). Pengaruh kualitas pelayanan dan motivasi terhadap loyalitas pelanggan melalui kepuasan pelanggan sebagai variabel intervening. *RIGGS*, 4(2), 458–464.