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TOWARDS A MODERN LEADERSHIP: SUSTAINABLE DEVELOPMENT-ORIENTED MANAGEMENT

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Abstract

The new context generated by the series of crises having occurred at the global level (the COVID-19 pandemic, the Ukraine war, the price increases) brings to our attention the sustainable development-oriented management of organisations.

The purpose of this paper is to outline the importance of adapting management styles to the requirements of the current economic context and to the sustainability-related challenges. The efficient communication, the cohesion, and the development of personal relationships are essential for creating a productive and pleasant work environment.

The main research methods used in order to achieve such a goal are: principal component analysis, matching propensity score, binary logistic regression, multilevel binary logistic regression, and structural equation models.

The results reveal that the long-term orientation of leaders towards sustainability is influenced by factors such as gender, age, position within the organisation, type of organisation where they carry out their activity, but also by a series of personal qualities and features.

This article is a novelty for Romania, as it fills a gap in the related scientific literature on the relationship between the characteristics of a leader and the role of the same in the implementation of sustainability in the organisational environment.

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The output reflects the appreciations that the employees operating in the organisational environment manifest with respect to the features of sustainability-oriented leaders, as well as to their long-term role in promoting sustainability. Furthermore, the implications regarding the promotion of good practices in sustainability, among both managers and employees, are identified, taking into consideration the dynamic rhythm of the business environment and the ever-complex sustainability-related requirements.

Keywords: sustainability, sustainable development, leader, leadership, strategy.

JEL classification: Q01, M15, M54

Introduction

In the dynamic and unpredictable business environment, it becomes obvious that the sustainability concept should be analysed and implemented. By targeting to minimise the negative effects or even generate positive ones on the environment, sustainability involves other factors as well, such as long-term projection of organisational strategies, provision of work conditions beneficial to employees, and even considering taking steps for their continuous training. Used as a communication tool, as a competitive strategy, or as a modality to meet legal, economic, or ethical requirements, sustainability becomes ever more visible, especially in large corporations (Akdogan, Arslan and Demirtas, 2016).

The literature is extensive and comprises a series of studies focused on the analysis of leadership styles and on the identification of the qualities necessary to become efficient and successful organisational leaders. At the same time, a significant growth of the interest in organisational sustainability is ascertained, this subject becoming more and more relevant in the context of the current social, economic, and ecological evolution.

However, there is a notable gap in the literature on the exploration and understanding of the connection between leadership styles and support for sustainability within organisations. Although both topics have been individually deeply studied, the research approaching the synergy between them is scarce and limited.

To better understand the nature of such a connection and to explore the synergy between leadership and sustainability, researchers and professionals in management and organisational behaviour should take steps towards a rather holistic approach. Such an integrative approach could bring some light to the way the leadership styles and the specific features of leaders might influence, support, or even inhibit the organisational efforts of reaching sustainability-related goals.

From the perspective of employees, being involved in initiatives promoting sustainability strengthens the feeling of work environment safety and own labour significance (Akdogan, Arslan and Demirtas, 2016). However, the most important role in selecting a sustainable strategy belongs to leaders, as they have the leading capacity and the power to make possible the implementation of such a strategy. Leaders are those individuals capable of articulating problems and recognising the capacity of their organisation to solve them (London, 2008).

Previous studies demonstrated that leaders and their styles are important elements in facilitating sustainability, the differentiation of ethical styles as a critical factor increasingly

preferred by employees and leaders (Lin et al., 2020). As the literature lacks a detailed analysis of leadership styles from the perspective of sustainability, this element will be approached in this study.

The purpose of this paper is to outline the importance of adapting management styles to the requirements of the current economic context and to the sustainability-related challenges. The efficient communication, the cohesion, and the development of personal relationships are essential for creating a productive and pleasant work environment.

The paper continues with the literature review section, split into two large topics: sustainability and leadership styles in the organisational environment. Thereafter follows the analytical presentation of the methodology being at the basis of the quantitative research, the latter having generated the output rendered in results and discussions. The last part of the paper is dedicated to conclusions, research limitations, practical implications, and new directions of research.

1. Literature review

In a business environment, the sustainable development and sustainability concepts are strongly correlated with the feeling of safety. Although initially used in the 1970s, in the context of the occidental development model, the covered dimensions are not exclusively limited to economic aspects, but also include social issues (Ruggerio, 2021).

According to the definition rendered in the report "Our Common Future", published by the World Commission in 1987, relating to Environment and Development, sustainable development refers to, "... development that meets the needs of the present, without compromising the ability of future generations to meet their own needs..." (WCED, 1987, quoted by Ruggerio, 2021, p.3).

The existing literature considers sustainability and organisational implication as a reaction to the external pressures of the global organisations, in order to be useful, especially in extremely changing contexts, such as wars, health, or political instability crises (Thoradeniya et al., 2022). Therefore, in an ever-changing working environment, as the one that has characterised the last years, sustainable development is seen as a strategy creating a safety net for the future. According to Gorski (2017), a company assumes a visible role in the context of sustainability when it exceeds basic activity and what the law requires, bringing additional value both to the company and to the society.

The unstable environment, specific to the last period, provided organisations with the opportunity to assess the risks they are facing. Therefore, as stated by Bashir, Alfalih and Pradhan (2022), organisations should approach such new economic and environmental challenges in a systematic, holistic, and radical way, based on sustainable development. The implementation of innovation in the business model can be used in such regard, to design new products or to develop news working patterns treating both return and sustainability as a unique concept and as part of the main solution.

The business sustainability becomes a reflection of the organisation success and growth, this being transposable into the business strategy, essential in a competitive environment, and indispensable for the future. In this context, the organisational key of success is the leader,

on which all stakeholders rely for leading them out of the crisis (Bowers, Halland and Srinivasan, 2017), as well as for valorising the opportunities.

1.1. Impact of sustainable development and sustainability

The authors explore, through a multidimensional approach, the concept of sustainable development and its significance in the treatment of the complex challenges facing our society. Via resorting to various sources, the same outline the essential sustainable development aspects, such as environmental protection, social equity, and economic prosperity. They insist on the need for integrated strategies, collaborative efforts, and technological progress, in order to promote sustainable development practices. Sustainable development became a fundamental concept in approaching emerging global issues, ranging from climatic changes to lack of resources and inequality of rights (Bowers, Hall and Srinivasan, 2017). Highlighting the multidimensional nature of sustainable development requires a comprehensive understanding of this concept and its present and future implications.

Preserving the natural operational environment of an organisation is a central pillar of sustainable development. Brynjolfsson and McAfee (2014) outline the importance of using innovative technologies in order to minimise ecological footprints and to promote a sustainable management of resources. With respect to social equity, Arora, Cohen and Walsh (2019) state that artificial intelligence and machine learning can be used as technological facilitators for entrepreneurship, promoting economic opportunities, and lowering social disparities. Furthermore, Bughin and Catlin (2017) reveal the potential of smart cities and digital solutions in creating liveable communities, therefore favouring social cohesion and quality of life.

On the other hand, economic prosperity and sustainable development are supposed to create a balance between economic growth and environmental protection. Acemoglu and Restrepo (2019) explore how automation and technological progress can replace and reduce the volume of the needed labour force, constructing the future of labour in a sustainable development context. Gomber, Koch and Siering (2018) discuss about the current and future directions of the digital finance and financial technology (FinTech) based research, underlining their potential in contributing to a sustainable economic development. To achieve sustainable development, as an integral part of an organisation, integrated strategies and collaborative efforts are essential. Less et al. (2023) focus on the importance of intelligent governance in providing the ethical and legal frameworks necessary for a responsible use of artificial intelligence. At the same time, the study reveals the contribution of governance policies and structures to the promotion of sustainable development initiatives.

1.2. Leadership styles in the context of sustainability

Leaders represent the key actors of an organisation, both appreciated for their success and deemed liable for any failure. During the last decades, they have become subjects of high interest, mainly as for the leadership styles, thoroughly analysed by specialists in terms of the organisational and employee effectiveness (Abbas and Ali, 2023).

Busola Oluwafemi, Mitchelmore and Nikolopoulos (2020, p.196) observed that leaders have to demonstrate “flexible adaptive leading behaviours and to adjust their leadership styles to the unpredictable circumstances encountered”. Some of the current largely approached leadership styles are: *transformational leadership, ethical leadership, distributed or shared*

leadership, and authoritarian leadership. To understand the most appropriate leadership styles, relevant for the present research, each of them will be analysed in relation to the specific competencies required.

According to Chamakiotis, Panteli and Davison (2021), the transformational leadership is an option fit for the nowadays teams, based on virtual interactions, as it is characterised by inspirational motivation and individualised attention. This can facilitate trust building; individual identification, and can promote an innovative atmosphere (Xie et al., 2018). Innovation and sustainability have been positively correlated with the organisation capacity to surpass crises, as well as with the digitalisation process, which is so useful in a virtual environment (Ebersberger and Kuckertz, 2021). The transformational style is deemed to be pro-sustainability by providing all necessary conditions for employees to get involved in actions relating to the improvement of the work environment and of the surrounding one. Trust, voicing behaviour, and lack of anxiety in the business environment are positively correlated with sustainable initiatives (Zheng et al., 2023).

The transactional management style, based on the reward-punishment system, was related to strict leading behaviours, associated by Busola Oluwafemi, Mitchelmore and Nikolopoulos (2020) with the sanctioning of errors, delimitation of routines, monitoring, and control of goal reaching, appropriate measures taken, and attention paid to homogenous accomplishment of tasks.

According to Zheng et al. (2023), transactional leaders resort to existing information, the interactions involving reward-based conditional exchanges. As for sustainability, such aspects are positive, as sustainable initiatives need a clearly delimited vision and the participation of the largest possible number of organisational members, both aspects being covered by the transactional leadership style. Although the previous studies demonstrated that the transactional leaders have a minimum impact on the behaviours that cannot be quantitatively measured, respectively, rewarded, it can be argued that those transactional leaders adopting a sustainable strategy have the ability and the tendency to implement such system targeting and rewarding the sustainable goals,

Therefore, as noted by Lee et al. (2023), the transactional leaders have the capacity to better define and share the scope and role of employees within a company, leading to an augmented trust in management, an increased motivation, and a superior performance.

However, it should be determined that, compared to the transformational leadership style, the transactional one forces employees to focus on error prevention, raising stress at work, and lowering the level of involvement in practices relating to the protection of the surrounding environment (Zheng et al., 2023).

Taking into consideration the fact that this study concerns Romania, a country having dealt with autocratic leaders, specific to a communist and post-communist period, the transactional leadership style can be identified as an intermediary stage towards the targeted western models and cultures of inspirational leaders that, in most of the cases, could not be reached yet. The present study aims to analyse the transactional style, as a sustainability mediator.

Another leadership style that has drawn the attention lately is the *ethical style*, which refers to the achievement of ethical actions, considering the impact of decisions on stakeholders and the transmission of moral signals to followers (Banks et al., 2021). It involves specific attitudes and behaviours of the followers, beyond ethics, such as: work satisfaction, personal

initiative, trust in leaders, organisational commitment, implication at work, task performance, job withdrawal behaviours, deviant behaviours, and employee emotions (Velez and Neves, 2018). The ethical leadership style is usually associated with the sustainability concept, referring to both the increase of the commitment towards the organisation and the adhesion to equality, stability, and sustainability related behaviours (Ilyas, Abid and Fouzia, 2020).

As noticed by Chamakiotis, Panteli and Davison (2021), in case of virtual teams, the central leadership styles operate better if combined with other styles, promoting empowerment and distribution, such as the *shared leadership*. The shared leadership looks for different performance levels of specific tasks and for responsibility undertaking, by empowering people to lead collectively towards common goals. This is accomplished by sharing mental models, as a predictor of the team efficacy (Lungeanu, DeChurch and Contractor, 2022). The types of teams benefitting from the shared leadership are the ones the members of which have different abilities, experience, and features. Team collaboration provides the necessary involvement and empowerment, so as to overcome the difficult situations, as well as the necessary ideas and abilities, to adopt a new working style. From the perspective of sustainability, the dilemma that arises concerns the ability of shared leadership to create a clearly delimited vision, necessary for such a concept.

Regarding the authoritarian leadership style, frequently associated with pre-democratic leadership forms, the sustainability-related literature is limited. Authoritarian leaders are supposed to be characterised by the need for power, narcissism, neuroticism, and even psychopathic behaviours, inducing a low to inexistent level of admiration among followers (Hamsa et al., 2018). They are oriented towards the tasks of the employees and less towards the well-being of the group, so that a correlation with the sustainability antecedents, such as trust, sense of ethics, or psychological safety, is almost inexistent. Although considered negative influencers of the group climate and of the team efficiency, they have also been associated with some positive aspects, such as precise structures, hierarchical predictability, and clear roles. After all, the involvement of the authoritarian leaders in sustainable initiatives might be efficient, but it represents a subjective issue, seldom encountered within this leadership style (De Hoogh, Greer and Hartog, 2015). Irrespective of the selected leadership style, digitalisation stops being an innovation source, turning into a requirement, allowing teams to work remotely and supporting businesses to continue with their activities in a sustainable manner (Ebersberger and Kuckertz, 2021). Nowadays, it became a must, due to the remote work-related policies adopted by most organisations. By virtue of such event, the virtual teams involved individuals who have previously rejected working remotely or just couldn't work at home until then. As argued by Chamakiotis, Panteli and Davison (2021), the leadership success depends to a large extent on the cohesion between the leader and the team, as part of the team social and emotional process.

An important initial factor was the already existing team cohesion, but this can also be obtained by resorting to digital instruments specifically created for such a purpose. Communication represents a major factor and the ability to send precise and timely messages, as well as to develop more personal relationships at work, in order to build trust. This is deemed one of the biggest challenges, considering the personal time and family limits, as well as the breaks that are so useful for any employee.

Given the leadership styles described above and the expectations related to sustainable development, the authors embarked on developing this study, in order to identify which one

better fits the expectations of followers, correlating the same with the context-specific business and social environment of sustainability.

Therefore, four hypotheses are formulated at the theoretical level, the same being subsequently checked on the data collected based on the questionnaire. The first and last hypotheses refer to the appreciations manifested by respondents about the characteristics of sustainability-based leaders. The other two hypotheses have in view the role of sustainability in the long run, with a focus on the differences encountered depending on the age, gender, and status of employees. The hypotheses are as follows:

H₁: There are differences between the employees working in the private sector and those working in the public sector in terms of the level of appreciation of the qualities needed by a leader who pleads in favour of sustainability.

H₂: The employees leading teams appreciate more the role of sustainability in achieving long-term goals than those who do not have such responsibility.

H₃: The gender, age, and level of appreciation of the qualities of a leader oriented towards sustainable development significantly influence the long-term performance of the companies promoting leadership.

H₄: The opinions regarding the qualities of a leader focussed on sustainability are influenced by the awareness of the challenges to be faced, as well as by the deep commitment of the leader to certain leadership practices.

2. Research methodology

Consistent with the research goals and questions, the authors resorted to exploratory research (enquiry) based on a structured questionnaire.

This quantitative research method involved the collection of data from 249 leaders and employees. The questionnaire included questions regarding their perception relating to the leadership styles, the importance of sustainability, the competencies, and responsibilities necessary for a leader preoccupied with such an issue. The collected data was analysed using different methods presented below, based on SPSS 23 and Stata15 software.

The analysed sample consists of 249 employees working in the public and private sectors. To collect data from these statistical units, we proceeded to an enquiry and used a questionnaire that also included questions outlining the relationship between leadership and sustainability. The questionnaire was distributed to respondents between June 1st and July 15th, 2023 via Google Forms. A snowball-type directed sampling method has been used, as the questionnaire was first distributed to a lower number of respondents, who forwarded the same to other individuals meeting the characteristics targeted by the research purpose. The sample is not representative for the population and the research being based on an enquiry for which the representativeness of the sample in relation to the population, given a specific characteristic, is not required.

Among the respondents, 70.3% are women and 29.7% are men. Most of the respondents are aged 20 to 35 (48.6%), being followed by those belonging to the superior age category, namely 35 to 50 (42.6%). Only one-third of the respondents lead teams and more than half

work in multinationals. Also, almost half of them have 10 years (41.8%), respectively 10 - 20 years (41%) of service length (Table no. 1).

Table no. 1. Distribution of respondents according to certain characteristics

Variable	Category	Relative frequencies (%)
Gender	Male	29.7
	Female	70.3
Age (years)	Under 20	0.4
	20-35	48.6
	35-50	42.6
	50-65	8.4
Team leading	Yes	33.3
	No	66.7
Field of activity	Public	16.5
	Private	83.5
Company size	Microenterprise	14.1
	Small enterprise	15.7
	Medium-sized enterprise	18.9
	Multinational (large enterprise)	51.4
Length of service (years)	<10	41.8
	10-20	41.0
	20-30	15.3
	>30	2.0

Source: own computation in Stata 15

The methodological framework resides in several methods that match the logical approach, in line with the hypotheses rendered at the theoretical level.

2.1. Principal component analysis

The first step consists of the principal component analysis (PCA), destined for identifying the most important features needed by a leader oriented towards the sustainable development of the company, according to the opinion of the employees working in the public system, respectively, in the private one. The score of the features of a leader who pleads in favour of sustainability at the level of the company led by the same is computed based on the common characteristics included in the first principal component of each group of respondents (the employees working in the private sector, respectively, the employees working in the public one). Each feature needed by a leader is measured on a 6-point Likert scale, being assigned a number of points (written in brackets) for each possible variant of answer: full disagreement (0), disagreement (1), rather disagreement (2), rather agreement (3), agreement (4), full agreement (5). The score variable is reflected in the sum of the number of points associated with the level of agreement regarding the characteristics of a leader who advocates sustainability at the organisational level. A higher score reveals a higher importance assigned to the characteristics of a successful leader for the implementation of sustainable practices in the said organisation. The hypothesis relating to the different perceptions of the employees working in the public system as against the employees working in the private one as concerns the qualities needed by a leader who pleads in favour of sustainability is checked based on the comparative analysis carried out in this respect.

2.2. Propensity score matching

Regression using propensity score matching (PSM) is generated based on the previously determined score variable. This technique allows for the evaluation of the independent effect of an intervention (treatment). In this case, the intervention refers to the team leader of some of the employees who have answered the questionnaire. This status can affect their perceptions related to the qualities needed by a leader oriented towards company sustainability, as well as the opinion regarding the impact that sustainable leadership might have on the long-term organisational success. In this context, the technique should be applied twice, having, at a time, as a dependent variable, the score variable, previously determined, and the impact variable, having as values the scores associated with the answers to the question relating to the appreciation of the impact of sustainable leadership on company long-term performance: no impact (0), very low impact (1), low impact (2), medium impact (3), high impact (4), very high impact (5). Additionally, the average treatment effect (ATE) is computed for the dependent variable of interest.

2.3. Binary logistical regression and multi-level binary logistic regression (with mixed effects)

The impact variable defined above was re-codified so as to take two possible values: 0 (without significant impact, associated with the variables: no impact, very low impact and low impact) and 1 (with significant impact, for the cases: medium impact, high impact, and very high impact). The arising variable, named binary impact, represents the dependent variable in the binary logistic regression using as explanatory variables the previously defined score variable, the age, and the gender of respondents. Besides, the multi-level binary logistic regression groups the respondents based on their position of team leaders, respectively, on their field of activity (public/private).

2.4. Structural equation models

Structural equation models (SEM) are used to evaluate the relationships between the observed and latent variables. This study analyses the relationship between the challenges faced by leaders in dealing with sustainability-related issues, the features needed by a leader who pleads in favour of sustainability at the level of the company led by the same, and the practices to which the leader of the company of respondents is deeply committed.

3. Results and discussions

The principal component analysis on the dataset relating to the appreciation of the characteristics needed by a leader focussed on sustainability at institutional level resulted in two principal components for the employees working in the public sector and a single component for the employees working in the private one. The Varimax method of rotation and the Kaiser criterion for selection of the principal components were used, this corresponding to eigenvalues exceeding 1. For the employees working in the public sector, the first principal component stands for 73.385% of the total variance and corresponds to an eigenvalue of 7.338, while the second one reveals 13.74% of the variation, the related eigenvalue amounting to 1.374. Together, the two principal components explain 87.125% of the total variance. Concerning the employees working in the private environment, the principal component identified reflects 65.343% of the total variance, with an eigenvalue

equal to 6.534. Table 2 shows the matrices of the principal components, following a Varimax rotation.

Table no. 2. Matrices of main components

Characteristics	Employees working in the public sector		Employees working in the private sector
	Component 1	Component 2	Component 1
Power	0.463	0.810	0.664
Dedication	0.929	-0.052	0.864
Intelligence	0.926	-0.057	0.911
Empathy	0.949	-0.152	0.764
Creativity	0.950	-0.198	0.862
Future orientation	0.931	-0.127	0.853
Authority	0.487	0.770	0.619
Trust others	0.823	0.068	0.830
Ethics	0.957	-0.125	0.809
Communication skills	0.950	-0.143	0.859

Source: own computation in Stata 15

For the respondents working in the public system, the first principal component includes the characteristics of a leader focussed on sustainable development, such as: dedication, intelligence, empathy, creativity, future orientation, trust in others, ethics and communication skills. The second component includes power and authority, suggesting that the employees working in the public system consider that authority and power are features less important to a leader. In exchange, the proper organisation and the quality of the relationship with subordinates do matter. Ethics seems to be the most important characteristic of a leader, according to employees working in the public sector. Regarding employees working in the private sector, all considered features are important for a leader, but intelligence prevails. Therefore, *the hypothesis stating that there are differences between the employees working in the private sector and the ones working in the public sector as to the level of appreciation of the qualities needed by a leader who pleads in favour of sustainability is validated.*

The perception of the qualities needed by leaders focused on sustainability could be different in the case of employees leading teams as opposed to not having such responsibility. Hence, the effect of this intervention (experience in leading teams) on the score variable, respectively, on the appreciation of the impact of the sustainable leader on the success of an organisation in the long-run is evaluated. According to Table 3, the experience of leading a team of some respondents does not generate differences in appreciating the qualities of a leader focused on sustainability, as compared to those not leading teams. On the other hand, the average impact of sustainable leadership on the long-term performance of the company is appreciated as less significant if the respondents did not lead teams in relation to the case where they all dealt with such leadership experience. Otherwise said, *employees leading teams appreciate more the role of sustainability in achieving the company long-term goals than those not having such responsibility.*

Table no. 3. Output of propensity matching scores

Average treatment effect	Coefficient	Robust standard errors	p-value
Dependent variable: impact Intervention: leading a team (no/yes)	-0.323**	0.143	0.025
Dependent variable: score Intervention: leading a team (no/yes)	0.072	1.35	0.957

Source: own computation in Stata 15

Note: ** indicates p-value < 0.05.

The impact variable is transformed into a binary variable taking two possible values: 0 (without significant impact) and 1 (with significant impact), named binary impact, and indicates the significance of the sustainable leadership impact on the company’s long-run performance. According to Table 4, the gender, age, and score explain the impact of sustainable leadership on the company’s long-run performance.

Table no. 4. Binary logistic regression and multi-level binary logistic regressions (with mixed effects) explaining the appreciation of the impact of sustainable leadership on the long-term performance of the company

Variable	Odds ratio (p-value in brackets)		
Gender	2.101* (0.091)	2.101* (0.091)	2.101 (0.091)
Age	1.962* (0.061)	1.962* (0.061)	1.962* (0.061)
Score	1.105*** (0.001)	1.105*** (0.001)	1.105*** (0.001)
Constant	0.003*** (0.003)	0.003*** (0.003)	0.003*** (0.003)
Grouping variable: leading a team Constant variance	-	0.089	-
Grouping variable: field of activity (public/private) Constant variance	-	-	0.0204
Chi-square (p-value)	19.56 (<0.01)	14.34 (0.0025)	20.46 (<0.01)
Hosmer and Lemeshow test: statistics (p-value)	3.87 (0.7941)	2.87 (0.874)	3.04 (0.804)

Source: own computation in Stata 15

Note: *** indicates p-value < 0.01, ** indicates p-value < 0.05, * indicates p-value < 0.1.

The chances that women appreciate as significant the impact of sustainable leadership on the company long-term performance are almost two times higher than in the case of men. Passing from one age category to a superior one, the chances of recognising as significant the impact of the sustainable leadership for those belonging to the upper age category are almost two times higher than for those belonging to a lower age category. An increase with 1 unit of the score related to the appreciation of the quality of a leader oriented toward sustainability

causes an increase with 10.5% of the chances to have a significant impact of the sustainable leadership on the company long-term performance. In case of grouping by clusters, given the experience in leading teams or the field of activity, the influence on the company performance of the sustainable leadership is significantly lower. Therefore, *the hypothesis assuming that the gender, age and level of appreciation of the qualities specific to a leader oriented towards sustainable development have a significant impact on leadership from the perspective of the long-run performance of companies is validated.*

Different measures, based on certain items, were also considered:

- A. Deep commitment of leaders concerning certain practices:
 - A1. Continuous training of employees;
 - A2. Consideration of the long-term implications of the decisions made and implemented.
- B. Challenges faced by leaders in approaching sustainability-related issues:
 - B1. Missing solid scientific data that demonstrate that the sustainable solutions are viable;
 - B2. Lack of viable supply chains to obtain sustainable solutions.
- C. Features of a leader focused on sustainable development:
 - C1. Dedication;
 - C2. Intelligence.

Cronbach's Alpha coefficient reveals values exceeding 0.8 (0.8223 for A, 0.8466 for B, and 0.9124 for C), which suggests the internal consistency of the model. The factor loadings exceed 0.7: 0.755 for A1, 0.845 for A2, 0.788 for B1, 0.806 for B2, 0.904 for C1, 0.912 for C2. According to the Heterotrait-Monotrait criterion, used for assessing the discriminant validity, all computed coefficients are lower than 0.9. The values of the inflation factors are below 3, no multi-collinearity cases being revealed. According to Table 5, the appreciation of the characteristics of a leader focused on sustainability is directly explained based on the deep commitment of the own leader to certain practices, as well as on the challenges faced by leaders in approaching sustainability-related issues. Otherwise, *being acquainted with the manner of action of the leader focussed on sustainability, as well as with the challenges faced by the same, directly influences the description of the features of a leader focussed on sustainability.*

Table no. 5. Relationship coefficients for SEM

Relationships	Coefficients	Standard deviation	Z statistics	p-value	Conclusions
A→C	0.2393397***	0.0553464	4.32	<0.01	The deep commitment of the leader as for certain practices has a significant influence on the appreciation of the features of the leader focussed on sustainability.

Relationships	Coefficients	Standard deviation	Z statistics	p-value	Conclusions
B→C	0.1366182**	0.0648875	2.11	0.035	The challenges faced by leaders in approaching sustainability-related issues directly influence the appreciation of the features of the leader focused on sustainability.

Source: own computation in Stata 15

Note: *** indicates p-value < 0.01, ** indicates p-value < 0.05, * indicates p-value < 0.1.

The questionnaire included a question with multiple choices, suggested four roles of leaders in promoting sustainable practices, and also the possibility of mentioning other roles. The four roles are Champions and models to follow, Facilitators and supporters, Decision-makers and strategists, and Communicators and educators. It should be mentioned that the respondents did not mention any other role.

The frequencies related to the role of leaders in the promotion of sustainable practices revealed a preference for the role of facilitators and supporters of sustainability, with a percent of 30.1% (Table 6). This aspect demonstrates that sustainability should be seen as a common effort, facilitated and supported by leaders, but involving all employees. The responsibility is shared between leaders and their followers, underlining the major role that the role of facilitator involves. Therefore, to create a sustainable perspective of the business environment, leaders must create specific contexts.

Table no. 6. Frequencies–roles of leaders

The role of leaders in promoting sustainable practices within organisations		Answers		Percent of cases
		N	Percentage	
Qualities of the leader ^a	Champions and models to follow	96	23.5%	38.6%
	Facilitators and supporters	123	30.1%	49.4%
	Decision-makers and strategists	79	19.4%	31.7%
	Communicators and educators	110	27.0%	44.2%
Total		408	100.0%	163.9%
a. Group				

Source: own computation in SPSS 23

The interviewed individuals manifested their top preference for the transactional leadership style, followed by the ethical one. The preference for the transformational style is quite low, due to the inspirational element rather missing in the nowadays Romanian business environment. Most respondents (45 individuals, representing 11% of the total answers) having indicated the transactional leadership style consider that leaders should act mainly as facilitators and supporters. This quality is also mentioned by those who have chosen the ethical leadership style. Therefore, the role of facilitator and supporter is identified as primordial in promoting sustainability for the most frequently encountered leadership styles: transactional and ethical (Table 7).

Table no. 7. Association of the roles of leaders with the leadership styles and the gender of the respondents

			Leadership styles					Total
			Transfor- mational	Transacti- onal	Ethic- al	Auto- cratic	Laissez- faire	
Male	Roles of leaders ^a	Champions and models to follow	2	11	6	5	2	26
		Facilitators and supporters	4	19	3	7	3	36
		Decision-makers and strategists	4	16	2	7	2	31
		Communicators and educators	8	13	5	5	4	35
	Total	18	59	16	24	11	128	
Female	Roles of leader ^a	Champions and models to follow	13	22	17	13	5	70
		Facilitators and supporters	12	26	26	14	9	87
		Decision-makers and strategists	9	17	11	7	4	48
		Communicators and educators	13	21	17	12	12	75
	Total	47	86	71	46	30	280	
Percentages and totals are based on responses.								
a. Group								

Source: own computation in SPSS 23

Concerning the distribution depending on the gender of respondents and on the roles of leaders as for the orientation of the organisation towards sustainability, the results reveal a relatively balanced spread of options regarding the qualities of leaders, in the case of males, with preference for facilitators and supporters, respectively, communicators and educators. The same preferences are encountered in the case of women, but with a significant difference in terms of percents. Thereafter, a reversal of the roles between the two genders is observed – champions and models to follow are preferred by females and decision-makers and strategists by males.

Given the abovementioned, all four hypotheses assumed at the theoretical level are validated on the basis of the data collected via the specified questionnaire. Such results allow for the formulation of some recommendations for promoting a sustainable leadership:

- organising training sessions for all employees, relating to the benefits of sustainability, challenges, practices and sustainable solutions;
- encouraging leaders to share and transfer some of their responsibilities related to sustainability to the members of their teams and to provide the same with support in order to allow them to develop the skills necessary for promoting sustainability at organisational level;

- considering an open and transparent communication between leaders and employees as for the sustainability-related goals, values, and progress, in order to inspire the employees to get involved and, thereby, to actively contribute to the sustainability initiatives;
- appreciating and rewarding the employees involved in promoting sustainability via a performance assessment system, by compensating the same, or by publicly recognising their contribution.

Conclusions

The present study encompasses two current concepts that have a major impact on the Romanian organisational future: leaders and sustainability. These are approached from the perspective of the level of appreciation of the qualities needed by leaders to be oriented towards sustainability. The related literature abounds in studies analysing the leadership styles and the required qualities, while the interest manifested with regard to the organisational sustainability is more and more obvious, but the connection between the two topics is rarely studied. In order to cover such gap, the present paper reveals the appreciations that the employees operating in the organisational environment manifest with respect to the features of sustainability-oriented leaders and the role of sustainability in the long-run, with a focus on the differences occurring depending on the age, gender, and status of employees.

Research-related results contribute to the enrichment of the literature on leaders and their impact on organisational sustainability. Additionally, practical implications for the dissemination of good practices in sustainability are identified, both among managers and employees. The sense of responsibility, the involvement level-related information and the sustainability specific practices represent essential elements in stimulating sustainable actions within a business environment.

Regarding the review of the existing literature, the results of this research confirm and support the conclusions of other studies, such as Ilyas, Abid, and Fouzia (2020), Bashir, Alfalih, and Pradhan (2022), and Gorski (2017), on the strong impact of leadership on sustainability. The fundamental role of the leader is influenced by factors such as age, gender, and work environment, identified in the present paper as well.

However, this study has some limitations that should be taken into account when interpreting the resulting output. Data were collected based on a limited sample of 249 respondents, including both employees and leaders, from public and private environments, working in large corporations, small and middle enterprises, as well as start-ups. For a better understanding, future studies could analyse in a detailed manner each and every aspect, in order to be able to reflect specific behaviours and ideas in an exhaustive manner. Furthermore, the low level of control over the responses received from the interviewed individuals, through self-administration of the online posted questionnaire, could be questioned.

Furthermore, sustainability is a continuously changing concept, permanently influenced by the current business environment and by events that occur at the global level. In this regard, the authors suggest for the following research to consider the collection of data during different time moments, to analyse the evolving and dynamic nature of sustainability.

Such academic approaches may provide a deeper and more comprehensive understanding of the importance of sustainability and its impact on the business environment, allowing the identification of the most efficient strategies to promote sustainable actions in this complex context.

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