

Artículo original

Leadership style in hospital management and perception from followers at the Guayaquil Institute of Neurosciences

Editor académico:

Dr. Jimmy Martín

Recibido: 17/05/24

Revisado: 24/06/24

Aceptado: 26/06/24

DOI:

<https://doi.org/10.61708/j2e8r915>



Copyright: © 2023 por los autores. Presentado para su publicación en acceso abierto bajo los términos y condiciones de la licencia Creative Commons Attribution (CC BY). El uso, distribución o reproducción en otros foros está permitida, siempre que se cite la publicación original en esta revista.

José Alejandro Valdevila Figueira^{1,2,3*}, Rosa Ana Tomalá Barco⁴, Norman Vicente Castellanos Davalo⁵, María José Abad Moran⁶, Indira Dayana Carvajal Parra³, María Gracia Madero Dutazaka³

¹ Faculty of Marketing and Communication, Ecotec University, Samborondon, Ecuador.

² Research network in psychology and psychiatry (GIPSI), Guayaquil, Ecuador.

³ Instituto de Neurociencias, Junta de Beneficencia de Guayaquil, Guayaquil, Ecuador.

⁴ CPA Accounting and Auditing Engineer, Guayaquil, Ecuador.

⁵ Hospital de Niños Dr. Roberto Gilbert, Junta de Beneficencia de Guayaquil, Guayaquil, Ecuador.

⁶ School of Psychology, Universidad de Especialidades Espíritu Santo, Samborondon, Ecuador.

Corresponding author :

José Alejandro Valdevila Figueira *
alejandrovaldevilafigueiral@yahoo.es
Institute of Neurosciences of Guayaquil.
Avenida Pedro Menéndez Gilbert s/n, Guayaquil, Ecuador.

Abstract

Background: leadership has been studied from various disciplines such as sociology, business administration, psychology and economics and from different analytical perspectives such as power, positions that try to explain it using behavioral, situational and interactive approaches and from leadership styles. This research aimed identify the leadership style that prevails in the leaders of the Institute of Neurosciences of Guayaquil.

Materials and methods: The Multifactor Leadership Questionnaire 5x short version scale was used, composed of nine leadership factors and three outcome factors. The questionnaire was administered online through questionpro. The format in which followers evaluate the leader

was applied. 200 employees responded to the questionnaire. **Results:** The followers evaluated their leaders or immediate bosses, resulting in a predominance of the transformational leadership style. The individualized consideration factor was the lowest rated, among the transactional and transformational factors, suggesting that leaders do not pay due attention to individual needs. The most rated factors were inspirational motivation and idealized influence of behavior. Additionally, passive/avoidant leadership scored the lowest in the organization. **Conclusions:** In the organization studied, the transformational leadership style prevails, and it is recommended to carry out future research incorporating quantitative and/or qualitative methods such as interviews, observation sheets or analyzing climate or performance surveys of the organization and investigating the positive influence of transformational leadership in aspects related to commitment, corporate social responsibility or psychosocial risks.

Keywords: Transactional leadership; transformational leadership; MLQ 5x collaborators organization.

Resumen

Introducción: El liderazgo ha sido estudiado desde diversas disciplinas como la sociología, la administración de empresas, la psicología y la economía y desde diferentes perspectivas analíticas como la del poder, posiciones que intentan explicarlo utilizando enfoques conductuales, situacionales e interactivos y desde estilos de liderazgo. Esta investigación tuvo como objetivo identificar el estilo de liderazgo que prevalece en los líderes del Instituto de Neurociencias de Guayaquil. **Materiales y métodos:** Se utilizó la escala versión corta Multifactor Leadership Questionnaire 5x, compuesta por nueve factores de liderazgo y tres factores de resultado. El cuestionario se administró en línea a través de questionpro. Se aplicó el formato en el que los seguidores evalúan al líder. 200 empleados respondieron al cuestionario.

Resultados: Los seguidores evaluaron a sus líderes o jefes inmediatos, resultando en un predominio del estilo de liderazgo transformacional. El factor de consideración individualizada fue el peor valorado, entre los factores transaccionales y transformacionales, lo que sugiere que los líderes no prestan la debida atención a las necesidades individuales. Los factores más valorados fueron la motivación inspiradora y la influencia idealizada del comportamiento. Además, el liderazgo pasivo/evasivo obtuvo la puntuación más baja de la organización.

Conclusiones: En la organización estudiada prevalece el estilo de liderazgo transformacional, y se recomienda realizar futuras investigaciones incorporando métodos cuantitativos y/o cualitativos como entrevistas, fichas de observación o analizando encuestas de clima o desempeño de la organización e investigando la influencia positiva de liderazgo transformacional en aspectos relacionados con el compromiso, la responsabilidad social corporativa o los riesgos psicosociales.

Palabras clave: Liderazgo transaccional; liderazgo transformacional; Organización de colaboradores de MLQ 5x.

Introducción

Leadership has been studied from various disciplines such as sociology, business administration, psychology, and economics (1), and from different analytical perspectives such as power (2), approaches that seek to explain it using behavioral, situational, and interactive approaches (3), and from leadership styles, such as transactional leadership and transformational leadership (4).

In the field of healthcare, the quality of leadership plays a crucial role as it

can predict organizational outcomes. This assertion is based on the fact that effective leadership in organizations focuses on influencing and coordinating individual and collective efforts to achieve common goals (4-7). The leader's effectiveness, therefore, is reflected in their ability to influence others effectively and ethically, for the benefit of individual patients and populations (6,7).

The extra effort, leader effectiveness, and employee satisfaction with the leader are supported by the leadership styles adopted. Leadership styles have a direct relationship with employee responses and organizational behavior in the workplace (8). Furthermore, these styles can influence employees' perceptions of organizational policies (9). Specifically, transformational and transactional leadership have been shown to have a significant impact on job engagement and perceptions of organizational support (10-13).

Transactional leadership strengthens the basic principles of the links between leaders and their followers, implementing the guidelines and expectations that are formed in said relationship, clarifying responsibilities, and setting rewards and recognitions to achieve sought-after goals and results. In contrast, transformational leadership drives the development of followers, encouraging them to seek new ways and motivating them to surpass expectations, incentivizing them to adhere to values and moral standards that guide their behavior (14).

Transformational leadership is considered one of the most effective ones, with a positive impact on organizational justice, motivation, and work engagement (15), therefore, having this leadership style in an organization would ensure that employees work motivated in the achievement of their goals.

Some perceptions about leadership are linked to the view one has of human nature, where a negative view considers discipline and control necessary to guarantee the fulfillment of goals, and a positive vision will tend towards a more democratic style by considering that human beings can be self-motivated and self-directed (16).

For Stoner (17), leadership is understood as the process of influencing and directing the actions of followers or members of a group that is capable of involving people who accept to follow the leader, who accept the inequality that exists between leaders and followers regarding the distribution of power, that has the ability to use power to influence followers and that does not lack values or principles.

Riveros-Barrera (2012), García-Solarte, (2015) and Gómez (2009) (18-20), refer to leadership as the leader's ability to promote a more direct approach with the work team, without imposition on the provisions, encouraging each member of the team to contribute their best work, and become a participatory entity in business strategies and objectives.

Among the multiple perspectives for analyzing leadership, reflected in the previous definitions, the studies of Bass and Avolio (2014) (21, 22) stands out, who propose the existence of transformational and transactional leadership styles. These leadership styles intervene in the interaction that exists between the leader and his collaborators, from a motivational perspective to achieve effectiveness in decision making (23).

For Bass (1999), the execution of activities is carried out with followers through a transaction that involves reward or recognition, whether monetary or not, converting transactional leadership into an exchange between leader and followers, where the leader offers a reward to the follower, in exchange for an action, so their interests must coincide (24).

Transactional leaders, execute actions and fulfill their promises to followers (23), having a relationship based on exchange, being a moderately effective leadership style when properly practiced (25). This exchange results in implicit compliance with the leader's demands but is not expected to generate commitment in the follower (26). Thus, the transactional leadership style would have better results if applied in traditional roles and structured changes, where strategies are planned by leaders, guaranteeing compliance with the proposed objectives focused on organizational results (27, 28).

Entities providing mental health services must promote comprehensive and inclusive care for individuals with mental disorders (28, 29), moving away from exclusion in hospitals and focusing on social reintegration (30). This involves proposing changes in models and paradigms, incorporating levels of inpatient and outpatient care, with multidisciplinary and intersectoral approaches to treatment (31).

Thus, in the case of psychiatric hospitals and other health facilities, the need for effective leadership that can navigate through complex social and political forces, persistent shortages of health professionals, and performance and security indicators requirements is recognized (31-33). The development of a specific leadership model for healthcare, based on competencies recognized as the most important attributes for effective leadership in this sector is essential.

Studies indicate that leaders play a crucial role in guiding employees to align their practices with institutional objectives (34) and in steering processes based on the prevailing type of leadership. Therefore, our focus is on characterizing the leadership style of a mental health institution in the city of Guayaquil. This work is considered particularly relevant because its results can be valuable for other organizations of a similar nature committed to elevating their standard of care. The chosen institution has implemented a comprehensive and inclusive health model, catering to over sixty thousand patients annually, without confining them to a mental hospital. This establishment has become a benchmark in Ecuador.

Methodology

Type of study, population, and sample

A quantitative, observational, cross-sectional instrumental study was carried out applying the MLQ 5x (Annex 2) to the collaborators of the Institute of Neurosciences of Guayaquil (INC) (n = 360). The scale was applied online (Questionpro online questionnaire) with a duration of approximately 12 minutes and was accompanied by an ad hoc survey (Annex 1) for the collection of sociodemographic variables of interest. 200 employees (56%) responded to the survey. For the purposes of the research, the format in which followers evaluate the leader was applied. Each participant was asked to evaluate their immediate boss according to the administrative organization chart of the unit studied. The data were anonymized and coded to ensure the confidentiality of the participants.

Instrument

The MLQ5x was used, which is composed of 3 groups of factors, namely 1) transformational leadership, which includes idealized influence (charisma attribute), idealized influence (behavior attribute) and inspirational motivation, intellectual stimulation and individual consideration; 2) transactional leadership, which includes contingent reward and management by exception (active)

and 3) passive-avoidant leadership, that includes management by exception (passive) and Laissez-Faire (35). The MLQ 5x also studies 3 factors of organizational results: effectiveness, satisfaction, and extra effort, which are measured through 9 items (36). The leader's effectiveness (4 items), employee satisfaction with the leader (2 items) and the extra effort that employees are willing to give (3 items) (35). Of the two formats of the MLQ 5x questionnaire (leader's self-assessment and leader's evaluation by followers), the second format was used. The questionnaire allows to respond on a Likert scale that evaluates the perception of the leader in 5 options: never (0), rarely (1), sometimes (2), often (3) and frequently, almost always (4). Its validity and reliability have been demonstrated, with acceptable ranges in previous research (37, 38).

Statistic analysis

The data was grouped into percentage distribution tables for better analysis and understanding. The arithmetic mean and standard deviation were obtained using the SPSS program, as well as the correlation between the leadership factors and the result variables. Finally, reliability was determined using Cronbach's alpha.

Results

123 women (61.47%) and 77 men (38.53%) responded to the survey. 28.5% (n = 57) of the sample performed administrative functions and 71.5% (n = 143) performed technical functions. According to the analysis of the position profile, the result was that 39% (n = 78) worked as assistants, graduates, professionals (graduates, psychologists, and doctors) represented 31% with 62 subjects, and 15.5% (n = 31) corresponded to the attendees. Those who held coordinator or supervisor roles constituted 9.5% of the sample (n = 19) and area heads made up 5% (n = 10).

Results show that 55.96% (n = 112) had more than 15 years of work experience in the center, 11.93% (n = 24) between 11 and 15 years, 11.01% (n = 22) between 6 and 10 years, 10.09% (n = 20.) between 2 and 5 years and 11.01% (n = 22) had less than 1 year.

Regarding the academic level of the respondents, the following results were found: High School: 26.36% (n = 58), Incomplete University: 9.09% (n = 18), Third level: 15.45% (n = 30), Fourth level: 28.18 % (n = 56) and not specified: 20.5% (n = 38).

According to age, most of the subjects were grouped in the age range between 50 and 59 years (n = 72; 36.0%), followed by the groups between 40 and 49 years (n = 57; 28.64%), between 30 and 39 years old (n = 43; 21.36%) and the groups of under 30 and over 60 with 14 subjects each (6.82% for each group). The results show that in the institution there is transformational leadership, highlighted by the inspirational motivation factor, which suggests that leaders can provide meaning to the work of followers and manage to formulate a convincing vision of the future for them and the organization.

The highest rated factor was contingent reward, demonstrating that leaders establish clear expectations and recognize employees who meet them, and that laissez-faire is the lowest rated, which suggests the nonexistence of passive leadership in the organization.

On the other hand, the Individualized Consideration factor was the least rated among the transformational leadership factors, even below the transactional ones. This result suggests that leaders do not focus on understanding the needs of each follower and that there is a low interest in enhancing their development.

Table 1. Arithmetic mean and standard deviations of the MLQ 5x factors

Factor	Style	Items	Media	Standard Deviation
Inspirational Motivation	Transformational	36	15.49	4.20
Idealized Influence Behavior	Transformational	36	14.52	3.83
Contingent Reward	Transactional	36	14.24	4.11
Idealized Influence Attributed	Transformational	36	14.15	3.93
Intellectual Stimulation	Transformational	36	14.07	4.10
Active Management-by-Exception	Transactional	36	14.00	3.60
Individualized Consideration	Transformational	36	13.53	3.80
Management-by-Exception- Passive	Passive Avoidant	36	7.96	3.53
Laissez Faire	Passive Avoidant	36	7.70	3.54
Items		36		

Displays the results of the Multifactor Leadership Questionnaire (MLQ) 5x, highlighting that in Transformational leadership, Inspirational Motivation scored the highest average (15.49), while in Passive Avoidance, Laissez Faire recorded the lowest (7.70). This table is the property of the author and he has permission to reproduce it.

Transformational leadership was the most perceived by employees, showing an arithmetic mean of 71.75 with a dispersion of 17.96. In contrast, transactional leadership was second with an average score of 28.24 and a dispersion of 6.89 and finally passive/avoidant leadership presented an average of 15.66 with a dispersion of 6.56. Looking at the average score, it is seen that there is a considerable difference between transformational and transactional leadership, which indicates a low possibility of leaders using both types of leadership.

Table 2. Arithmetic mean and standard deviations in leadership styles

Type of leadership	N	Min.	Max.	Media	Stand. Dev.
Transformational	200	24.00	100.00	71.75	17.96
Transactional	200	8.00	40.00	28.24	6.89
Passive/Avoidant	200	8.00	36.00	15.66	6.56
Valid N (according to the list)	200				

Table 2 displays the arithmetic means and standard deviations in leadership styles, showing that Transformational leadership had the highest average (71.75), while the Passive/Avoidant style recorded the lowest average (15.66). This table is the property of the author and he has permission to reproduce it. Regarding the arithmetic mean and standard deviations with the organizational result variables related to the extra effort that employees are willing to make, the leader's effectiveness and their satisfaction show that employees perceive effectiveness in the leadership exercised by immediate managers, which is reflected in a mean of 15.40, with a dispersion of 4.49. Furthermore, it is evident that employees are willing to provide extra effort (mean of 11.45 with a standard deviation of 3.36). The satisfaction outcome variable was the one with the lowest score (mean of 7.77 and dispersion of 2.26).

Table 3. Arithmetic mean and standard deviation of the organizational outcome variables

Outcome Variables	N	Min.	Max.	Media	Stand. Dev.
Efficacy	200	4.00	20.00	15.40	4.49
Extra Effort	200	3.00	15.00	11.45	3.36
Satisfaction	200	2.00	10.00	7.77	2.26
Valid N (according to the list)	200				

Presents the arithmetic means and standard deviations of organizational outcome variables, revealing that the Efficacy variable had the highest average (15.40), while satisfaction recorded the lowest average (7.77). This table is the property of the author and he has permission to reproduce it.

Table 4 shows the correlation between the factors that constitute transformational, transactional, and passive/avoidant leadership with the organizational outcome variables.

Table 4. Pearson correlation of the main factors and outcome variables

Factors	Extra Effort	Satisfaction	Efficacy
Contingent Reward	,789**	,815**	,778**
Intellectual Stimulation	,743**	,754**	,743**
Management-by-Exception-Passive	-,366**	-,322**	-,322**
Active Management-by-Exception	,503**	,579**	,546**
Laissez Faire	-,382**	-,348**	-,338**
Idealized Influence Behavior	,774**	,794**	,801**
Inspirational Motivation	,868**	,874**	,839**
Idealized Influence Attributed	,761**	,798**	,746**
Individualized Consideration	,713**	,720**	,738**
Extra Effort	1	,879**	,867**
Efficacy	,879**	1	,883**
Satisfaction	,867**	,883**	1

**Correlation is significant at 0,01 (bilateral). * Correlation is significant at 0,05 (bilateral). This table is the property of the author and he has permission to reproduce it.

The reliability analysis of the instrument used showed a Cronbach’s alpha coefficient of 0.94, which demonstrates high validity of the results obtained.

Table 5. Reliability analysis

Description	Values
Cronbach’s Alpha	0.94
Item number	45
Number of respondents	200
Sum of variance of the items (Vi)	72.35
Total variance by factors	170.40

The table 5 shows the results of the reliability analysis, indicating a high Cronbach’s Alpha of 0.94 for the 45 items surveyed among 200 respondents, with a total item variance of 72.35 and a total variance by factors of 170.40. This table is the property of the author and he has permission to reproduce it.

Discussion

The results show that in the institution there is transformational leadership, highlighted by the inspirational motivation factor. This factor denotes that leaders are capable of providing meaning to the work of followers and manage to formulate a convincing vision of the future for them and the organization, coinciding with Bass’s assessments (39).

In relation to transactional leadership, the most rated factor is contingent reward, demonstrating that the organization’s leaders establish clear expectations and provide recognition to employees who meet them (40). and in the case of laissez-faire leadership, it is the lowest scored, denoting that passive leadership does not exist in the organization (41).

In opposition, the Individualized Consideration factor is the least rated among the transformational leadership factors, even below the transactional ones. This data suggests that leaders do not focus on understanding the needs of each follower, there is a low interest in enhancing its development (40) (for more detail see table 4).

Transformational leadership was also developed by Bass (1988), based on Burns' theory (1978) (40), related to charismatic leadership. Transformational leaders support their followers to develop and transform into leaders, satisfying their needs by empowering them, in a way that focuses on meeting the individual, leader, group and organization aims and goals, seeking to make the follower go beyond the individual purpose, increasing interest in the mutual well-being of the leader and the organization (42).

Regarding the transformational leader Ganga & Navarrete, (2014) (43), mention that it is someone with reflexivity, proactivity, dynamics and persuasive skills, among their characteristics, this kind of leaders raise awareness among those who follow them to achieve the goals of the organization. Transformational leadership has emerged as one of the most researched constructs in organizational psychology. According to this author, this leadership style generates in the leader the ability to motivate collaborators, strengthening the vision and a sense of organizational mission, inspiring pride, respect, and trust among the followers. According to Gameda and Lee (2020) (44), training strategies and programs must be developed aimed at transforming leadership skills to serve as support, allowing a vision to be transmitted to collaborators, so that leaders can influence their staff.

Charisma is one of the outstanding characteristics of transformational leadership (45), the same one that is applied in the work team to foster trust and empathy, in addition to generating a positive attitude where team members are participatory, collaborative, and accessible to organizational objectives (46). According to this point of view, changes are promoted, which represent a long-term benefit for teams, organizations, and society (47).

Similarly, charisma, as indicated by Bass and Avolio (21), helps followers to identify with their charismatic leaders aiming to imitate them, taking them as a role model, as that the charismatic leader possess some attributes that show they are worthy of the admiration, respect and trust of their followers by demonstrating ethical and moral conduct (48).

Thus, transformational leadership directs the leader to encourage followers to participate energetically and proactively in internal changes at the organization (49), fulfilling the aim of raising awareness among followers by promoting the empowerment of institutional values, the mission and vision, demonstrating enthusiasm, responsibility, productivity and commitment to organizational expectations and strategies (50).

Laissez-faire leadership represents the absence of a leadership transaction in which the leader avoids making decisions, abdicates responsibility, and does not use his authority (50). It is considered active to the extent that the leader chooses to avoid taking an action. This component is generally considered the most passive and ineffective form of leadership (51). This type of leadership gives responsibility for free action to the follower, which would be considered inappropriate, since the follower could assume that the workload is greater than they can handle without support from the leader, in these circumstances the follower would assume that the lack of leadership is attributed to its leader as Laissez-faire (52).

The application of Laissez-faire causes followers to have less confidence in their leader, which generates a decrease in motivation, and disorientation in the execution of tasks, since the follower does not feel supported or directed by their leader, demonstrating little interest of leaders by not intervening with their resources, consequently causing distrust in followers (53). In relation to Laissez-faire leadership, some firm and consistent results have been found showing that it is the least effective and unsatisfactory leadership style (54).

Based on the investigation carried out in the literary review, it is possible to verify that applying some leadership style is necessary to direct organizations in search of meeting their objectives and strategic planning (55); likewise, the existence of a leader who directs and guides collaborators to achieve common goals is a priority (56, 57).

The transformational and transactional leadership styles contribute positively to the organization through different elements, in a way that no style is better than the other, but rather that both complement each other, providing advantages and limitations, which can be adapted depending on the needs of the organization (58).

A series of limitations were evident in the preparation and the obtained results of this study, such as the inability of applying the survey to all employees due to lack of access to the network, the participation of a limited number of assistants (they constitute 40% of the total of the collaborators) for not having the facilities to apply the survey; also, at the time of the application of the survey there were restrictions related to the health emergency due to the Covid-19 pandemic. On the other hand, and although it is the largest mental health institution in the country, its data is related to collaborators from the province of Guayas, which does not represent all collaborators of mental health institutions and limits the extrapolation of the results.

It is recommended to carry out similar studies incorporating other quantitative and/or qualitative methods to corroborate the results such as interviews, observation sheets or investigating internal organizational surveys. This would allow the information to be triangulated and have a more comprehensive assessment to identify the existing leadership style in an organization. It would also be important to evaluate aspects of the organizational culture that may affect the results of the instruments used since it is likely that an organizational culture focused on results prefers transactional leadership and a people-oriented culture may tend toward transformational leadership.

Conclusions

The application of the MLQ 5x to the collaborators of the Institute of Neurosciences of Guayaquil, identified that their leaders exercise transformational leadership, characterized by having a clear vision of the institutional objectives and effectively transmitted to the followers, being one of the most recommended leadership styles for a health service institution, because it creates emotional ties with its followers and inspires the highest values. The predominant transformational leadership factors demonstrate that leaders are capable of motivating their team members, providing meaning to their work and making their followers identify with them and even try to imitate their behaviors.

The lowest score for the Individualized Consideration factor suggests that there is a gap that leaders would have to improve, and that may be related to the ability to be interested in the individual needs of their followers and the highest rated factor was Contingent Reward, which suggests a focus on seeking results.

Passive/Avoidant leadership obtained a low score, probably related to the fact that it is a leadership style that does not inspire, influence, or contribute to organizational success. The outcome variables, show that leaders are effective and get their followers to contribute to the organization's objectives, although doing so requires extra effort. However, the variable related to the follower's satisfaction with their leader obtained a low score, with a significant correlation (0.01) with the transformational factor Individualized Consideration, which reinforces that the evaluated leaders must care about the needs of their collaborators.

Leaders face new challenges due to new forms of employment such as teleworking, freelance and coworking, which incorporates other important variables where it has been shown that transformational leadership can have positive influence.

Author contributions

José Alejandro Valdevila Figueira: Analysis and data collection, writing of the original draft, review and editing of the writing, approval of the final manuscript, visualization.

Rosa Ana Tomalá Barco: Visual resources, visualization, approval of the final manuscript.

Norman Vicente Castellanos Dávalo: Original idea, visualization, validation, approval of the final manuscript.

María José Abad Moran: Visualization, validation, approval of the final manuscript.

Indira Dayana Carvajal Parra: Writing the original draft, review and editing of the writing, approval of the final manuscript, viewing.

Maria Gracia Madero Dutazaka: Writing the original draft, review and editing of the writing, approval of the final manuscript, viewing.

Ethical statement

The present study received the necessary authorizations to be carried out by the hospital's teaching and research department. All information was treated anonymously and confidentially to protect the protection of patients' personal data.

Data availability statement

The data included in this study are available upon request to the author and hospital considering ethical and privacy restrictions.

Conflicts of interest

The authors declare no conflict of interest.

Financing

The authors declare that they have not received specific funding to carry out this study.

Orcid

José Alejandro Valdevila Figueira: <https://orcid.org/0000-0002-1696-6892>

Rosa Ana Tomalá Barco: <https://orcid.org/0009-0007-2966-2488>

Norman Vicente Castellanos Davalo: <https://orcid.org/0009-0002-8776-6000>

María José Abad Moran: <https://orcid.org/0000-0003-1816-5316>

Indira Dayana Carvajal Parra: <https://orcid.org/0009-0009-9800-4280>

María Gracia Madero Dutazaka: <https://orcid.org/0000-0001-8515-0451>

References

1. Cruz-Ortiz V, Salanova M, Martínez I. Transformational leadership: current research and future challenges. *Rev. Universidad & Empresa.* 2013;25:13-32. Available at: <https://revistas.urosario.edu.co/index.php/empresa/issue/view/223/43>
2. Venezia Contreras Torres F, Castro Ríos GA. Leadership, power and organizational mobilization. *Rev. Estud. Gerenc.* 2013;29:72-76. Available at: [https://doi.org/10.1016/s0123-5923\(13\)70021-4](https://doi.org/10.1016/s0123-5923(13)70021-4)
3. Bustamante MCA, Correa-Chica A. Analysis of the variables associated with the study of leadership: A systematic review of the literature. *Rev. Univ. Psychologica.* 2017;16(1):1-13. Available at: <https://doi.org/10.11144/Javeriana.upsy16-1.avae>
4. Awamleh R, Gardner WL. Perceptions of leader charisma and effectiveness. *Rev. Leadersh. Q.* 1999;10(3):345-373. Available at: [https://doi.org/10.1016/S1048-9843\(99\)00022-3](https://doi.org/10.1016/S1048-9843(99)00022-3)
5. Ganga-Contreras FA, Navarrete-Andrade E, Suárez Amaya W. Approach to the theoretical foundations of authentic leadership. *Rev. Venez. Gerencia [Internet].* 2017;22(77):36-55. Available at: <https://www.redalyc.org/articulo.oa?id=29051457004>
6. Behrendt P, Matz S, Göritz AS. An integrative model of leadership behavior. *Rev. Leadersh. Q.* 2017;28(1):229-244. Available at: <https://doi.org/10.1016/j.leaqua.2016.08.002>
7. Cochran J, Kaplan GS, Nesse RE. Physician leadership in changing times. *Rev. Healthcare.* 2014;2(1):19-21. Available at: <https://doi.org/10.1016/j.hjdsi.2014.01.001>
8. Wang F, Ding H. Strengths-based leadership and employee strengths use: the roles of strengths self-efficacy and job insecurity. *J. Work Organ. Psychol.* 2023;39:47-54. Available at: <https://dx.doi.org/10.5093/jwop2023a6>
9. Saleem H. The Impact of Leadership Styles on Job Satisfaction and Mediating Role of Perceived Organizational Politics. *Procedia - Soc. Behav. Sci.* 2015; *Rev. Healthcare.* 2(1):19-21. Available at: <https://doi.org/10.1016/j.hjdsi.2014.01.001>

10. Medina NDV, Balcázar GM. Transformational leadership and its influence on the sense of belonging at work. A literary review in the organizational context. *Rev. Nova Rua*. 2021;13(22). Available at: <https://doi.org/10.20983/novarua.2021.22.5>
11. Noordin F, Jusoff K. Levels of Job Satisfaction amongst Malaysian Academic Staff. *Rev. Asian Soc. Sci*. 2009;5(5). Available at: <https://pdfs.semanticscholar.org/aeb5/83b0271ef53f021e68bef28531b105d1162a.pdf>
12. Segredo Pérez AM, García Milian AJ, León Cabrera P, Perdomo Victoria I. Organizational development, organizational culture and organizational climate. A conceptual approach. *Rev. INFODIR*. 2017. Available at: <https://revinfodir.sld.cu/index.php/infodir/article/view/200>
13. Acosta, C. R., Rojas, L. E. A., Hernández-Castro, S. G., & Salazar, Z. E. Transformational and transactional leadership and job satisfaction in two medium-sized companies of Ecatepec, México. *Rev. RELAYN-Micro*. 2023. 7(3), 35-48. Available at: <https://doi.org/10.46990/relayn.2023.7.3.1104>
14. Mitonga-Monga J, Hlongwane V. Effects of employees' sense of coherence on leadership style and work engagement. *Rev. J. Psychol. Afr*. 2017; 27(4):351-5. Available at: <https://doi.org/10.1080/14330237.2017.1347757>
15. Tziner A, Shkoler O. Leadership styles and work attitudes: Does age moderate their relationship? *Rev. Psicol. Trab. Organ*. 2018. Vol. 34. Num. 3. - 2018. Pages 195-201. Available at: <https://doi.org/10.5093/jwop2018a21>
16. Gutiérrez KMH. Influence of leadership on Burnout in employees of the Ensenada health services jurisdiction. *Rev. Univ. Autón. Baja Calif*. 2012 Available at: <https://repositorioinstitucional.uabc.mx/handle/20.500.12930/821>
17. Stoner JAF, Freeman RE, Gilbert DR, Sacristán PM. Administration, Financial Management System, Meeting, Management and meeting points. *Rev. Pearson Educ*. 1996. Available at: https://alvarezrubenantonio.milaulas.com/pluginfile.php/76/mod_resource/content/1/LIBRO%20DE%20ADMINISTRACION.pdf
18. Riveros-Barrera A. The distribution of leadership as a strategy for institutional improvement. *Education and Educators*. 2012;15(2):289-301. *Rev. Scielo*. Available at: http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S0123-12942012000200008
19. García-Solarte M. Formulation of a leadership model from organizational theories. 2015;11(1):60-79. *Rev. Scielo*. Available at: http://www.scielo.org.co/scielo.php?pid=S1900-38032015000100005&script=sci_arttext
20. Serrano Orellana BJ, Portalanza Ch A. Influence of leadership on the organizational climate. *Rev. Suma Neg*. 2014;5(SPE11):117-125. Available at: [https://doi.org/10.1016/S2215-910X\(14\)70026-6](https://doi.org/10.1016/S2215-910X(14)70026-6)
21. Bass BM, Avolio BJ. Multifactor Leadership Questionnaire, Manual and Sample Set. Mind Garden. 1995. APA PsycTests. Available at: <https://doi.org/10.1037/t03624-000>
22. Pedraja-Rejas L, Massó RV, Castañeda JR. The importance of leadership styles in the quality of university academic units. *Rev. Cienc. Hum. Soc*. 2018; 86:130-151. Available at: <https://dialnet.unirioja.es/servlet/articulo?codigo=7338171>

23. Riquelme-Castañeda JA, Pedraja-Rejas LM, Vega-Massó RA. Leadership and management in wicked problem solving. A literature review. *Rev. Form. Univ.* 2020;13(1):135-144. Available at: <https://doi.org/10.4067/s0718-50062020000100135>
24. Bass BM. Two Decades of Research and Development in Transformational Leadership. *Eur. J. Work Organ. Psychol.* 1999;8(1):9-32. Available at: <https://doi.org/10.1080/135943299398410>
25. Sivanathan N, Cynthia Fekken G. Emotional intelligence, moral reasoning and transformational leadership. *Rev. Leadersh. Organ. Dev.* 2002;23(4):198-204. Available at: <https://doi.org/10.1108/01437730210429061>
26. Trottier T, Van Wart M, Wang X. Examining the nature and significance of leadership in government organizations. *Rev. Public Adm.* 2008;62(2):319-333. Available at: <https://doi.org/10.1111/j.1540-6210.2007.00865.x>
27. Contreras Torres F, Barbosa Ramírez D. From transactional leadership to transformational leadership: implications for organizational change. *Rev Virt Univ Católica Norte.* 2013;(39):152-164. Available at: redalyc.org/pdf/1942/194227509013.pdf
28. Hermosilla D, Amutio A, Costa SD, Páez D. Transformational leadership in organizations: mediating variables and long-term consequences. *Rev. Psicol. Trab. Organ.* 2016;32(3):135-143. Available at: <https://doi.org/10.5093/tr2013a7>
29. Vásquez JG, López RR, Ayay NTT, Alvarado GDP. Organizational climate in the Latin American public sector. *Ciencia Latina Rev. Cient. Multidisciplin.* 2021;5(1):1157-1170. Available at: https://doi.org/10.37811/cl_rcm.v5i1.318
30. Menéndez Osorio F. Twenty years of the Psychiatric Reform: Panorama of the state of psychiatry in Spain from the 1970s to the 2000s: from one unique thought to another. *Rev. Asoc. Esp. Neuropsiq.* 2005;(95):69-81. Available at: <https://doi.org/10.4321/s0211-57352005000300005>
31. Menéndez Osorio Federico. The Psychiatric Reformation 20 years later: Panorama of the state of Psychiatry in Spain from the 1970s to the 2000s: from an unique thought to another one. *Rev. Asoc. Esp. Neuropsiq.* 2005;(95):69-81. Available at: <https://doi.org/10.4321/s0211-57352004000400003>
32. Santa AM, Muñoz CL, López JR, Martínez JQ, Rojas YS, Palacio ZP. Transformational leadership and organizational culture: Transformational Leadership and Organizational Culture. *Rev. Gest. Secur. Salud Trab.* 2022;1(4):23-31. Available at: <https://doi.org/10.15765/gsst.v4i4.3011>
33. Simbron-Espejo SF, Sanabria-Boudri FM. Management leadership, organizational climate and teacher job satisfaction. *Rev. Cienciamatria.* 2020;6(1):59-83. Available at: <https://doi.org/10.35381/cm.v6i10.295>
34. Fernández C, Quintero N. Transformational and transactional leadership in Venezuelan entrepreneurs. *Rev Venez Gerencia.* 2017;22(77):52-64. Available at: <https://doi.org/10.31876/revista.v22i77.22498>
35. Molero Alonso F, Recio Saboya P, Cuadrado Guirado I. Transformational leadership and transactional leadership: an analysis of the factor structure of the Multifactor Leadership Questionnaire (MLQ) in a Spanish sample.

Rev. Psicothema. 2010;22(3):495-501. Available at: <https://reunido.uniovi.es/index.php/PST/article/view/8883>

36. Rowold J. Multifactor leadership questionnaire. Psychometric properties of the German translation by Jens Rowold. Redwood City. Rev. Mind Garden; 2005. Available at: <https://doi.org/10.1037/t03624-000>

37. Antonakis J, Avolio BJ, Sivasubramaniam N. Context and leadership: An examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire. Rev. Leadersh. Q. 2003;14(3):261-95. Available at: [https://doi.org/10.1016/S1048-9843\(03\)00030-4](https://doi.org/10.1016/S1048-9843(03)00030-4)

38. Puni A, Mohammed I, Asamoah E. Transformational leadership and job satisfaction: the moderating effect of contingent reward. Rev. Leadersh. Organ. Dev. 2018;39(4). Available at: <https://doi.org/10.1108/LODJ-11-2017-0358>

39. Bass BM. Does the Transactional - Transformational Leadership Paradigm Transcend Organizational and National Boundaries? Rev. APA Psyc. 1997;52(2):130-9. Available at: <https://doi.org/10.1037/0003-066X.52.2.130>

40. Bass B. The Inspirational Processes of Leadership. Rev. Manage. Dev. 1988;7(5):349-351. Available at: <https://doi.org/10.1108/eb051688>

41. Burns JM. Ethics, the heart of leadership. Bloomsbury Publishing USA; 2014. Available at: <https://www.bloomsbury.com/us/ethics-the-heart-of-leadership-9781440830679/>

42. Bass BM, Riggio RE. Transformational Leadership. 2005. Available at: https://www.researchgate.net/publication/287282133_Transformational_leadership_Second_edition

43. Ganga F, Navarrete E. Significant theoretical contributions on charismatic and transformational leadership. Rev Venez Gerencia. 2014; 19(67):456-476. Available at: <http://www.redalyc.org/articulo.oa?id=29031856009>

44. Gameda HK, Lee J. Leadership styles, work engagement and outcomes among information and communications technology professionals: A cross-national study. Rev. Heliyon. 2020;6(4):609-735. Available at: <https://doi.org/10.1016/j.heliyon.2020.e03699>

45. Thieme C, Treviño E. Leadership in Education: In the end only charisma matters. Rev. Espacio abierto. 2012;21(1):37-58. Available at: <http://www.redalyc.org/articulo.oa?id=12221805002>

46. Solano AC, Benatuil D. Leadership styles, intelligence and tacit knowledge. Rev. An. Psicol. 2007;23(2):216-225. Available at: <https://revistas.um.es/analesps/article/view/22401>

47. Bracho Parra O, Garcia Guilianny J. Some theoretical considerations about transformational leadership. Rev. Telos. 2013; 15(2):165-77. Available at: <http://www.redalyc.org/articulo.oa?id=99328423003>

48. Durán Gamba MG, Castañeda Zapata DI. Relationship between Transformational and Transactional Leadership with the behavior of sharing knowledge in two service companies. Rev. Acta Colomb Psicol. 2015; 18(1):135-147. Available at: <https://doi.org/10.14718/ACP.2015.18.1.13>

49. Córdor EG, Bustamante MA, Lapo M del C, Campos RM. Intrinsic Motivation and Leadership Factors in an Ecuadorian Family Telecommunications Business. *Inform Tecnol.* 2018; 29(4) Available at: <https://doi.org/10.4067/s0718-07642018000400205>
50. Morgado C, Aldana Zavala JJ, Isea Argüelles J. Transformational management from the directive teaching actions to address the School Context. *Rev. cienciométrica.* 2019; 5(9). Available at: <https://doi.org/10.35381/cm.v5i9.99>
51. Bass B. A New Paradigm for Leadership: An Inquiry into Transformational Leadership. *U.S. Army Res Inst Behav Soc Sci.* 1996. Available at: <https://searchworks.stanford.edu/view/3157086>
52. Wong SI, Giessner SR. The thin line between empowering and laissez-faire leadership: An expectancy-match perspective. *Rev. Journal of Management.* 2016;44(2):757–83. Available at: <https://doi.org/10.1177/0149206315574597>
53. Breevaart K, Zacher H. Main and interactive effects of weekly transformational and laissez-faire leadership on followers' trust in the leader and leader effectiveness. *Rev. Occup Organ Psychol.* 2019; 92(2): 384-409. Available at: <https://doi.org/10.1111/joop.12253>
54. Bass BM. Bass & Stogdill's handbook of leadership: Theory, research, and managerial applications. 3rd ed. 1990. Available at: [https://www.scirp.org/\(S\(351jmbntvnsjt1aadkposzje\)\)/reference/ReferencesPapers.aspx?ReferenceID=1871417](https://www.scirp.org/(S(351jmbntvnsjt1aadkposzje))/reference/ReferencesPapers.aspx?ReferenceID=1871417)
55. Mendoza Martínez IA, Uribe Prado JF, García Rivera BR. Leadership and its Relationship with Outcome Variables: a Comparative Structural Model between Transformational and Transactional Leadership in an Entertainment Company in Mexico. *Rev. Acta Colomb Psicol.* 2014;4(1):1412-1429. Available at: [https://doi.org/10.1016/s2007-4719\(14\)70384-9](https://doi.org/10.1016/s2007-4719(14)70384-9)
56. Rojero-Jiménez R, Gómez-Romero JGI, Quintero-Robles LM. Transformational leadership and its influence on the attributes of followers in Mexican MSMEs. *Management Studies.* 2019; 35(151). *Rev. of Mament and Econo. for Ibero.* Available at: <https://doi.org/10.18046/j.estger.2019.151.3192>
57. Díaz YC, Andrade JM, Ramírez E. Transformational Leadership and Social Responsibility in Coffee Growing Women's Associations in Southern Colombia. *Rev. Inf. tecnol.* 2019. 30(5); 121-130. Available at: <https://doi.org/10.4067/s0718-07642019000500121>
58. Muñoz Rojas D, Orellano N, Hernández Palma H. Psychosocial risk: trends and new work orientations. *Rev. Psicogente.* 2018; 21(40); 532–544. Available at: <https://doi.org/10.17081/psico.21.40.3090>

Annex 1. Demographic data

Dear participant: We request your collaboration by completing this information that you provide to us. It will be COMPLETELY ANONYMOUS, so you do not need to write your name. The instrument must be resolved individually. Your collaboration is very important. Thank you!

General data

Please mark an X in the option that applies to you.

1. Sex: woman man

2. Age: under 30 between 30 and 39 between 40 and 49 between 50 and 59 60 years and older

3. Marital status: single married widowed common law marriage divorced de facto union

4. What is your highest level of education currently?

high school technological incomplete university third level fourth level

5. How many years have you been working at the Institute of Neurosciences or the Charity Board?

less than 1 year between 1 and 5 years between 6 and 10 years between 11 and 15 years more than 15 years

6. Department or area to which you belong: technical administrative

7. Current position or position held where you work:

department or area manager boss, supervisor or coordinator does not have a management position

8. Do you have personnel under your supervision?

none between 1 and 5 collaborators between 6 and 10 collaborators more than 10 collaborators

Annex 2. MLQ 5x short version questionnaire taken from the report.

Dear participant:

Thank you very much for your participation in this research process. The survey seeks to determine the leadership style used in the organization. Please follow the instructions detailed below:

a) Write the date of the survey.

b) Then, starting with question 1, select how often each statement applies to you, and mark your answers by circling the corresponding number.

- If any question is inapplicable, or if you are not sure or do not know the answer, leave it blank.

-We remind you that there are no right or wrong answers. We guarantee that the information collected will be treated confidentially.

Leadership style in hospital management and perception from followers at the Guayaquil Institute of Neurosciences

José Alejandro Valdevila Figueira, Rosa Ana Tomalá Barco, Norman Vicente Castellanos Davalo, María José Abad Moran, Indira Dayana Carvajal Parra, María Gracia Madero Dutazaka

Items	No (0)	Barely (1)	Sometimes (2)	Often (3)	Frequently, almost always (4)
1.Helps me to make an effort					
2.Evaluates beliefs and assumptions to see if they are appropriate					
3.Avoids intervening unless the problems becomes serious					
4.Pays attention to irregularities, errors, exceptions, and deviations from established rules					
5.Avoids getting involved when significant problems arise					
6.Speaks about my most important values and beliefs					
7.It is absent when requested					
8.Seeks different perspectives when solving a problem					
9.Speaks optimistically about the future.					
10.Makes people under their charge feel proud to work with them					
11.Specifically identifies the person responsible for achieving performance goal					
12.Waits for things to go wrong before taking action					
13.Speaks enthusiastically about what needs to be achieved					
14.Emphasizes the importance of having a strong sense of purpose					
15.Dedicates time to teach and train					
16.Exhibits a strong belief in "if it's not broken, don't fix it"					
17.Put aside personal interests for the group's benefit					
18.Treats others as individuals, rather than just as members of the group					
19.Allows problems to become chronic before taking action					

Items	No (0)	Barely (1)	Sometimes (2)	Often (3)	Frequently, almost always (4)
20.Acts in a way that earns respect form others					
21.Fully focuses on adressing mistakes, complaints and failures					
22.Considers the consequences of moral and ethical decisions					
23. Keeps track of mistakes					
24.Displays a sense of power and confidence					
25.Clearly expresses my vision of the future					
26.Directs my attention towards non-compliance with the rules					
27.Avoids making decisions					
28.Considers each individual as people with parti- cular needs, aspirations and set of skills					
29.Encourages other to analyze problems from different perspectives					
30.Helps others to develop their strengths					
31.Sugests new ways to accomplish the assigned work					
32.Delays responses to urgent matters					
33.Ephasizes the importance of having a collective desire of achieving goals					
34.Expresses satisfaction when expectations are met					
35.Expresses confidence in achieving the goals					
36.Is efficient in satisfying the work-related needs of others					
37.Uses satisfactory leadership methods					
38.Motivates me to perform beyond expectations					
39.It is effective in representing me with the super- visors					
40.Works with me in a satisfactory manner					
41.Boosts my desire to succeed					
42.It is effective in identifying the needs of the organization					
43.Tends to increase my desire to work harder					
44.Directs an effective group.					