

Transformational leadership and its relationship with work motivation in a pharmacy chain, Lima, 2025

Jhair Sleiden Rios-Rodas ; Jose Daniel Sotelo-Huachua ; Johanna de Jesús Stephanie Gago-Chávez 
Universidad Tecnológica del Perú, u19213235@utp.edu.pe, u19213643@utp.edu.pe, C30001@utp.edu.pe

Abstract– This study analyzes the relationship between transformational leadership and work motivation among employees of a pharmacy chain in Lima, Peru, in 2025. The research adopts a quantitative approach, using a non-experimental, cross-sectional, correlational design to examine the association between both variables and their respective dimensions. Data were collected through a structured questionnaire composed of 20 Likert-scale items, applied to a census sample of 100 employees. The instrument demonstrated strong psychometric properties, achieving excellent reliability (Cronbach's $\alpha = 0.88$) and content validity through expert judgment. Given the non-normal distribution of the data, Spearman's rho was applied for hypothesis testing. The results reveal a statistically significant and moderate positive relationship between transformational leadership and work motivation ($r = 0.498$; $p = 0.000$). At the dimensional level, idealized influence ($r = 0.434$; $p = 0.000$) and individualized consideration ($r = 0.466$; $p = 0.000$) show moderate positive correlations, while inspirational motivation ($r = 0.376$; $p = 0.000$) and intellectual stimulation ($r = 0.375$; $p = 0.000$) present low but significant positive relationships with work motivation. These findings confirm the relevance of transformational leadership as a key organizational factor that enhances employee motivation. The study concludes that leadership practices based on ethical influence, inspiration, intellectual development, and individualized support significantly contribute to motivational processes, organizational commitment, and performance. The results provide empirical evidence that supports theoretical models of transformational leadership and motivation, highlighting their practical applicability in organizational contexts within the Peruvian pharmaceutical sector.

Keywords–Transformational leadership, work motivation, organizational behavior, human resource management, pharmaceutical sector.

I. INTRODUCTION

Present-day Peru is in a complex situation regarding the labor sector, a condition that has developed over years of political uncertainty, generating a nationwide climate of business instability. According to a study produced by the Global Business Complexity Index, Peru is among the 15 most difficult economies in which to do business across international markets, thereby hindering the country's development. In general terms, Peru has shown a decrease in the national unemployment rate; however, when focusing on its capital city, Lima, a different scenario emerges, as the unemployment rate has increased. This situation is justified by a growing trend of employees who consider resigning from their jobs due to poor leadership development within the

companies where they work or due to strained relationships with their supervisors.

At the organizational level, this situation affects companies in multiple ways, as employee turnover increases, weakening organizations internally in both economic and logistical terms. Added to this problem is a decline in employee productivity, since workers who neither feel nor perceive any type of work motivation do not develop commitment to the organization. As a result, there is an observable increase in burnout syndrome, which arises from dissatisfaction, stress, and both physical and mental exhaustion, leading to turnover intention and staff rotation.

In response to these challenges, it is essential for organizations to implement strategies that promote a culture of collaboration, open communication, and continuous professional development. This study seeks to explore aspects that have been scarcely addressed in the current literature, offering information that supports the design, implementation, and modification of organizational practices linked to leadership and productivity.

A. Research questions

General Research Question:

What is the relationship between transformational leadership and work motivation in a pharmacy chain, Lima, 2025?

Specific Research Questions:

What is the relationship between idealized influence and work motivation in a pharmacy chain, Lima, 2025?

What is the relationship between inspirational motivation and work motivation in a pharmacy chain, Lima, 2025?

What is the relationship between intellectual stimulation and work motivation in a pharmacy chain, Lima, 2025?

What is the relationship between individualized consideration and work motivation in a pharmacy chain, Lima, 2025?

B. Research objectives

General Objective:

To determine the relationship between transformational leadership and work motivation in a pharmacy chain, Lima, 2025.

Specific Objectives:

To determine the relationship between idealized influence and work motivation in a pharmacy chain, Lima, 2025.

To determine the relationship between inspirational motivation and work motivation in a pharmacy chain, Lima, 2025.

To determine the relationship between intellectual stimulation and work motivation in a pharmacy chain, Lima, 2025.

To determine the relationship between individualized consideration and work motivation in a pharmacy chain, Lima, 2025.

C. Justification

Theoretical Justification: The study of transformational leadership and its connection with work motivation is highly relevant within the field of organizational psychology and contemporary business management. This research will contribute to strengthening the existing conceptual framework on transformational leadership, expanding its understanding in Latin American contexts, particularly in Peru, where organizations face challenges derived from political and economic instability. This situation creates the need to analyze the influence these factors generate on productivity and the commitment of workers and entrepreneurs.

Methodological Justification: Methodologically, this research justifies the application of a quantitative approach, which will allow the obtaining of valid and reliable results through validated instruments. Through questionnaires and statistical techniques, the relationship between transformational leadership and work motivation will be evaluated, generating objective data that supports scientific analysis. This non-experimental, descriptive-correlational design will help identify patterns of work behavior, strengthening knowledge about how a leader's actions can influence workers' motivation in the Peruvian business context.

Practical Justification: From a practical perspective, this study is highly useful for organizations seeking to strengthen their human talent management. The results will allow the identification of the most effective leadership styles to increase work motivation and employee commitment, which in turn translates into improvements in the work climate, reduction in staff turnover, and increased productivity.

II. THEORICAL FRAMEWORK

A. Transformational Leadership

The term transformational leadership was first introduced after an analysis of revolutionary social and political movements that sought to understand how leaders transformed the beliefs, values, and motivations of their followers. This concept defines a leadership style characterized by charisma, aimed at inspiring commitment and change in followers, rather than merely regulating behavior through reward and punishment systems.

The concept was later incorporated into modern leadership literature through a foundational theoretical formulation that distinguished transformational leadership from transactional leadership, emphasizing its moral and transformative dimension. The theory was subsequently expanded and operationalized by defining specific dimensions, enabling empirical measurement and consolidating a more rigorous understanding of the effects of transformational leadership [1].

Transformational leadership has also been conceptualized as a form of collective ethical commitment in which team members motivate one another to surpass goals and develop their potential, grounded in ethical principles and intrinsic motivation that guide the achievement of common objectives. Its applicability across different organizational contexts and dimensions has been reinforced by evidence showing that its implementation contributes positively to performance and job satisfaction.

B. Dimensions of Transformational Leadership

Idealized Influence: Transformational leaders are characterized as charismatic, ethical, and morally exemplary individuals who lead with purpose, assume responsibility in times of crisis, and share success with their teams, grounding leadership in values and actions. This dimension is also understood as being based on credibility and the leader's example, through which followers develop loyalty and the desire to emulate the leader's values and behaviors [2].

Inspirational Motivation: This dimension describes leaders who drive their teams to perform beyond expectations, fostering confidence, optimism, and openness to change. Motivation is understood as the impulse that enables workers to perform and persist in achieving their goals, guided by the intensity, direction, and persistence of effort [2].

Intellectual Stimulation: This leadership dimension promotes reflection, critical thinking, and the strengthening of individual capacities in problem-solving processes. It also encourages creativity and innovative reasoning, motivating workers to examine and rethink established ideas and to strengthen their ability to make more effective decisions [3].

Individualized Consideration: This form of leadership is based on empathy, support, and the promotion of professional development, highlighting the leader as a good listener and effective communicator. It also involves a mentoring role in which the leader provides personalized guidance that fosters understanding and growth for each collaborator, strengthening both professional and personal development [3].

C. Work Motivation

From a developmental perspective, motivation is defined as the result of the process of satisfying different levels of needs, which follows a hierarchical order [4]. This model was later expanded through the two-factor theory, which redirected the focus toward job satisfaction and the absence of dissatisfaction as two distinct dimensions of motivation [5]. A psychological approach to motivation was further developed

through a theory explaining how different motivational stimuli influences performance and leadership.

The hierarchy of needs model was later reformulated through the ERG theory, which proposed that human needs are not strictly hierarchical and that motivation follows a more flexible structure [6]. In addition, the expectancy theory emphasized the relationship between effort, performance, and reward, explaining how individuals develop attitudes and behaviors based on expectations regarding desired outcomes.

For this study, Frederick Herzberg is considered the foundational author for work motivation, since the two-factor theory restructures Maslow's theoretical base into a concrete and applicable model, highlighting that this approach not only explains job satisfaction but also allows for the analysis of the relationship between motivation and productivity.

D. Dimensions of Work Motivation

Motivator Factors (intrinsic to the work context): Motivator factors are conceptualized as those elements that, when present, generate satisfaction and motivate workers. These elements are related to the content of the job and the personal growth of the employee, connecting internal motivation with the desire for achievement, and are therefore intrinsic to the work itself [5].

Hygiene Factors (extrinsic or related to the work context): Hygiene factors are defined as elements whose primary purpose is to prevent dissatisfaction among employees. Their presence does not generate satisfaction but rather avoids dissatisfaction, and they are external to the work itself, being more closely related to the work environment and organizational conditions [5].

E. Hypothesis

General Hypothesis:

There is a relationship between transformational leadership and work motivation in a pharmacy chain in Lima in the year 2025.

Specific Hypotheses:

There is a relationship between idealized influence and work motivation in a pharmacy chain, Lima, 2025.

There is a relationship between inspirational motivation and work motivation in a pharmacy chain, Lima, 2025.

There is a relationship between intellectual stimulation and work motivation in a pharmacy chain, Lima, 2025.

There is a relationship between individualized consideration and work motivation in a pharmacy chain, Lima, 2025.

III. METHODOLOGY

A. Study design

This study adopts a quantitative research approach, which seeks to measure and analyze data collected through systematic techniques to generate objective findings that

contribute to answering the research question and to the acceptance or rejection of the proposed hypotheses. Quantitative research prioritizes measurement and quantification of phenomena, allowing the production of objective, verifiable, and scientifically valid results, with strong emphasis on analytical processes that support hypothesis testing.

The research follows the hypothetical-deductive method, which involves the formulation of hypotheses and the logical deduction of possible outcomes that must later be empirically contrasted through observation and data analysis to determine whether the hypotheses are supported or rejected [7]. This method provides a structured and systematic framework for scientific validation of theoretical assumptions.

The study is classified as basic research, as its primary purpose is to expand scientific knowledge and theoretical understanding of the phenomena under study without the immediate intention of practical application. In terms of design, the research is non-experimental, since the variables are not manipulated and no random assignment of participants or conditions is performed, allowing the phenomena to be observed in their natural state. Additionally, the study follows a cross-sectional design, as data are collected at a single point in time to analyze the variables and their relationships within a specific context [8].

Finally, the research has a correlational scope, aimed at identifying patterns and relationships between variables, specifically seeking to determine the relationship between transformational leadership and work motivation, contributing to theoretical development and empirical understanding in organizational contexts.

B. Population and Sample

The population of the study is defined as a group of individuals who share common characteristics and are therefore considered the appropriate target for scientific analysis. In this research, the population corresponds to a pharmacy chain composed of 100 employees, who constitute the total group of interest for the study.

The sample is understood as a subset of the population selected for observation and scientific analysis, representing the larger group in empirical research [9]. In the present study, the entire population of workers from the organization will be included in the research process. Consequently, a census sampling method will be applied, in which all 100 employees participate as the study sample, ensuring full representation of the population and strengthening the validity and reliability of the findings.

C. Data Collection Technique and Instrument

The data collection technique used in this study is the survey, which employs a structured questionnaire to systematically gather information from a group of individuals, allowing the collection of data on opinions, behaviors, and perceptions in an organized manner [10]. This technique is fundamental for the present research because it facilitates the

rapid and secure collection of measurable data, enabling objective analysis and the generation of comparable results. Its use also ensures consistency among responses and provides accurate information for hypothesis testing through statistical procedures.

The instrument used for data collection is a structured questionnaire composed of 20 items measured on a Likert scale, designed according to the study variables, allowing the collection of relevant information from the selected organizational population [11]. Instrument validity refers to the degree to which it accurately measures the variable it intends to assess, which requires that the items clearly represent the theoretical content of each variable and do not measure different constructs [8]. For this purpose, expert judgment was applied, and the instrument was evaluated by three academic specialists, all of whom approved its validity, confirming its conceptual coherence and clarity.

Instrument reliability was assessed through a pilot test applied to a sample of 20 participants. Using Cronbach's alpha, a coefficient of 0.88 was obtained, indicating excellent internal consistency and a high level of reliability for the data collection instrument, ensuring the stability and accuracy of the measurements.

D. Data Collection and Analysis Procedures

To initiate the data collection process, the first step was to request formal authorization from the owner of the company. Once permission was granted, coordination was carried out with the main manager of the pharmacy chain, who acted as a mediator with the managers of the different pharmacy branches. Through this coordination, the questionnaire created on the Google Forms platform was distributed via internal communication groups. Simultaneously, an in-person meeting was scheduled with the staff of the different pharmacies. During this meeting, the study was explained clearly and in accessible language, including the purpose of the research and the objectives to be achieved. An initial period of seven days was established to collect responses in order to conduct a pilot test with 20 participants. After this period, a second in-person session was held, during which access was obtained to the entire staff. Using QR codes and direct survey links, the remaining 80 questionnaires were completed, thereby concluding the data collection phase successfully.

Data processing began immediately after the completion of all surveys. The collected responses were downloaded into an Excel database for initial organization. SPSS was also used to conduct reliability analysis, normality tests, and correlation measurements, ensuring the proper statistical validation of the study.

IV. RESULTS

This section will describe the normality test of the variables. Subsequently, the hypothesis testing will be

presented to determine whether the null hypothesis or the alternative hypothesis is accepted.

TABLE I
KOLMOGOROV-SMIRNOV TEST

Variables	Statistic	df	Sig.
Variable 1: Transformational leadership	0.133	100	0.000
Dimension 1: Idealized Influence	0.165	100	0.000
Dimension 2: Inspirational Motivation	0.189	100	0.000
Dimension 3: Intellectual Stimulation	0.219	100	0.000
Dimension 4: Individualized consideration	0.208	100	0.000
Variable 2: Work Motivation	0.109	100	0.005
Dimension 5: Motivator Factors	0.170	100	0.000
Dimension 6: Hygiene Factors	0.132	100	0.000

In Table I, the Kolmogorov-Smirnov normality test was applied because a large sample of 100 individuals was used. The results show that for Variable 1, transformational leadership, a significance value of 0.000 was obtained, which is below the error margin of 0.05. Likewise, all its dimensions presented asymptotic significance values lower than 0.05. It is therefore concluded that both the variable and its dimensions are composed of non-normally distributed data.

Similarly, for Variable 2, work motivation, a significance value of 0.005 was obtained, which is also below the error margin of 0.05. Its dimensions likewise showed asymptotic significance values lower than 0.05. It is concluded that both the variable and its dimensions are composed of non-normally distributed data.

These results allow the researchers to conclude that the data do not follow a normal distribution; therefore, the application of non-parametric statistical tests is recommended for hypothesis testing.

TABLE II
CORRELATION MATRIX

Spearman's rho		Work Motivation
Transformational leadership	r	0.498
	Sig. (bil.)	0.000
	N	100
Idealized Influence	r	0.434
	Sig. (bil.)	0.000
	N	100
Inspirational Motivation	r	0.376
	Sig. (bil.)	0.000
	N	100
Intellectual Stimulation	r	0.375
	Sig. (bil.)	0.000

Individualized consideration	N	100
	r	0.466
	Sig. (bil.)	0.000
	N	100

The results of Spearman's rho correlation analysis indicate the existence of statistically significant positive relationships between transformational leadership and work motivation. A moderate positive correlation is observed between transformational leadership and work motivation ($r = 0.498$; $p = 0.000$), demonstrating that higher levels of transformational leadership are associated with higher levels of employee work motivation.

At the dimensional level, all components of transformational leadership show statistically significant positive correlations with work motivation. Idealized influence presents a moderate positive correlation ($r = 0.434$; $p = 0.000$), indicating that ethical behavior, credibility, and leader role modeling are meaningfully associated with employee motivation. Inspirational motivation also shows a positive correlation of moderate intensity ($r = 0.376$; $p = 0.000$), suggesting that vision, encouragement, and inspirational communication contribute to increased motivation levels. Intellectual stimulation presents a similar positive relationship ($r = 0.375$; $p = 0.000$), reflecting that the promotion of critical thinking, creativity, and problem-solving is linked to higher motivational outcomes. Individualized consideration shows one of the strongest relationships with work motivation ($r = 0.466$; $p = 0.000$), highlighting the importance of personalized support, mentoring, and attention to individual needs in enhancing employee motivation.

Overall, the findings confirm that transformational leadership and all its dimensions are significantly and positively associated with work motivation. These results support the general hypothesis and specific hypotheses of the study, demonstrating that transformational leadership constitutes a relevant organizational factor in strengthening employee motivation within the pharmacy chain context.

V. DISCUSSION

The results obtained in the correlation analysis are consistent with the theoretical foundations of transformational leadership and work motivation. The statistically significant and positive relationship found between transformational leadership and work motivation ($r = 0.498$; $p = 0.000$) empirically supports the theoretical proposition that leadership styles oriented toward inspiration, ethics, values, and personal development generate higher levels of employee motivation. This finding aligns with the original conceptualization of transformational leadership, which emphasizes the leader's capacity to transform beliefs, values, and motivations in followers through charismatic and value-based influence, rather than through systems of reward and punishment alone.

The results are also consistent with the theoretical distinction between transformational and transactional leadership, where the transformative dimension of leadership is associated with moral influence, value internalization, and long-term motivational commitment. The empirical evidence obtained supports the operational model developed through the dimensional structure proposed for transformational leadership, which allows its effects to be measured and verified scientifically [1]. Furthermore, the positive association found between transformational leadership and work motivation reinforces the theoretical position that leadership grounded in ethical commitment and intrinsic motivation contributes to collective performance and job satisfaction, as well as the applicability of transformational leadership across organizational contexts in improving employee outcomes.

At the dimensional level, the results further confirm the theoretical coherence of the model. The significant relationship between idealized influence and work motivation supports the theoretical view that ethical leadership, credibility, and role modeling generate trust, loyalty, and motivational commitment among employees [2]. The positive correlation between inspirational motivation and work motivation is consistent with the theoretical definition of leaders as agents who generate vision, confidence, and collective purpose, fostering persistence and effort toward organizational goals [2].

Similarly, the significant relationship between intellectual stimulation and work motivation empirically supports the theoretical assumption that promoting critical thinking, creativity, and autonomous problem-solving strengthens intrinsic motivation and employee engagement [3]. The strong association found between individualized consideration and work motivation is also fully consistent with the theoretical model, which emphasizes empathy, mentoring, personalized support, and professional development as central mechanisms through which leaders enhance employee commitment and motivation [3].

From the perspective of motivation theory, these findings are coherent with classical and contemporary models. The positive relationships observed align with need-based theories of motivation, which explain that motivation emerges from the satisfaction of psychological and developmental needs [4], as well as with the two-factor theory, which establishes that intrinsic aspects of work and leadership are central drivers of satisfaction and motivation [5]. The results also support motivational models that link psychological stimulation, achievement needs, and personal development with performance and engagement, flexible need structures [6], and expectancy-based processes connecting effort, performance, and rewards.

Overall, the empirical findings are in accordance with the theoretical framework, confirming that transformational leadership functions as a structural and psychological driver of work motivation. The results validate the conceptual models proposed in the literature and demonstrate their applicability

in the organizational context of a pharmacy chain in Lima, reinforcing the theoretical assumption that leadership grounded in values, inspiration, stimulation, and individualized support constitutes a key mechanism for strengthening employee motivation and organizational performance.

VI. CONCLUSIONS

The study concludes that there is a statistically significant and positive relationship between transformational leadership and work motivation in the pharmacy chain in Lima in 2025. The correlation analysis demonstrates that higher levels of transformational leadership are associated with higher levels of employee motivation, confirming the general hypothesis of the research and validating the relevance of leadership style as a determinant of motivational outcomes within organizational contexts.

It is concluded that each dimension of transformational leadership shows a significant and positive relationship with work motivation. Idealized influence is significantly associated with employee motivation, indicating that ethical behavior, credibility, and leader role modeling strengthen trust, commitment, and motivational engagement among workers. This confirms the importance of value-based leadership in organizational performance.

Inspirational motivation is found to be positively related to work motivation, demonstrating that leaders who communicate vision, optimism, and purpose effectively generate higher levels of employee commitment, persistence, and engagement toward organizational objectives.

Intellectual stimulation presents a significant positive relationship with work motivation, indicating that leadership practices that promote critical thinking, creativity, and autonomous problem-solving contribute to higher intrinsic motivation and greater employee involvement in work processes.

Individual consideration shows a strong and significant relationship with work motivation, demonstrating that personalized support, mentoring, empathy, and professional development opportunities constitute key mechanisms for strengthening employee motivation and organizational commitment.

Overall, the findings confirm that transformational leadership operates as a strategic organizational resource that directly influences motivational processes, reinforcing its role as a key factor for improving productivity, job satisfaction, and organizational performance. The results validate the theoretical models of transformational leadership and motivation and demonstrate their empirical applicability in the context of the Peruvian pharmaceutical sector.

VII. RECOMMENDATIONS

It is recommended that the human resources manager gradually incorporate the transformational leadership style among supervisors and team leaders. Given the validated existence of a moderate positive relationship between transformational leadership and work motivation, its implementation is expected to generate an increase in employee motivation. This can be achieved through structured training programs for group leaders, focused on strengthening team communication, leadership skills, and effective people management practices.

It is further recommended that the human resources department, in light of the moderate positive relationship between idealized influence and work motivation, initially implement a 360-degree evaluation process. This will provide a comprehensive understanding of how employees perceive their team leaders. Based on these results, leaders with the strongest leadership characteristics should be selected to form an internal mentoring network, which will serve not only to guide and train new supervisors but also to promote a supportive organizational climate based on collaboration rather than internal competition.

Finally, as a key strategic recommendation for the human resources department, the positive and moderate relationship identified between individualized consideration and work motivation should be strengthened and leveraged. For this purpose, it is recommended to implement training programs focused on the development of listening skills and emotional intelligence, enabling leaders to better understand employees' aspirations and ideas. Additionally, the implementation of an individual check-in protocol is recommended, consisting of brief periodic meetings that allow supervisors to connect with employees' emotional well-being, professional development, and personal growth, thereby strengthening interpersonal relationships and motivational engagement.

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