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Artículos científicos

Los universitarios y sus percepciones con respecto al liderazgo ejercido por parte del personal directivo

***University students and their perceptions regarding the leadership
exercised by management personnel***

***Estudantes universitários e suas percepções sobre a liderança exercida por
gestores***

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Resumen

El objetivo del presente trabajo fue analizar las percepciones de estudiantes en relación con los tipos de liderazgo transformacional, transaccional y *laissez-faire* para determinar el que prevalece en una unidad académica de enseñanza superior del Instituto Politécnico Nacional de México. Para ello, se llevó a cabo un estudio cuantitativo en el que empleó un muestreo no probabilístico, donde participaron 796 estudiantes de seis programas académicos. Los datos se obtuvieron por medio del cuestionario CELID y fueron analizados mediante el *software* SPSS; además, se aplicó análisis factorial exploratorio y la prueba de Kruskal-Wallis. Se encontró que el liderazgo con mayor prevalencia en la unidad académica fue el *laissez-faire*, seguido del transaccional y del transformacional. Aunado a lo anterior, en relación con el liderazgo transformacional, los jóvenes dieron calificaciones bajas al orgullo, el respeto y la confianza hacia el trabajo del personal directivo. Asimismo, se evidenció una



insuficiente capacitación, carencia en la motivación y, por ende, muy baja cultura relacionada con el éxito. En cuanto al liderazgo transaccional, se evidenció que las autoridades evitan realizar cambios en lo establecido, mientras que en lo relacionado con el liderazgo *laissez-faire* se encontraron carencias en la comunicación y en las formas de localizar a los directivos. Se concluye, por tanto, que es necesario implementar acciones para incrementar la credibilidad y confianza en los líderes de dicha unidad académica, aunado al desarrollo de programas intensivos de formación y capacitación de líderes para los futuros cuadros directivos.

Palabras claves: estilos de liderazgo, instituciones de educación superior, estudiantes, directivos, seguidores.

Abstract

The objective of the present work is to analyze the perceptions of the students in relation to the types of transformational, transactional and *laissez-faire* leadership, to determine the type of leadership that prevails in an academic unit of higher education at the Instituto Politécnico Nacional of Mexico. A quantitative study was carried out using a non-probabilistic sample, where 796 students from six academic programs participated. The data was obtained through the CELID questionnaire and was analyzed using the SPSS software; exploratory factorial analysis and the Kruskal-Wallis test were applied. It was found that the most prevalent leadership in the academic unit was *laissez-faire*, followed by transactional leadership and, finally, transformational. Additionally, in relation to transformational leadership, young people gave low marks to pride, respect and trust towards the work of management personnel. Likewise, there was evidence of insufficient training, lack of motivation and, therefore, a very low culture related to success. In turn, in relation to transactional leadership, it was evidenced that the authorities avoid making changes to what is established. Regarding *laissez-faire* leadership, deficiencies were found in communication and in the ways to locate managers. It is concluded that it is necessary to implement actions to increase the credibility and confidence in the leaders of that academic unit, together with the development of intensive training programs for leaders for future management.

Keywords: Leadership styles, higher education institutions, students, managers, followers.

Resumo

O objetivo do presente trabalho foi analisar as percepções dos alunos em relação aos tipos de liderança transformacional, transaccional e laissez-faire para determinar o que prevalece em uma unidade acadêmica de ensino superior do Instituto Politécnico Nacional do México. Para isso, foi realizado um estudo quantitativo no qual foi utilizada uma amostragem não probabilística, onde participaram 796 alunos de seis programas acadêmicos. Os dados foram obtidos por meio do questionário CELID e analisados por meio do software SPSS; Além disso, foi aplicada a análise fatorial exploratória e o teste de Kruskal-Wallis. Constatou-se que a liderança mais prevalente na unidade acadêmica foi a laissez-faire, seguida da transaccional e transformacional. Além do anterior, em relação à liderança transformacional, os jovens atribuíram notas baixas ao orgulho, respeito e confiança no trabalho do pessoal de gestão. Da mesma forma, foram evidenciados treinamento insuficiente, falta de motivação e, portanto, baixíssima cultura relacionada ao sucesso. Em relação à liderança transaccional, evidenciou-se que as autoridades evitam fazer mudanças no que está estabelecido, enquanto em relação à liderança laissez-faire, foram encontradas deficiências na comunicação e nas formas de localizar os gestores. Concluiu-se, portanto, que é necessário implementar ações para aumentar a credibilidade e confiança nos líderes da referida unidade acadêmica, juntamente com o desenvolvimento de programas intensivos de treinamento de líderes para futuras equipes de gestão.

Palavras-chave: estilos de liderança, instituições de ensino superior, alunos, gestores, seguidores.

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Introduction

Universities contribute to an important social transformation through training and research (Azizi, 2022; Griebeler et al., 2021 and Rivera et al., 2021). Therefore, academic leaders, especially those who hold management positions, have the challenge of responding to the expectations of a diversity of interested parties, such as the government, agencies in charge of accreditation, administrative staff, academics, researchers, the industrial sector, among others (Srivastava et al., 2019).

This challenge for managers increases if we consider the different problems that universities have, some generated by the pandemic, such as the need to improve emotional stability, leadership and communication skills (Fernández and Shaw, 2020; Roofe, 2021).



Regarding leadership, its importance has grown in recent years due to the greater need for sustainability of educational systems in a digital society and great changes (Rocha et al., 2022). Considering the characteristics of this context, according to most of the literature, the most appropriate leadership for work motivation and proactivity is transformational (Mbithi et al., 2016). This also seems to be the one that is best in sync with the social responsibility of various organizations, including universities (Al-Mansoori and Koc, 2019b; Díaz et al., 2019; Espinoza et al., 2020; Melo-Rojas and Hernández-Herrera, 2023; Rojas and Di Fiore, 2021; Sangrà et al., 2022).

In any case, it is a pending matter to find the most appropriate types of leadership for universities in this context. Thus, such types of leadership must be integrated with the other elements that make school improvements possible, directly or indirectly. A positive school culture—which includes proactivity, collaboration, motivation, etc.— can be fostered by leadership that promotes the best conditions for all its actors (teachers, students and other staff) (Day et al., 2020), as well as taking care of daily tasks in crisis situations and managing personal and professional situations (Roofe, 2021).

The work of academic leaders who hold a management position in an educational organization is challenging, since their need to work effectively must be considered, adjusting their profiles to the needs of educational organizations, constant critical observation of their different internal and external interest groups; all this despite the short time that their role can play in their role as a directive leader (Black, 2015) and that many of these leaders have not received leadership training, which limits their vision of the complexities and challenges of their role. (Ruben, 2022).

The conditions described above can be analyzed in specific case studies of prominent Mexican universities such as the National Polytechnic Institute (IPN). This institution, in the period 2022-2023/1, served a total of 216,274 students, of which 135,558 were found at the higher level, 74,434 at the upper secondary level, and 6,282 in postgraduate studies. In the specific case of the school or academic unit where this study was carried out, 12,097 young people were served, with a dropout rate of 10 04 students (IPN, 2023). The academic unit also belongs to the higher education system of the IPN, which for several years has had various problems that have caused complications in governance and, therefore, important repercussions in academic life.

To this is added the uncertainty and deficiencies in various aspects and negative impacts on mental health derived from the pandemic. For this reason, it can be indicated that,

today, the situations faced by managers are not simple. In principle, the school was closed for a period of more than two and a half years as a measure to prevent infection by the SARS COV-2 virus. Subsequently, attempts were made to return to classes and other work in person, but it was complicated due to difficulties generated by the lack of adequate organization or possibly by the lack of empathy and emotional exhaustion of the young people, which led them to enter into a three-month academic strike. Finally, after several dialogue and negotiation tables, the facilities were handed over and a new management was incorporated with another director in charge of said academic unit.

However, on September 19 in Mexico City there was an earthquake that led the student strikers to be put on alert, who requested a review of the buildings, which yielded an unfavorable opinion. This has led the unit and its managers to operate in complex environments, without facilities, which is why virtual classes have been used, although with the spirits of young people probably devastated in some cases and, in others, mired in resignation.

Having described the previous context, the objective of this article is to analyze the perceptions of students in relation to transformational, transactional and laissez-faire leadership to determine which prevails in the academic unit. This will make it possible to identify those central elements to which attention must be paid in order to improve the leadership exercise that is currently in force in the school. The research question that was worked on was the following: what are the leadership styles that prevail in the academic unit and to what extent are they perceived by the students of six academic programs?

Leadership in higher education institutions

The topic of leadership has been approached from many perspectives, ranging from narratives closer to fashion and quackery to its more academic and investigative treatment (Cruz Soto, 2021; Melo-Rojas and Hernández-Herrera, 2023). Regarding the latter, the different dimensions of leadership analysis stand out, as well as the various disciplines that study it (Cruz Soto, 2021; Melo-Rojas and Hernández-Herrera, 2023). In addition, it is necessary to recognize that although many studies analyze leadership in people who hold formal managerial positions, its practice can be carried out by people who do not necessarily hold formal leadership positions (Robinson and Gray, 2019).

Currently, leadership styles that account for the value of higher education institutions as actors to form human capital and meet the economic needs of countries are still required



(Mbithi et al., 2016), which would allow promoting innovation, motivation, empowerment and flexibility in the face of any unexpected situation for all members of the organization, hence their integral condition as people must be recognized (Khan, 2021). Leaders in educational organizations are also required to contribute to building shared visions, to the personal and professional development of community members, and to building a culture of collaboration (Leithwood et al., 2020). In addition, leaders who have a vision of power and authority that is not unilateral, but shared, to respect the roles of the different groups in the university organization (Morris, 2016). Finally, these leaders need to make the members of the organizations incorporate and develop personal, managerial, communication and analytical skills (Ruben et al., 2021; Ruben et al., 2022; Ruben and Gigliotti, 2022).

However, in many current societies, management leadership is seen as paternalistic and corrupt, leading to leadership styles that are unsuitable for current dynamics and needs, such as support for inclusion and participation (Lewa et al., 2022). Therefore, it is essential to study and understand the different styles of leadership and understand which of them are appropriate for the types of organization and for the different contexts and organizational cultures.

One of the leadership styles that seems to be important to analyze in the first place is transformational. This began with James Downton in 1973 and was further developed by James Burns in 1978. Bernard Bass later expanded the concept to develop ways to measure the success of transformational leadership. This is used to incentivize leaders to demonstrate a more authentic, inclusive, committed and strong leadership, which motivates employees to follow their example. Authors like Hitt et al. (2013) express that transformational leaders inspire and motivate workers without applying micromanagement, managing through commitment, inclusion and demonstrate confidence in trained employees to have authority in the decisions of the jobs they are in charge of.

Transformational leadership has been found to have important implications for change management, as it brings together characteristics such as idealized influence, intellectual stimulation, individualized consideration, and inspirational motivation. In addition, transformational leadership helps to recognize the path forward for change management and lead the organization to a desirable future (Lewa et al., 2022; Lo et al., 2020). It is also thought that transformational leadership is capable of generating inclusion in the management of organizations and more so in those that are found in dynamic contexts (Lewa et al., 2022).

Transformational leaders inspire their followers using four processes of influence: a) providing personalized care so that people feel valued, b) fostering creativity to enhance intellectual stimulation, c) communicating optimism and high expectations, and d) providing a vision and sense of purpose that builds the trust and respect of followers (Bass & Avolio, 1995). According to Lewa et al. (2022), transformational leadership has a lot to offer to change management, especially in societies facing never-before-seen changes, such as the increase in diseases, climate change, political systems, etc. In other words, the dynamism that the world is currently facing demands transformation in the forms of management of organizations, institutions and communities (Lewa et al., 2022). In line with the above, Lo et al. (2020) and Purwanto et al. (2021) have found that transformational leadership has significant effects on the performance of universities. Other authors such as Hafeez and Bidari (2022) affirm that this style of leadership has positive impacts on educational organizations, since it provides leaders with important tools to manage this type of organization effectively and to optimize the performance of the members of the educational community. All this generates conducive and pleasant environments that favor the fulfillment of organizational objectives.

Second, transactional leadership is also highlighted. This usually focuses mainly on inputs, processes and products, that is, it focuses on key performance indicators, rewards, punishments and other negative reinforcements to achieve the objectives. Leaders who exercise this type of leadership consider that if people solve their particular problems, the organization will automatically solve the general problems that concern it (low productivity, waste, conflicts, etc.). These types of leaders tend to offer mentoring and training, and know how to create a balance between nanomanagement, micromanagement, macromanagement, and metamanagement (Khan, 2021).

It should be noted that this style of leadership is characterized by a type of relationship in which collaborators are willing to carry out their work motivated by a reward or a benefit; however, it is difficult to bear as people's expectations or needs change and it may not always be easy to satisfy them (Melo-Rojas and Hernández-Herrera, 2023; Montañez et al., 2022). In line with the above, according to Castro et al. (2007), it is possible that a leader with this style of leadership directs or manages those followed by him through a direction by exception, that is, he only intervenes when the objectives set by the organization are not achieved.

Finally, in third place, is laissez-faire leadership. This is considered ineffective, since interventions towards their followers are not perceived nor does it allow them to receive feedback. In addition, there is little support when facing complicated situations, which generates higher levels of anguish and more conflicts with co-workers (Breevaart and Zacher, 2019). Likewise, the laissez-faire style is characterized by giving excessive freedom to its followers to the point of making them feel alone and not supporting them in making important decisions that affect the entire organization. (Montañez *et al.*, 2022).

Materials and methods

The methodology used in this study was quantitative, non-experimental and cross-sectional. For data collection, the CELID questionnaire by Castro *et al.* (2004), which, due to the complex conditions faced by the academic unit, was applied online through Google forms in December 2022. It is worth mentioning that the type of sampling was non-probabilistic and for convenience, in which young people were invited to participate anonymously and freely in completing the questionnaire. In total, 796 responses were collected from students from six academic programs of a unit of the National Polytechnic Institute.

Instrument

The leadership styles questionnaire of Castro *et al.* (2004), known as CELID, was applied, which is derived from the theoretical considerations of Bass (1985) and the multifactorial leadership questionnaire (MLQ) measurement instrument of Bass and Avolio (1990, 1995), as well as the work of Morales and Molero (1995).

The CELID is a questionnaire that makes it possible to distinguish between leadership styles: transformational, transactional and laissez-faire. For the dimension of transformational leadership, there are sub-dimensions charisma, intellectual stimulation, inspiration and individualized consideration; Regarding the transactional leadership dimension, there are the sub-dimensions contingent reward and management by exception; Lastly, in relation to the dimension of laissez-faire leadership, despite the fact that this questionnaire does not directly report specific subdimensions, it is important to mention that this is characterized by being absent and leaving its collaborators alone in decision-making. The CELID questionnaire is made up of 34 items, and a specific group belongs to each of the sub-dimensions mentioned above, which in turn belong to a certain leadership style or

dimension (Castro et al., 2004; Munayco, 2022; Vicuña, 2017). According to Vicuña (2017) and Antezana (2020), this questionnaire is presented in two forms: the first is a self-administered questionnaire, where the researcher must answer based on their own perception (known as CELID-A); The second form corresponds to a questionnaire that evaluates the perception that individuals have of the leader or leaders (called CELID-S) and was applied in the present study.

Table 1 below shows the way in which the data collection proposed by the CELID questionnaire is distributed:

Table 1. Leadership Styles, Subdimensions, and Items that make up the CELID.

Dimension	Subdimensions		Items
Transformational	Charisma	Generates admiration and respect from individuals.	3, 21, 33 y 34
	Intellectual Stimulation	Encourages creativity to solve problems.	4, 15, 23, 25, 28, 29 y 30
	Inspiration	Involves individuals in achieving organizational goals.	19, 22 y 24
	Individualized Consideration	Individuals perceive that they are important to the organization.	13, 14 y 17
Transactional	Contingent Reward	Involves reciprocal exchanges.	8, 10, 11, 12 y 16
	Management by Exception	Intervenes when corrections need to be made.	2, 5, 7, 9, 18 y 26
<i>Laissez-faire</i>	Lacks dimensions	Absent, not very responsible, and not committed to the objectives.	1, 6, 20, 27, 31 y 32

Source: Own elaboration based on Castro et al. (2004, 2007) and Vicuña (2017).

Data processing and analysis

The data obtained through the questionnaire, through the use of information and communication technologies, were organized and incorporated into the IBM SPSS software to proceed to the respective processing and statistical analysis. This allowed knowing the Cronbach's alpha corresponding to 0.859, which indicates that the instrument has a good internal consistency; In addition to this, an exploratory factor analysis was performed. Likewise, the Kruskal Wallis test was applied to establish the differences in the results obtained between the six academic programs. Finally, the data segmentation was carried out, which facilitated the comparison and division by groups for the analysis of each dimension and the academic programs participating in the present study.

Results

796 questionnaires were obtained, of which 41% were women and 59% men. The programs that participated were a) Industrial Administration (27% = 219), b) Computer Science (15% = 123), c) Computer Engineering (15% = 121), d) Transportation Engineering (12% = 94), e) Railway Engineering (5% = 31), f) Industrial Engineering (26% = 207). Similarly, it was found that 72% live in Mexico City and 28% are from the province. On the other hand, 63% are full-time dedicated to studies and 37% have a job in addition to being a student. Also, it was found that 29% of young people have received training on the subject of leadership, while the remaining 71% have not.

Exploratory factor analysis yielded positive results; in the Kaiser Meyer Olkin test, a value of $0.948 > 0.05$ was obtained, which indicates that the items are highly viable to be grouped into factors, thus achieving a total of seven factors. Tables 2, 3 and 4 detail the results of each of the programs in relation to seven factors: the first four belong to transformational leadership, the next two to transactional leadership and, finally, the factor that belongs to laissez-faire leadership, all with their respective items.

Tabla 2. Results of Exploratory Factor Analysis and Averages Obtained for Each Career
(Factors 1, 2, and 3)

Factors	Factor Loadings	Obtained Averages					
		Industrial Management	Computer Science	Computer Engineering	Transport Engineering	Railway Engineering	Industrial Engineering
Factor 1: Charisma							
34. We trust the capacity of the managers.	0.858	2.79	2.55	2.57	2.68	2.90	2.53
33. We have full confidence in the managers.	0.825	2.47	2.40	2.31	2.45	2.74	2.30
21. The managers deserve all our respect.	0.779	3.22	3.01	3.12	3.08	3.48	2.97
3. I feel proud of the managers.	0.774	2.63	2.54	2.46	2.67	2.83	2.45
Factor 2: Intellectual Stimulation							
30. Managers provide us with new ways to approach problems that were previously puzzling.	0.780	3.00	2.86	2.92	2.79	3.03	2.87
28. Managers encourage the use of intelligence to overcome obstacles.	0.777	3.02	2.95	3.12	2.95	3.29	2.93
15. Managers advise us to base problem-solving on reasoning and evidence.	0.762	3.28	3.14	3.43	3.17	3.25	3.21

23. Managers try to make us see problems as an opportunity to learn.	0.759	3.06	2.82	3.03	2.87	3.41	2.83
25. Managers make us think about old problems in a different way.	0.725	2.92	2.68	2.88	2.72	3.16	2.72
4. Managers place special emphasis on carefully resolving problems before taking action.	0.613	2.62	2.48	2.57	2.44	2.77	2.31
29. Managers ask us to support our opinions with strong arguments.	0.582	3.66	3.51	3.71	3.41	3.38	3.58
Factor 3: Inspiration							
22. Managers enhance our motivation for success.	0.879	2.80	2.66	2.51	2.66	3.22	2.55
24. Managers try to develop new ways to motivate us.	0.876	2.64	2.48	2.58	2.41	3.03	2.54
19. Managers give us talks to motivate us.	0.854	2.60	2.64	2.68	2.37	3.03	2.52

Source: Own elaboration

Table 3. Results of Exploratory Factor Analysis and Averages Obtained for Each Career
(Factors 4 and 5)

Factor 4: Individualized Consideration		Industrial Management	Computer Science	Computer Engineering	Transport Engineering	Railway Engineering	Industrial Engineering
17. Managers are willing to instruct and teach the academic community whenever they need it.	0.847	2.93	2.69	2.90	2.64	3.22	2.67
13. Managers care about training those who need it.	0.839	2.61	2.43	2.54	2.48	2.71	2.43
14. Managers focus their attention on cases where expected goals are not achieved.	0.832	2.82	2.56	2.90	2.54	3.09	2.60
Factor 5: Contingent Reward							
12. Managers let us know that we can achieve what we want if we carry out our academic activities and	0.794	3.21	2.90	3.04	2.92	3.45	2.99

duties as agreed with them.							
16. Managers try to ensure that we get what we desire in exchange for our cooperation.	0.756	3.15	3.06	3.17	3.11	3.32	3.04
11. Whenever necessary, we can reach an agreement with the managers regarding what we will receive in return for fulfilling our duties.	0.741	2.90	2.78	2.97	2.74	3.41	2.72
10. Managers make sure there is a strong agreement between what is expected of us and what we can obtain from them for our effort.	0.677	2.99	2.86	3.00	2.95	3.61	2.94
8. Managers give us what we want in exchange for our support.	0.577	2.84	2.87	2.86	2.78	3.03	2.79

Source: Own elaboration

Table 4. Results of Exploratory Factor Analysis and Averages Obtained for Each Career
(Factors 6 and 7)

Factor 6: Management by Exception		Industrial Management	Computer Science	Computer Engineering	Transport Engineering	Railway Engineering	Industrial Engineering
18. Managers avoid making changes while things are going well.	0.730	3.52	3.47	3.58	3.57	3.67	3.50
9. Managers avoid intervening, except when goals are not achieved.	0.669	3.26	3.39	3.48	3.43	3.32	3.39
7. Managers firmly believe in the saying "if it ain't broke, don't fix it."	0.661	3.42	3.53	3.68	3.73	3.22	3.64
2. Managers avoid changing established practices in the academic community as long as things are going well.	0.630	3.41	3.39	3.36	3.40	3.41	3.48
26. Managers allow us to continue our academic	0.443	3.41	3.30	3.35	3.22	3.09	3.20

activities as we have always done unless it is necessary to introduce some changes.							
5. Managers avoid getting involved in our academic activities.	0.400	3.25	3.10	3.18	3.46	3.25	3.17
Factor 7: Laissez-faire Leadership							
32. Managers are likely to be absent when they are needed.	0.771	3.71	3.82	3.64	3.81	3.06	3.82
27. It is difficult to find or contact managers when a problem arises.	0.726	3.68	3.64	3.66	3.71	3.38	3.80
20. Managers avoid making decisions.	0.639	3.11	3.10	2.95	3.19	2.93	3.25
6. Sometimes, managers do not tell us how to contact them or where we can find them.	0.600	3.51	3.53	3.29	3.74	3.19	3.65

31. Managers avoid telling us how things should be done.	0.595	3.13	3.29	3.19	3.25	3.19	3.22
1. The presence of managers has little effect on my academic performance.	0.522	3.29	3.33	3.38	3.22	3.45	3.20

Source: Own elaboration

The results obtained for each dimension or leadership style are described below:

Transformational leadership

Factor 1: Charisma

This sub-dimension assesses the pride, respect, trust and ability that young people perceive of the school authorities. It was found that only 13% of the participants agreed with feeling proud of the school managers, 45% were neutral and 42% indicated that they disagreed with the statement. Likewise, it was inquired whether the managers deserve the respect of the students. In this sense, it was found that 35% agree, 42% neither agree nor disagree, and 23% do not agree. In addition, 10% agree with the fact that they feel trust in managers, while 40% showed no tendency and 50% definitely expressed disagreeing with the opinion and going for the negative part. In the same way, regarding the confidence that students feel about the work carried out by managers, it was obtained that 19% agree with perceiving that confidence, while 40% were neutral and 41% do not feel confident regarding the ability of managers.

Factor 2: Intellectual stimulation

In this sub-dimension, the young people were asked whether the directors of the academic unit place special emphasis on the careful resolution of problems before acting. It was found that 16% agree, while 32% were impartial with the questioning and 52% disagree, which means that for the students the authorities in charge of management are not paying attention to important situations. Similarly, it was found that 43% agree that managers have expressed and taught them that they should be based on reasoning and evidence before

solving a problem, 39% did not agree or disagree and 18% expressed disagreement with the statement. On the other hand, regarding the perception of the participants about whether the school managers try to make them see the problems as an opportunity to learn, 31% expressed that they agreed, 39% showed no tendency and 30% indicated that they disagreed with the statement.

Continuing with the findings, it was found that 21% of the respondents indicated that they agreed that school managers make them think about old problems in a different way, 47% were neutral and 32% said they disagreed. Another of the questions was focused on whether managers encourage the use of intelligence to overcome obstacles; in this regard, only 29% indicated that they agreed, while 46% did not indicate a trend and 25% reported that they did not agree. On the other hand, it was asked if the directors of the academic unit ask them to support their opinions with solid arguments; in this regard, 59% agreed, 31% expressed neither agree nor disagree and 10% said they did not agree with the questioning. Finally, it was investigated if the school directors offer new ways of approaching the problems that were previously disconcerting: 24% said they agreed, 50% were neutral and 26% indicated they did not agree.

Factor 3: Inspiration

This factor is made up of three items or statements: the first was focused on knowing if the school managers gave them talks to motivate them; in this regard, only 23% indicated that they agreed, while 31% were more undecided in the trend (that is, they neither agree nor disagree) and 46% disagreed. On the other hand, it was investigated if the school directors enhance the motivation towards success: unfortunately only 19% said they agreed, 42% did not show a tendency and 39% said they did not agree. Finally, students were asked if the school authorities try to develop new ways to motivate them: only 16% said they agreed, 38% neither agreed nor disagreed, and 46% disagreed.

Factor 4: Individualized consideration

This dimension was made up of three questions: young people were asked if managers care about training those who need it. In this regard, only 18% expressed agreement, while 33% showed no tendency in their response and 49% said they disagreed. In the same way, it was investigated if the authorities focus their attention on cases in which the expected goals are not achieved: only 20% said they agreed, while 41% were neutral and

39% emphasized that they did not agree, which shows a negative tendency towards the lack of individualized consideration. In addition, it was found that 24% of the young people agreed that the directors of the academic unit are willing to instruct and teach the academic community whenever they need it, 39% were indifferent to the question and 37% disagreed.

Transactional leadership

Factor 5: Contingent reward

The participants were asked if the school authorities give them what they want in exchange for their support. In this regard, only 23% said they agreed, 43% said they neither agreed nor disagreed, and 34% said they disagreed. In addition, it was asked if the authorities ensure that there is a strong agreement between what students are expected to do and what they can get for the effort they put in. In this regard, 27% expressed agreement with the statement, while 47% showed no tendency and 26% strongly disagreed. In addition, it was investigated if the managers let them know that they can achieve what they want if they carry out their academic tasks as agreed with them. In this regard, it was found that 38% said they agreed, 33% said they were neutral and 29% said they did not agree. However, they were also questioned if the directors try to get the students what they want in exchange for their cooperation; It was found that 34% agreed, while 44% did not show any tendency and 22% expressed disagreement. Finally, it was questioned whether agreements can be reached with the school directors in exchange for the students fulfilling their duties, to which 25% agreed, 42% were neutral and 33% disagreed.

Factor 6: Address by exception

This factor was made up of six variables that were investigated with the students. Participants were asked if school managers avoid changing what is established by the academic community while everything goes well; In this regard, 49% emphasized agreeing, 36% expressed neither agreeing nor disagreeing, and 15% indicated they did not agree. Another of the questions was about whether the directors avoid getting involved in their academic activities; In this regard, 38% of young people said they agreed, 41% did not reflect a trend and 21% emphasized their disagreement. It was also questioned whether managers show that they firmly believe in the adage “if it works, don't fix it”. 54% agreed, 33% said they were neutral, and 13% said they disagreed. In turn, it was investigated whether managers avoid making changes while everything is going well. It was discovered that 56% said they

agreed, 31% did not show any response preference and 13% determined to be in disagreement. Similarly, young people were asked if managers avoid intervening, except when the objectives are not achieved. It was found that 47% emphasized agreeing with the statement, 39% did not indicate a trend and 14% said they disagreed. Finally, the respondents were asked if the managers allow them to continue doing their academic activities as usual unless it is necessary to introduce some change. In this regard, 45% indicated that they agreed, while 37% remained neutral and 18% expressed their disagreement.

Factor 7

Laissez-faire leadership

Students were asked whether the presence of managers has little effect on academic performance. It was found that 41% of those surveyed said they agreed, 39% did not reflect a trend on their response and 20% said they did not agree. Similarly, it was found that 58% of the students agree that on some occasions the authorities do not tell them how they can contact them or find them during working hours, while 21% said they neither agreed nor disagreed and 21% said they did not agree. For their part, they inquired as to whether managers avoided making decisions. In this regard, 30% expressed agreement, 48% did not reflect a trend in their response and 22% disagreed on this point. Likewise, it was discovered that 59% of the students agreed that it is difficult to find or contact the directors of the unit when a problem arises, 29% were neutral and 12% emphasized that they did not agree. On the other hand, it was investigated if managers avoid telling them how things have to be done; It was found that 34% agreed, 47% determined to neither agree nor disagree, and 19% did not agree. Finally, it was investigated if managers are absent when they are needed: 62% said they were in favor of the statement, while 30% showed no tendency and only 8% disagreed.

Kruskal–Wallis test

On the other hand, the Kruskal-Wallis non-parametric statistical test was applied, which allows carrying out the hypothesis tests; that is, in the case of the present study, to determine if there is a difference between the academic programs to which the students belong and their perception of leadership styles. The results show that there is only a difference between the academic programs in the perception of transformational leadership, since a better score was found in the Railway Engineering degree and a lower one in Industrial Engineering (table 5).

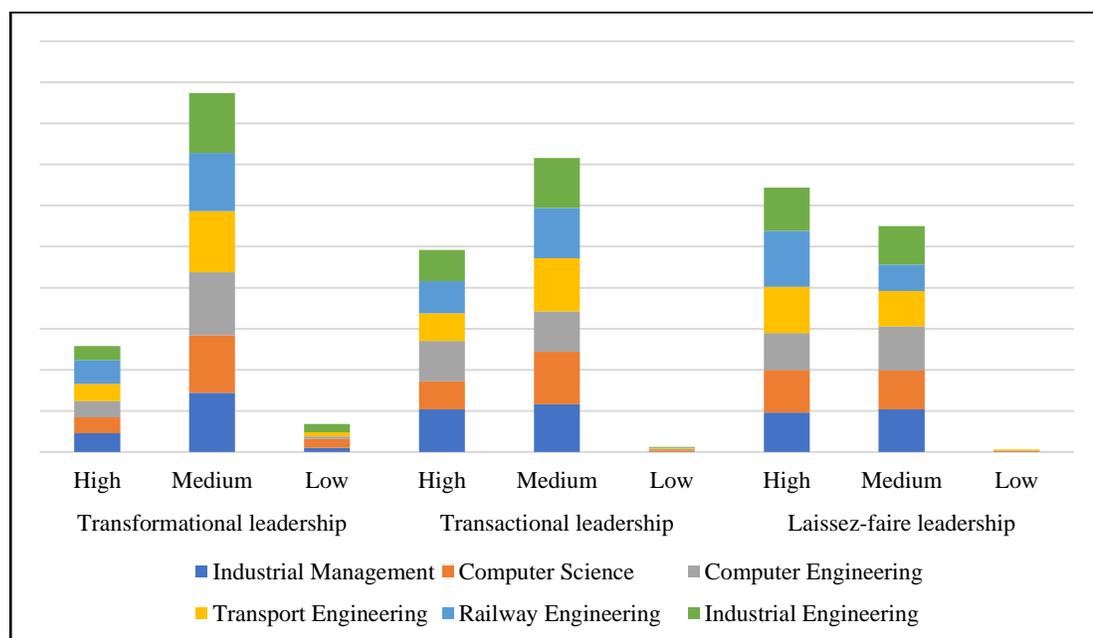
Table 5. Kruskal-Wallis Non-parametric Test

Academic Program	Transformational leadership	Transactional leadership	<i>Laissez-faire</i> leadership
Industrial Management	428.89	402.62	384.93
Computer Science	376.41	372.43	409.27
Computer Engineering	411.45	430.63	375.56
Transport Engineering	362.89	390.51	428.43
Railway Engineering	489.06	435.82	304.00
Industrial Engineering	372.50	386.97	417.92
p- value sig bilateral	0.01*	0.358	0.06

Source: Own elaboration

Finally, from the data segmentation, scores were worked on scales between high, medium and low for each leadership style, where the perception given by each academic program was highlighted (figure 1).

Figure 1. Comparison of Leadership Style Perception and Academic Program



Source: Own elaboration

It was found that the leadership style that obtained a "high" rating with the highest prevalence was laissez-faire, followed by transactional leadership and transformational leadership. Likewise, the leadership style where the "medium" scale stood out was

transformational, followed by transactional and laissez-faire. Finally, the "low" scale only highlighted transformational leadership.

Discussion

The results of this research allow us to offer a general overview of the type of leadership that is most prevalent in the academic unit studied at the National Polytechnic Institute. According to the perceptions of the students, it was obtained that laissez-faire leadership has a higher prevalence, although in the other types there are also important considerations that have to be discussed.

Transformational leadership was analyzed in four sub-dimensions: 1) charisma, 2) intellectual stimulation, 3) inspiration, and 4) individualized consideration. In relation to charisma, it was found that the young people expressed little pride, little respect and no confidence towards the work carried out by the authorities. Considering the results, it must be emphasized that it is extremely worthwhile for the academic unit to consider improving charismatic language, since it increases the quality and quantity of member participation (Becker et al., 2022). Inspirational communication should also be worked on because it has important effects on the empowerment of people (Minai et al., 2020). To carry out the above, it is essential to take into account that the credibility of leaders must be worked on, since this has positive or negative impacts on organizational performance (Williams et al., 2018).

Likewise, to improve transformational leadership, it is necessary to intervene in the emotional work of individuals whenever there is psychological empowerment, in addition to self-determination and self-efficacy, positive mediators of transformational leadership (Cheng et al., 2023). In addition to the above, this leadership style has the charisma component, which positively influences psychological capital, related to people's attitudes. (Shah *et al.*, 2023).

Universities have had to face various complexities since the pandemic, such as high stress on community members and lack of government support (Olaleye et al., 2020). However, and despite the difficulties, transformational leadership is characterized by allowing higher education institutions to achieve their objective focused on learning, oriented to the community and collective well-being (Sharma and Jain, 2022). In accordance with other studies, to promote this style of leadership in universities, it should be possible to implement training programs aimed at transformational leadership to create learning communities in all members of the academic unit, and try to find institutional ways so that,

despite the different changes of leaders, this is a leadership that prevails over time (Hafeez and Bidari, 2022).

In relation to intellectual stimulation, it was found that it is necessary to work on motivating the use of mental abilities that allow the management, understanding and solution of problems. Only a third of those surveyed consider that managers make an effort so that they see problems as an opportunity to learn. Considering this, leaders should look for ways to promote intellectual stimulation by proposing ways to solve problems with creativity and innovation (Saira et al., 2021). Intellectual stimulation has effects on high-performance skills, which have important impacts on youth employability (Htike, 2019; Wang et al., 2020). In addition, self-determination (Minai et al., 2020; Thuan, 2020) and student participation (Shin and Bolkan, 2021) are encouraged.

On the other hand, derived from the discouraging results found in this research, it is recognized that, in order to expand the possibilities of innovation, it is necessary to strengthen the intellectual capital of the professors who are in direct contact with the students, which would serve to raise the excellence of the students and, therefore, increase the prestige of the institution (Ibarra-Cisneros et al., 2023). Similarly, it is necessary to consider that commitment, motivation, communication and decision-making improve the process of participation and innovation (Owusu-Agyeman, 2021).

However, regarding the inspiration sub-dimension, it was found that the students perceived that managers do little to motivate them. There are also no intentions of looking for new ways to inspire them under a culture based on success. In this regard, it is important to consider that transformational leaders occupy inspiration to a greater extent, because they are the ones who generate awareness in followers about what is correct, good, important, beautiful, etc., but this happens when the needs for achievement and self-realization in followers increase (Al-Mansoori and Koç, 2019a). In addition, they cause people to go beyond their own interests. These leaders have high emotional intelligence and take care of their followers by inspiring, motivating and communicating. It is recognized that having a high-quality education requires the development of people to harness individual leadership and governance strengths for innovative higher education.

With respect to individualized consideration, it was obtained that the young people identified that the directors of the academic unit have insufficient concern for training those who need it. In this regard, it is important to mention that individualized consideration is relevant in the management of the organization, since the leader is capable of paying attention

to the individual needs of the members and being empathetic (Niessen et al., 2017; Pedraja-Rejas et al., 2020). Thus, a supportive climate is established and training and learning opportunities are offered.

Once the above is understood, it is necessary to address some reflections on the results of the other types of leadership. First of all, it is important to highlight that the research found that transformational leadership, unlike transactional and laissez-faire leadership, did show differences in the study programs that were analyzed, so it is essential to carry out a detailed diagnosis of those variables that are causing students to perceive the daily operation of the programs in this way. On the other hand, it was found that transactional leadership was one of those rated as high by young people, since they perceive a strong presence of situations such as avoiding changes in the established, avoiding getting involved, high belief in the saying if it works, don't fix it and, in the same way, they make them feel that there will be a reward as long as they do their academic homework. In this regard, Young et al. (2021) recognize that transactional leadership has positive and negative effects on the performance of followers, so it is thought that this is a double-edged sword, since the contingent reward is said to hinder empowerment. However, Puni et al. (2018) and Hilton et al. (2021) point out that the contingent reward has a positive relationship with satisfaction towards the activities that people carry out and, therefore, has a positive relationship with organizational performance. This occurs because transactional leadership is backed by high worker motivation (Wahyuni et al., 2020). Therefore, to promote leadership development, it is necessary for educational organizations to be more open and recognize their capacities. (Hasija *et al.*, 2019).

Regarding laissez-faire leadership, as already mentioned, this is the most prevalent in the school studied. Respondents expressed that there is a lack of communication regarding the ways in which they can contact the authorities, coupled with poor communication in the event of a problem and the perception of the absence of managers at times when the student community needs them most. In this regard, Klasmeier et al. (2022) emphasize that Laissez-faire leadership is defined as the lack of leadership, since those in charge of supervision do not respond to the requests of their followers, are absent most of the time and avoid making decisions, which reduces citizenship behaviors. Similarly, Breevaart and Zacher (2019) mention that the existence of transformational leadership tends to obtain positive results, while laissez-faire leadership negatively affects followers. In addition, these authors recommend that leaders have to avoid offering a passive approach towards followers, even

more so in those moments when they do not show transformational leadership. If it is not avoided, it can lead to a reduction in the confidence of the followers towards the leader.

Finally, the supporting literature makes it possible to clarify the benefits and dangers related to laissez-faire leadership, since it delegates decision-making powers to followers, which creates learning opportunities for them. This type of leadership is more efficient when people are motivated and qualified, although it is also perceived as passive and, therefore, ineffective; It is even thought that there is no leadership, so it is not recommended in those subordinates who lack skills and knowledge. In contrast, this type of leader is capable of creating feelings of self-regulation in followers, as well as self-control, autonomy, empowerment, and self-leadership. (Ahmed *et al.*, 2021).

Conclusions

The present work analyzed the perceptions of the interest group of the students of a prominent academic unit of the National Polytechnic Institute with respect to the leadership styles that prevail in it. Said analysis was given in relation to transformational, transactional and laissez-faire leadership styles, with results of the CELID application, and with statistical analysis. In this way, it was possible to identify the main issues to improve in the exercise of said leadership in the academic unit studied.

In general, it can be mentioned that the challenges that higher education institutions have had to face are diverse and complex, especially in the last three years where countries around the world were hit hard by the SARS CoV-2 pandemic, which generated economic, political and social effects. In the midst of these difficulties and other social and environmental crises, universities have had the challenge of continuing their work, hence the importance of exercising leadership by those in charge of said organizations. For this reason, it can be ensured that adequate leadership is essential to move forward with all higher education institutions, especially those that attend massive enrollments that exceed in various ways the daily operation of schools.

However, the results of this research show the shortcomings and difficulties related to the exercise of leadership in the school studied, and the existence of significant damage is recognized, not only those caused by the pandemic, but also by the omission and ignorance of the problems perceived by the students, which could be seen in this research. In other words, there are prevailing aspects that indicate that the school must work to improve its image and its actions in terms of adequate and responsible leadership for this very important

interest group. This improvement can occur by innovating in various forms of communication, motivating and generating confidence in the ability of managers, letting their students know and feel that they are not alone, that the school is a facilitator and not an actor that hinders their professional training. Otherwise, the consequences for schools will be worrying, since it can negatively affect student performance, generate a perception of low quality in the education they receive, and even lead to critical dropout rates. In this scenario, a leadership style such as laissez-faire is neither relevant nor favorable for the proper functioning of universities; On the contrary, it hinders the social function that these organizations must fulfill, so one of the leadership styles that best suits and supports the fulfillment of the objectives and needs that universities must attend to is transformational. For this reason, ways must be sought for their training in management positions and other members of the academic community.

In summary, this research shows transformational leadership as the one that can best support higher education institutions, given that it has important characteristics such as the ability to inspire, motivate, generate trust, empower all its stakeholders to succeed, create environments where there is effective and efficient communication, stimulate intellectually, and make the educational community feel that it is important to said organization. Therefore, the tools provided by this style of leadership can help managers improve the exercise of their leadership and, therefore, contribute to the general well-being of the entire educational community. However, to achieve this well-being, it is important that transformational leadership is not only exercised by managers, but by everyone (for example, teachers who are in direct contact with students). This means that said leadership style must be studied in its different dimensions, especially in the transversal one: from the managers to each member of the organization. In this way, this style of leadership can contribute to fulfilling the social function of universities.

Future lines of research

It would be important to know, based on more studies, how the leadership style exercised by teachers impacts the academic performance of their students and, even more, in a world as dynamic as today's, where needs are constantly changing. It would also be relevant to know through empirical studies if a certain leadership style, such as the transformational one, promotes a good exercise of university social responsibility (USR), since it is a subject

that has currently taken on great importance, since it is thought that universities should support the sustainable development objectives through a good exercise of USR.

References

- Ahmed, Z., Abid, G., Arshad, M., Ashfaq, F., Athar, M. A. & Hassan, Q. (2021). Impact of authoritative and laissez-faire leadership on thriving at work: The moderating role of conscientiousness. *European journal of investigation in health, psychology and education*, 11(3), 667-685. <https://doi.org/10.3390/ejihpe11030048>
- Al-Mansoori, R. S. & Koç, M. (2019a). Transformational leadership, systems, and intrinsic motivation impacts on innovation in higher education institutes: Faculty perspectives in engineering colleges. *Sustainability*, 11(15), 4072. <https://doi.org/10.3390/su11154072>
- Al-Mansoori, R.S & Koc, M. (2019b). Sustainability in Higher Education: The Impact of Transformational Leadership on Followers' Innovative Outcomes A Framework Proposal. In *Sustainability in University Campuses: Learning, Skills Building and Best Practice*; Leal Filho, W., Bardi, U., Eds.; Springer: Cham, Switzerland.
- Antezana, D. R. (2020). *Diagnóstico del liderazgo en la gestión del consorcio educativo La Inmaculada, Chiclayo 2018*.
- Azizi, L. (2022). Which leadership processes encourage sustainable transitions within universities? *International Journal of Sustainability in Higher Education* (ahead-of-print).
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. Nueva York: Free Press.
- Bass, B. M. & Avolio, B. (1990). *Manual for the Multifactor Leadership Questionnaire*. Consulting Psychologists Press.
- Bass, B. M. & Avolio, B. J. (1995). Individual consideration viewed at multiple levels of analysis: A multi-level framework for examining the diffusion of transformational leadership. *The Leadership Quarterly*, 6(2), 199-218.
- Becker, L., Coussement, K., Büttgen, M. & Weber, E. (2022). Leadership in innovation communities: The impact of transformational leadership language on member participation. *Journal of Product Innovation Management*, 39(3), 371-393.
- Black, S. A. (2015). Qualities of effective leadership in higher education. *Open Journal of Leadership*, 4(2), 54-66. <https://doi-org.org/10.4236/ojl.2015.42006>

- Breevaart, K. & Zacher, H. (2019). Main and interactive effects of weekly transformational and laissez-faire leadership on followers' trust in the leader and leader effectiveness. *Journal of Occupational and Organizational Psychology*, 92(2), 384-409. <https://doi.org/10.1111/joop.12253>
- Castro, S. A., Nader, M. & Casullo, M. M. (2004). La evaluación de los estilos de liderazgo en población civil y militar argentina. *Revista de Psicología*, 22(1), 63-88.
- Castro, S. A., Nader, M., Perugini, M. y Benatuil, D. (2007). *Teoría y evaluación del liderazgo*. Editorial Paidós.
- Cheng, P., Liu, Z. & Zhou, L. (2023). Transformational Leadership and Emotional Labor: The Mediation Effects of Psychological Empowerment. *International Journal of Environmental Research and Public Health*, 20(2), 1030. <https://doi.org/10.3390/ijerph20021030>
- Cruz Soto LA. (2021). *Interpretaciones del pensamiento administrativo*. Publicaciones Empresariales, FCA Publishing. Universidad Nacional Autónoma de México.
- Day, C., Sammons, P. & Gorgen, K. (2020). Successful School Leadership. *Education Development Trust*. <https://eric.ed.gov/?id=ED614324>
- Díaz, Y. C., Andrade, J. M. & Ramírez, E. (2019). Liderazgo transformacional y responsabilidad social en asociaciones de mujeres cafeteras en el sur de Colombia. *Información Tecnológica*, 30(5), 121-130.
- Espinoza, A. S., Mugerza, H. M., Alejandro, A. P. & Flores, H. E. (2020). Liderazgo transformacional y desarrollo sostenible ambiental verde en docentes de la Universidad Nacional Herminio Valdizán. *Revista de la SEECI*, (53), 135-151.
- Fernández, A. A. & Shaw, G. P. (2020). Academic leadership in a time of crisis: The Coronavirus and COVID-19. *Journal of leadership Studies*, 14(1), 39-45. <https://doi.org/10.1002/jls.21684>
- Griebeler, J. S., Brandli, L. L., Salvia, A. L., Leal Filho, W. & Reginatto, G. (2021). Sustainable development goals: a framework for deploying indicators for higher education institutions. *International Journal of Sustainability in Higher Education*, 23(4). doi: 10.1108/ijshe-03-2021-0088
- Hafeez, M. & Bidari, S. (2022). How Does Transformational Leadership Style Effect on the Organizational Performance? The Case of Educational Institutions. *South Asian Review of Business and Administrative Studies (SABAS)*, 4(2), 113-128.

- Hasija, M. K., Hyde, A. M. & Kushwaha, V. S. (2019). A Study of Management by Exception: Active, Passive & Laissez-faire Leadership Style of Leaders in B School. *International Bulletin of Management and Economics*, 9, 150-161.
- Hilton, S. K., Arkorful, H. & Martins, A. (2021). Democratic leadership and organizational performance: the moderating effect of contingent reward. *Management Research Review*, 44(7), 1042-1058. <https://doi.org/10.1108/MRR-04-2020-0237>
- Hitt, M. A., Ireland, R. D. & Hoskisson, R. E. (2013). *Strategic management: Competitiveness & globalization* (11th ed.). Cengage Learning.
- Htike, Z. M. (2019). Different leadership styles: impact on organizational performance. *International Journal on Recent Trends in Business and Tourism (IJRTBT)*, 3(2), 8-12.
- Ibarra-Cisneros, M. A., Vela-Reyna, J. B. & Hernández-Perlines, F. (2023). Interaction between knowledge management, intellectual capital and innovation in higher education institutions. *Educ Inf Technol*, <https://doi.org/10.1007/s10639-022-11563-x>
- Instituto Politécnico Nacional (IPN) (2023). *Estadística básica. Dirección de Información Institucional, inicio del período escolar 2022-2023/1 y fin del período escolar 2021-2022/2*.
<https://www.ipn.mx/assets/files/coplaneval/docs/Evaluacion/Estadistica%20Basica%2022-23.pdf>.
- Khan, M.A. (2021). *University Management, Leadership, and Governance*. In *Governance Models for Latin American Universities in the 21st Century*. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-83465-4_2
- Klasmeier, K. N., Schleu, J. E., Millhoff, C., Poethke, U. & Bormann, K. C. (2022). On the destructiveness of laissez-faire versus abusive supervision: A comparative, multilevel investigation of destructive forms of leadership. *European Journal of Work and Organizational Psychology*, 31(3), 406-420. <https://doi.org/10.1080/1359432X.2021.1968375>
- Leithwood, K., Harris, A. & Hopkins, D. (2020). Seven strong claims about successful school leadership revisited. *School Leadership & Management*, 40(1), 5-22. <https://doi.org/10.1080/13632434.2019.1596077>

- Lewa, P. M., Mburu, M. M., & Murigi, R. M. (2022). Transformational Leadership and Change Management in Dynamic Contexts. In Marques, J. and Dhiman, S. (eds.), *Leading With Diversity, Equity and Inclusion. Future of Business and Finance*. Springer, Cham. https://doi.org/10.1007/978-3-030-95652-3_4
- Lo, P., Allard, B., Anghelescu, H. G., Xin, Y., Chiu, D. K. & Stark, A. J. (2020). Transformational leadership practice in the world's leading academic libraries. *Journal of Librarianship and Information Science*, 52(4), 972-999.
- Mbithi, A. M., K'Obonyo, P. O. & Awino, Z. B. (2016). Transformational leadership, employee outcomes, and performance of universities in Kenya. *DBA Africa Management Review*, 6(2).
- Melo-Rojas, G. M. & Hernández-Herrera, C. A. (2023). Estilos de liderazgo: su lugar en las universidades y su vínculo con la responsabilidad social. En Hernández-Herrera, C. A. y Obregón-Sánchez, M. G. (coords.), *Avances de investigación de las organizaciones con un enfoque interdisciplinario* (pp. 1-38). Editorial Díaz de Santos.
- Minai, M. H., Jauhari, H., Kumar, M. & Singh, S. (2020). Unpacking transformational leadership: dimensional analysis with psychological empowerment. *Personnel Review*, 49(7), 1419-1434. <https://doi.org/10.1108/PR-10-2019-0580>
- Montañez, A. P., Palumbo, G. B., Ramos, R. P. & Ramos, P. M. (2022). Estilos de liderazgo en organizaciones educativas: aproximaciones teóricas. *Revista Venezolana de Gerencia*, 27(97), 170-182. <https://doi.org/10.52080/rvgluz.27.97.12>
- Morales, J. & Molero, F. (1995). Leadership in two types of health care organization. En J. M. Peiró, F. Prieto, J. Meliá and O. Luque (eds.), *Work and organizational psychology: European contributions of the nineties* (pp. 209-221). Lawrence Erlbaum.
- Morris, L. V. (2016). Management and leadership in colleges and universities. *Innovative Higher Education*, 41(1), 1-3.
- Munayco, R. V. (2022). *Estilos de liderazgo y su relación en la gestión directiva y en la calidad de la administración en un gobierno regional, 2021*.
- Niessen, C., Mäder, I., Stride, C. & Jimmieson, N. L. (2017). Thriving When Exhausted: The Role of Perceived Transformational Leadership. *Journal of Vocational Behavior*, 103, 41-51. <https://doi.org/10.1016/j.jvb.2017.07.012>

- Olaleye, S., Ukpabi, D. & Mogaji, E. (2020). Public vs private universities in Nigeria: Market dynamics perspective. In E. Mogaji, F. Maringe and R. E. Hinson (eds.), *Understanding the higher education market in Africa*. Routledge.
- Owusu-Agyeman, Y. (2021). Transformational leadership and innovation in higher education: A participative process approach. *International Journal of Leadership in Education*, 24(5), 694-716. <https://doi.org/10.1080/13603124.2019.1623919>
- Pedraja-Rejas, L. M., Marchioni-Choque, Í. A., Espinoza-Marchant, C. J. & Muñoz-Fritis, C. P. (2020). Liderazgo y cultura organizacional como factores de influencia en la calidad universitaria: un análisis conceptual. *Formación Universitaria*, 13(5), 3-14.
- Puni, A., Mohammed, I. & Asamoah, E. (2018). Transformational leadership and job satisfaction: the moderating effect of contingent reward, *Leadership & Organization Development Journal*, 39(4), 522-537. <https://doi.org/10.1108/LODJ-11-2017-0358>
- Purwanto, A., Purba, J. T., Sijabat, R. & Bernarto, I. (2021). The Role of Transformational Leadership, Organizational Citizenship Behaviour, Innovative Work Behaviour, Quality Work Life, Digital Transformation and Leader Member Exchange on Universities Performance. *Organizational Citizenship Behaviour, Innovative Work Behaviour, Quality Work Life, Digital Transformation and Leader Member Exchange on Universities Performance (December 17, 2021)*.
- Rivera, D. E., Terradellas Piferrer, M. R. & Benito Mundet, M. H. (2021). Measuring territorial social responsibility and sustainability using the EFQM excellence model. *Sustainability*, 13(4). doi: 10.3390/su13042153
- Robinson, V. & Gray, E. (2019). What difference does school leadership make to student outcomes? *Journal of the Royal Society of New Zealand*, 49(2), 171-187. <https://doi.org/10.1080/03036758.2019.1582075>
- Rocha, Á., Gonçalves, M. J. & Da Silva, A. F. (2022). Leadership challenges in the context of university 4.0. A thematic synthesis literature review. *Comput Math Organ Theory*, 28, 214–246. <https://doi.org/10.1007/s10588-021-09325-0>
- Rojas H., L. & Di Fiore S., M. (2021). Liderazgo transformacional para consolidar la responsabilidad social en instituciones educativas. *Informes Psicológicos*, 21(1), 117-131 <http://dx.doi.org/10.18566/infpsic.v21n1a08>

- Roofe, C. (2021). Instructional Leadership During Crisis: Jamaican School Leaders' Response. In Bissessar, C. (ed.), *Emergency Remote Learning, Teaching and Leading: Global Perspectives*. Springer, Cham. https://doi.org/10.1007/978-3-030-76591-0_11
- Ruben, B., Mahon, G. & Shapiro, K. (2022). Academic Leader Selection, Development, Evaluation, and Recognition: Four Critical Higher Education Challenges. *International Perspectives on Leadership in Higher Education*, 15, 115-138.
- Ruben, B. D. & Gigliotti, R. A. (2022). Explaining incongruities between leadership theory and practice: Integrating theories of resonance, communication, and systems. *The Leadership & Organization Development Journal*, 42(6), 942–957. <https://doi.org/10.1108/LODJ-02-2021-0072>
- Ruben, B. D. (2022). *Implementing sustainable change in higher education: Principles and practices of collaborative leadership*. Stylus.
- Ruben, B. D., De Lisi, R. & Gigliotti, R. A. (2021). *A guide for leaders in higher education* (2nd ed.). Stylus.
- Saira, S., Mansoor, S. & Ali, M. (2021). Transformational leadership and employee outcomes: The mediating role of psychological empowerment. *Leadersh. Organ. Dev. J.*, 42, 130–143.
- Sangrà, A., Arnold, D. & Gallifa, J. (2022). Liderazgo y tensiones en la universidad: el reto de integrar la educación digital. *American Journal of Distance Education*, 36(1).
- Shah, T. A., Parray, Z. A. & Ul Islam, S. (2023). The empirical relationship between transformational leadership and job attitudes: mediating role of psychological capital—a study of healthcare in India. *International Journal of Public Leadership*, (ahead-of-print).
- Sharma, P. & Jain, V. (2022). Role of Culture in Developing Transformative Leadership for Higher Education in Emerging Economies. In Mogaji, E., Jain, V., Maringe, F. and Hinson, R.E. (eds.), *Re-imagining Educational Futures in Developing Countries*. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-88234-1_13
- Shin, M. & Bolkan, S. (2021). Intellectually stimulating students' intrinsic motivation: the mediating influence of student engagement, self-efficacy, and student academic support. *Communication Education*, 70(2), 146-164.

- Srivastava, A.P., Mani, V. & Yadav, M. (2019). Evaluating the implications of stakeholder's role towards sustainability of higher education. *Journal of Cleaner Production*, 240. doi: 10.1016/j.jclepro.2019.118270.
- Thuan, L. C. (2020), Motivating follower creativity by offering intellectual stimulation, *International Journal of Organizational Analysis*, 28(4), 817-829. <https://doi.org/10.1108/IJOA-06-2019-1799>
- Vicuña, P. C. (2017). *Propuesta de perfil de liderazgo para ejecutivos empresariales de agencias comerciales de automotores en la ciudad de Cuenca* (tesis). Universidad del Azuay.
- Wahyuni, N. P. D., Purwandari, D. A. & Syah, T. Y. R. (2020). Transactional leadership, motivation and employee performance. *Journal of Multidisciplinary Academic*, 3(5), 156-161.
- Wang, S., Peng, M. Y. P., Xu, Y., Simbi, V. T., Lin, K. H. & Teng, T. C. (2020). Teachers' transformational leadership and students' employability development: A social cognitive career perspective. *Social Behavior and Personality: an international Journal*, 48(5), 1-15. <https://doi.org/10.2224/sbp.8594>
- Williams Jr, R., Raffo, D. M. & Clark, L. A. (2018). Charisma as an attribute of transformational leaders: what about credibility? *Journal of Management Development*, 37(3).
- Young, H. R., Glerum, D. R., Joseph, D. L. & McCord, M. A. (2021). A meta-analysis of transactional leadership and follower performance: Double-edged effects of LMX and empowerment. *Journal of Management*, 47(5), 1255-1280.

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