



IMPORTANCE OF SUSTAINABLE LEADERSHIP AND SUSTAINABLE LEADERSHIP PRACTICES AMONG MIDDLE-LEVEL HUNGARIAN MANAGERS

Sevinur Çuhadar, Ildiko Rudnak

Hungarian University of Agriculture and Life Sciences

Abstract

Corporations, managers, and employees are still having difficulties comprehending the idea of sustainable leadership and identifying this concept itself is a challenge for modern businesses. A new and expanded definition of leadership that is founded on sustainability principles, sustainable leadership practices, and developing an inclusive, collaborative, and responsive leadership approach is known as sustainable leadership. A better understanding of the idea of sustainable leadership and sustainable leadership practices we conducted research among Hungarian middle level managers. Main purpose of this study is to examine the level of sustainable leadership skills of middle-level Hungarian managers in a variety of industrial sectors and which sustainable leadership practices with its subcomponents can be preferred to implement in organizations by Hungarian managers. Questionnaire method was used among 201 middle-level Hungarian managers. Findings show that there is a slight difference between non sustainable leadership skills and sustainable leadership skills among managers, general results showed that sustainable leadership scores of the Hungarian managers (3.20) stayed below non- sustainable leadership scores (3.75) that indicates Hungarian managers need to improve themselves relate to sustainable leadership skills based on applying sustainable leadership practices in organizations. Among sustainable leadership practices key performance drivers (3.69) are the most applicable sustainable leadership practices among the middle level Hungarian managers comparing to foundation practices (3.35) and higher-level practices (3.56) based on scores. Among subcomponents of the sustainable leadership practices score of managers centered leadership (3.4), employee centered leadership is the highest score (3.9), organizational profit (3.2), employee's engagement (3.4) and lowest score is the knowledge sharing culture (2.7) among the middle level Hungarian managers.

KEY WORDS: Sustainability, Sustainable Leadership, Sustainable Leadership Practices.

JEL classification: M1, Q56

Introduction

Globalization brings significant difficulties not just business groups and governments throughout the world for all of humanity. On a worldwide scale, fresh mindsets and novel approaches are required to address environmental protection, social, and economic issues. Natural resource depletion, environmental degradation, and persistent social inequality in most countries imply that activities should be aimed at fulfilling social expectations. Organizations should aim sustainable activities and devote more attention to their long-term growth that contributes to environmental preservation not only within the company but also outside its walls (Tripathi et al., 2020). Sustainable development is inescapable, and it is highlighted as a leadership duty for modern organizations (Šimanskienė & Župerkienė, 2014). Sustainability is the long-term or institutionalization of an innovation or activity (Basiago, 1998). Sustainability is discussed in the literature in terms of economic, social, ethical, and political aspects. Sustainable leaders use the organization's resources to tackle environmental and social problems while increasing shareholder profit (Tideman, 2013).

Sustainability requires leaders who can promote sustainable practices in their communities and organizations while also generating economic growth (Metcalf & Benn, 2013). In this context, sustainable leadership has arisen as an effective (Shriberg & Macdonald, 2013). Organizations can benefit from

sustainable leadership and among the many advantages mentioned in the literature : Long-term organizational performance is seen to be improved by sustainable leadership practices to varying degrees. (Suriyankietkaew & Avery, 2016).

Management development, long-term employment, information exchange, and innovation processes are all examples of sustainable leadership practices (Kim & Park, 2019). Long-term company performance may be considerably boosted by sustainable leadership practices such as employee value, shared vision, social responsibility, and friendly labor relations (Suriyankietkaew & Avery, 2016). Moreover, sustainable leadership indirectly impacts sustainable performance (Iqbal et al., 2020). Sustainable leadership aims at improving talented, loyal, and highly engaged employees, providing high-quality goods and services, in order to ethical principles and standards all over the organization. Many organizations that willing to develop their performance and business resistivity based on sustainable leadership practices. Some firms have successfully applied sustainable leadership practices for sustainable growth, such as Wal-Mart creates a sustainable business strategy for minimizing the organization's impact on the global environment that businesses become more socially conscious of showing the sustainability concept to their vendors, consumers, and public (Scott, 2007). Combination of sustainable leadership approaches has been widely and effectively applied in numerous organizations worldwide. This is a better sign of

individuals who choose to live their lives and manage their enterprises in ways that consider their influence on the environment, society, and worldwide economic success (Ferdig, 2007).

The structure of this paper starts by describing sustainability, sustainable development, sustainability in organizations, and sustainable leadership practices among the middle-level managers in Hungary. This paper presents the results from a target group who reviewed the definition of leadership, sustainable leadership, and sustainable leadership practices from their perspective of concepts. The outcome allows further research in the same area.

Literature Review

Sustainability and Sustainable Development

There are over 300 definitions of sustainability in the literature, which differ by subject, such as biology, economics, sociology, and ecology. In the leadership area, sustainability has been discussed among management researchers. According to some perspectives, leadership is essential for ensuring organizational efficiency, durability, and sustainability (Dobson, 1996). The term "sustainable" which comes from the Latin "sub-tenere," refers to anything that can be sustained and preserved, as well as something that is bearable and can be declared with assurance. The term "sustainable" has been used to describe the capacity to attain present goals without compromising future ones in sense of politics, technology, economics, and the environment (Faber et al., 2010). Sustainability is defined as the capability to sustain an entity, outcome, or process throughout time (Basiago, 1998). Sustainable development is the duration of improving cities, lands, and communities, as well as companies in such a way that they fulfill current demands without harming future generations' pleasure (Sills, 1968). The United Nations Brundtland Commission describes sustainable development as "development that meets the present generation's economic, environmental, and social requirements without harming future generations' progress" (World Commission on Environment and Development, 1987). It is visible in previous definitions of sustainable development that various dimensions coincide with each other, focusing on the treatment of steady improvements in reaching development objectives, and can relate to the three main dimensions and engaging are all aspects of economic, human, and environmental. The greatest alternatives are those that fulfill societal demands while also being ecologically and economically feasible, economically and socially fair, and socially and environmentally tolerable (Van Marrewijk & Werre, 2003). As shown in Figure 1, there are three interconnected dimensions of sustainability that highlighted the connections between environmental, economic, and societal factors of sustainable development.

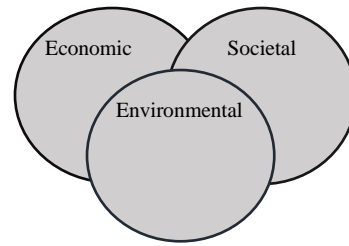


Fig.1. Three pillars of Sustainability

Source: Dyllick & Hockerts, 2002

"Economic sustainability" entails a production system that meets the current level of consumption while not threatening the necessities of humans (Lobo et al., 2015). The term "social sustainability" refers to the relationship between social circumstances such as poverty and environmental degradation (Sing & Ali, 2018). Environmental sustainability refers to how the natural environment continues to be fruitful and resistant to supporting human life. The entirety of ecosystems and the carrying capacity of the natural habitat are important factors in environmental sustainability (Brodhag & Talière, 2006). The three mutually reinforcing pillars of social development, economic growth, and environmental protection, as well as a dynamic interaction among many stakeholders, demonstrate the complex nature of sustainable development (Halisçelik & Soytaş, 2019). When it comes to businesses, the concept of sustainable development suggests that once certain actions are taken, both corporation and its stakeholder relationships are considered in terms of social and environmental issues (Jabłoński et al., 2020). In this framework, an organization aims long-term progress and expansion, balancing economic, social, and environmental objectives while managing its activities. As a result, it may be stated that development benefits economic stability, environmental quality, and social capital (Ciasullo & Troisi, 2013).

Sustainable Leadership and Sustainability in Organizations

Leadership is a process by which leaders influence followers and followers influence leaders (either positively or negatively). In general, leadership is the skill of imagining reality, attempting to achieve a specified objective by recruiting as many people/followers as possible and persuading them to work independently to achieve shared goals (Northouse, 2014). Leaders must retain their abilities to grow both employees and the business as a whole in ability to answer and adjust to complex problems created by changing circumstances (Davies, 2007). Leadership has a significant impact on an organization's long-term success because it shapes employee behavior and mindset (Hallinger & Suriyankietkaew, 2018).

The term "sustainability leadership" indicates the achievement of many goals which relate to (a) raising awareness of sustainability issues, (b) the ability to contribute to the resolution of societal and environmental challenges (c) the cultivation of sustainable characteristics and behaviors, and (d) a faith in one's power to change

things (Savage et al., 2015). Sustainability leadership reflects an increasing understanding among individuals who are deciding to live their lives and run their companies in ways that reflect their influence on the environment, society, and the health of local and global economies (Ferdig, 2007). Sustainable leadership assists leaders in improving their wisdom and abilities in human resource management and organizational resources, as well as offers possibilities to leaders in the educational field to network and sustain each other in achieving not only current but also future organizational goals (Fullan, 2001 ; Hargreaves & Fink, 2006). Therefore, such leadership must improve efficiency and bring positive changes. Leaders who can create ideas, policies, and programs to encourage sustainable habits at the social and organizational level and generate economic success are necessary for sustainability (Metcalf & Benn, 2013). Terms of sustainability, sustainable leadership, eco-sensitive leadership, and green leadership are used consistently to connect sustainable practices with leadership and/or management (Cosby, 2014). Sustainable leadership also emphasizes several outcomes for organizational efficiencies that go far beyond classic measures of achievement, such as worker performance, loyalty, and financial gains to include the "triple bottom line" of wider economic, social, and environmental results. Sustainable leadership affects an organization's reputation, satisfaction, and success (Burawat, 2019) and it emphasizes improving the lives of all stakeholders while creating present and future profits for an organization (McCann & Sweet, 2014). Leaders that practice sustainability leadership adopt a long-term approach in decision-making, supporting systematic innovation targeted at boosting customer value, creating talented, loyal, and highly engaged employees, and providing quality goods, services, options, and durability (Avery & Bergsteiner, 2011). Many logistics studies hypothesize the relationship between sustainable resources and performance (Jiang et al., 2020). Companies are increasingly integrating sustainability into their performance management process by evaluating individual success against sustainability objects (Arnott et al., 2009). Integrating sustainability into a company's core principles helps workers connect with the company's sustainability (Hargett & Williams, 2009). Similarly, company's values are important factors in shaping each employee's overall sustainability drive (Rok, 2009). The implementation of sustainability principles within a business context is known as corporate sustainability (Dyllick & Hockerts, 2002). Therefore, it is advised that sustainability must be integrated into business , which links environmental and social goals into corporate plans (Searcy, 2012). Latest research contributes empirical support to the literature on corporate sustainability drivers. Combination of internal and external sustainability drivers emerged from his examination of the literature. Internal factors contain 'leadership,' 'ethics,' 'culture,' and 'business case,' along with external drivers containing 'government,' 'competitors,' and stakeholder demands (Lozano et al., 2015). The concept of business sustainability was also linked to a layered structure that included economic, social, and ecological components.

The economy is a part of society, which is also a key aspect of the broader ecological system, and these pillars are interrelated. Corporate sustainability depends on six criteria: eco-efficiency, socio-efficiency, eco-effectiveness, socio-effectiveness, sufficiency, and ecological equity (Dyllick & Hockerts, 2002). These corporate sustainability principles may be grouped into value systems that boost financial performance (Van Marrewijk & Werre, 2003).

In the past, organizations measured their success based on market position, assets, and liabilities (Iqbal et al., 2020). At present, Corporations are concentrating on social and environmental success in addition to financial success. While financial success is concerned with criteria like profitability, market share, and sales, social performance is concerned with stakeholders like workers, consumers, and civil society. Environmental performance is concerned with environmental productivity and Environmental Management System set of quantitative variables. High-sustainability organizations have better-developed stakeholder engagement systems, and a long-term orientation, utilize both financial and non-financial indicators, and in the long run considerably outperform sustainability businesses from the point of accounting and stock market performance (Eccles et al., 2014). Organizations measure sustainable performance through monitoring performance concerning the economy, society, and environment in parallel. Sustainable performance evaluates and examines a company's performance from all aspects and for all partners (Charter & Tischner, 2017).

Sustainable Leadership Practices

Businesses are encouraged to use sustainable practices as a business strategy to achieve long-term benefits (Chabowski et al., 2011). According to (Ghassim & Foss, 2020), if a firm's sustainability efforts are to provide long-term value to both the organization and society, sustainability must be integrated into the firm's strategies. In the context of environmental challenges, sustainable leadership is known as highly effective leadership. Sustainable leadership practices emphasize sustained learning, long-lasting success, ethical, social, and responsible behavior, development of resources, environmental diversity, efficient stakeholder management, and an amicable relationship with employee. (Hargreaves & Fink, 2012). Sustainable leadership practices reflect strong management, often lower costs, and enhance reputation and brand image (Mays, 2003). They can also lead to better management of business risks and opportunities that also benefit investors and may make the organization less vulnerable to the effects of adverse events. Designing products and operations to be more sustainable can also increase profits and generate savings through improved processes (Dunphy, 2004).

Rhineland business model, which emphasizes a company's long-term sustainability and advocates all stakeholders, not just shareholders and supports corporate sustainability. According to the Rhineland model, a

company's success derives from a long-term perspective in decision making, building trained and committed personnel, and providing innovative goods, services, and high-quality alternatives. Avery undertook a study in 14 organizations based in Germany and Switzerland to establish Rhineland and Anglo leadership practices and determined that these two models' practices are contrary to one another. Thereafter, Avery acquired sustainable leadership practices by researching companies that have adopted the Rhineland model, namely Scandinavia, South Africa, the United States, Australia, and the United Kingdom (Albert, 1992). Avery created the Sustainable Leadership Framework, which includes 19 different sustainable leadership practices that set it apart from Rhineland and Anglo-US approaches and discovered 19 leadership techniques and classified them as Rhineland and Anglo/US techniques. Scholar discovered that these two techniques are separated into two opposite sets of actions that work hand in hand and then put the 19 factors to the test on a group of enterprises from all around the world that have used Rhineland sustainability practices to

varying degrees. The Rhineland method emergeeconomic model of society in Germany and surrounding nations. The term "Anglo-US method" leads to the idea of corporate culture in the United States and the United Kingdom (Kantabutra & Avery, 2013). Avery and Bergsteiner raised the number of practices to 23 by including four new components, as shown in Table 1 Sustainable Leadership Practices. There are alternatives for the long-term "honeybee" leadership style and the "shareholder-first" or "locust" leadership approach or non-sustainable leadership approach (Avery & Bergsteiner, 2010). The 23 Honeybee leadership components from all three levels collaborate to create a company's image and reputation, customer satisfaction, operational finances, long-term shareholder value, and, ultimately, long-term value for a variety of stakeholders. Although the parts in Table 1 are referred to as practices, some of them represent fundamental principles or views that may all be carried out in company-specific ways (Kantabutra & Avery, 2013).

Table1.Sustainable Leadership Practices

Leadership elements	Sustainable leadership honeybee philosophy	Shareholder-first locust philosophy
Foundation Practices		
1. Developing people	Develops everyone continuously	Develops people selectively
2. Labor relations	Seeks cooperation	Acts antagonistically
3. Retaining staff	Values long tenure at all levels	Accepts high staff turnover
4. Succession planning	Promotes from within wherever possible	Appoints from outside wherever possible
5. Valuing staff	Is concerned about employees' welfare	Treats people as interchangeable and a cost
6. CEO and top team	CEO works as a top team member or speaker	CEO is a decision-maker, a hero
7. Ethical behavior	Doing-the-right thing as an explicit core value	Ambivalent, negotiable, an assessable risk
8. Long-or short-term perspective	Prefers the long-term over the short-term	Short-term profits and growth prevail
9. Organizational change	Change is an evolving and considered process	Change is a fast adjustment, volatile, and can be ad hoc
10. Financial markets orientation	Seeks maximum independence from others	Follows its masters' will, often slavishly
11. Responsibility for environment	Protects the environment	Is prepared to exploit the environment
12. Social responsibility (CSR)	Values people and the community	Exploits people and the community
13. Stakeholders	Everyone matters	Only shareholders matter
14. Vision's role in the business	A shared view of the future is an essential strategic tool	The future does not necessarily drive the business
Higher-level practices		
15. Decision Making	Is consensual and devolved	Is primarily manager-centered
16. Self-management	Staff are mostly self-managing	Managers manage
17. Team orientation	Teams are extensive and empowered	Teams are limited and manager-centered
18. Culture	Fosters an enabling, widely shared culture	Culture is weak except for a focus on short-term results that may or may not be shared
19. Trust	Spreads throughout the organization	Limits knowledge to a few "gatekeepers"
20. Knowledge sharing and retention	High trust through relationships and goodwill	Control and monitoring compensate for low trust
Key performance drivers		
21. Innovation	Strong, systemic, strategic innovation is evident at all levels	Innovation is limited and selective; buys in expertise
22. Staff engagement	Values of emotionally committed staff and the resulting commitment	Financial rewards suffice as motivators, no emotional commitment is expected
23. Quality	Is embedded in the culture	Is a matter of control

Source: Avery & Bergsteiner, 2010

Foundation Practices are referred as management decisions for the organization's benefits. Management decides which practices will be applied from the outset of the organization's presence. Such as personnel improvement and training programs, strategies to dstaff turnover, plan for progression, and valuing employees (Avery & Bergsteiner, 2011). **Higher-level practices** are six practices which indicated by creating self-managing personnel, decision-making, developing a trustable

environment, and establishing an organizational attitude that helps leaders to be sustainable and disseminate organizational-related information (Avery & Bergsteiner, 2011) **Key performance drivers** are a third and most important level of the model in order to innovation, employee participation, and quality that drives organizational performance Quality is improved via teamwork, an educated and productive workforce, and

culture that supports information sharing and develops trust in the organization (Avery & Bergsteiner, 2011).

Research Methodology

Data and Data collection method

Data were collected online via a google form. The questionnaire was made according to G.Avery and

Bergsteiner's criteria (Avery & Bergsteiner, 2011), based on sustainable leadership framework. Furthermore, this type of questionnaire has already been used in previous research developed by Kalkavan (Kalkavan, 2015). We have taken Avery and Bergsteiner's framework as a model for our research and adapted it to our research context. The used framework and related factors can be seen below

Table 2. Statements for Questionnaire

	STATEMENTS	SUSTAINABLE LEADERSHIP PRACTICES
1	In terms of training and development, my goal is to improve everyone constantly.	FOUNDATION PRACTICES
2	In terms of training and development my goal is to improve people selectively	
3	In my interactions with my co-workers, I seek collaboration.	
4	In my interactions with my co-workers, I tend to be aggressive	
5	Long tenure at all levels is quite essential to me	
6	I can accept excessive employee turnover on some levels	
7	I mostly make promotions from within an organization from my employees	
8	Wherever feasible, I like to appoint people from outside the company.	
9	I'm quite concerned about the prosperity of my co-workers	
10	Employees are replaceable for me, and employee cost is a substantial cost pen in accounting.	
11	In my perspective, the CEO works as a top key member of the team or speaker	
12	In my perspective, the CEO is a decision-maker and the idol of his/her employees	
13	In business, "doing the right thing" is more essential than profit.	
14	The assessable risk might be accepted in every scenario to improve profits.	
16	I would rather short-term profits and expansion prevail.	
18	I believe that change is a gradual and intentional process.	
19	I believe individuals should perform as independently as possible to boost profits.	
20	I believe employees should pursue and abide by (obey) managers.	
21	In my business goals, I make a conscious effort to protect the environment	
22	In my perspective, the environment exists to be exploited in order to increase profit.	
24	I believe people and the community are exploited since they are both available to increase the profit of the corporation.	
25	In my opinion, everyone matters, whether they connect to the business world.	
26	In my opinion, only shareholders are important since we do business.	
27	In my opinion, vision statements provide a common perspective of the future, which is an important strategic instrument.	
28	In my opinion, the business does not have to be driven by the future.	
29	Decision-making should be decentralized and cooperative.	HIGHER LEVEL PRACTICES
30	Decision-making should be predominantly manager driven.	
31	In my opinion, employees are capable of self-management.	
32	In my opinion, managers should manage the employees.	
33	Teamwork should be comprehensive and encouraged.	
34	Teamwork should be restricted, and manager centered.	
35	I believe that a widely shared culture encourages and facilitates the achievement of company objectives	
36	I believe that culture may not be shared in order to fulfill short-term business goals.	
37	In my perspective, knowledge sharing is critical and should be spread throughout the business.	
38	In my perspective, information sharing is unnecessary; in fact, I believe that having certain people with expertise within an organization will suffice to fulfill the goal.	
39	In business, I must have a high level of trust established via relationships and goodwill.	KEY PERFORMANCE DRIVERS
40	In business, control and monitoring must be essential in order to compensate for low trust	
41	Strategic innovation is essential and should be supported at all levels of the organization.	
42	Innovation is a high-risk endeavor that should be managed only by managers.	
43	I place great importance on employees who are emotionally committed.	
44	Financial rewards are sufficient motivators; thus, I do not require emotional commitment from my employees	
45	Quality is entrenched in the culture.	
46	Controlling is the only way to create quality.	

Source: Kalkavan, 2015

This framework consists of 46 different statements as odd numbered ones indicate non sustainable leadership statements; even numbered ones indicate sustainable leadership statements. Framework divided into three categories based on sustainable leadership practices first

28 questions foundation practices, following 12 statements are higher level practices, and last 6 six key performance drivers by Avery and Bergsteiner(2010). Furthermore, we decided to further detail this categorization by grouping the three above-mentioned

criteria with the following subcomponents: 1. manager centered leadership, 2. employee centered leadership, 3. organizational profit, 4. employee's engagement, 5. knowledge sharing culture.

Manager centered leadership: Organizational success is achieved under leader's authority with strict rules. Employee centered leadership: Well-being and feelings of employee are the essential for managers. Organizational profit: it is essential to drive a business for success. Employee's engagement: it is associated with how strong commitment employee have for organization. Knowledge sharing culture: it implies organizational culture that supports free exchange knowledge, information between employees and it is essential to drive a business based on sustainable leadership criteria. Main purpose of this study is to examine the level of sustainable leadership skills of middle-level Hungarian managers in a variety of industrial sectors and which sustainable leadership practices with its subcomponents can be preferred to implement in organizations by Hungarian managers. Research questions are:

1. Do Hungarian middle level managers perceive leadership related to more non-sustainable leadership approach or sustainable leadership approach?
2. What is the application level of sustainable leadership practices of middle level Hungarian managers?

The survey was conducted among Hungarian middle-level managers in different industrial sectors through emails, LinkedIn, Facebook social platforms from November until April in 2021-2022. A total of 201 managers participated in the survey. Considering this paradigm, questions were developed, and answers were determined using a five-point Likert scale.

Theoretical Framework and Analytical Method

Descriptive statistics, Exploratory Factor Analysis (EFA) were carried out and mean scores of components were computed in the SPSS 27. Program. The aim of using EFA in this study was to reduce items of questionnaire (Çuhadar & Çakmakçı, 2021). Moreover, purpose of bringing meaningful research result and

accomplish the aim of study some questions has been removed from survey, for this reason EFA analysis was applied to 43 questions. We deleted 15, 17, and 23 questions in order to bring more meaningful items. Purpose of using descriptive statistics in this study was examined most and least considered questions among managers. Aim of computing mean scores of components were to examine level of sustainable and non-sustainable leadership approaches, application level of sustainable leadership practices and subcomponents of sustainable leadership practices comparison one another among managers.

The validity of the scale was evaluated using the Cronbach's Alpha value. References Criteria for the Scale's Reliability are $0 < \alpha < 0.40$ "not reliable", $0.40 < \alpha < 0.60$ "low confidence", $0.60 < \alpha < 0.80$ "reliable", $0.80 < \alpha < 1.00$ is "highly reliable" (Allen, 2006). The Cronbach Alpha of the formed framework is .81. This shows that the framework provides very trustworthy outcomes.

The survey was divided into two sections. The first section is a demographic section that included gender, age, education level, and industry sector in which managers work. The second section is designed for statistical analysis as it is mentioned above.

Results and Discussion

Descriptive Statistics

Survey questions were divided into following way. Firstly, according to Avery and Bergsteiner's criteria (Avery & Bergsteiner, 2011) such as higher-level practices, key performance drivers, foundational practices). Secondly, according to authors' classification (i.e., sub-components mentioned). Thirdly, according to whether they were related to sustainable (i.e., honeybee sustainable leadership philosophy) or non-sustainable leadership approach (i.e., share-holder first locust philosophy).

Table 3: Social-Demographics and Economics Features of Participants

Gender	N	%	Education	N	%
Female	101	50.2	Bachelor's degree	92	45.8
Male	100	49.8	Master's degree	71	35.3
Total	201	100.0	Ph.D. Degree	38	18.9
			Total	201	100
Age			Sectors		
25 and 30	59	29.4	Automotive	3	1.5
31-36	43	21.4	Oil and Gas	48	23.9
37-42	49	24.4	Energy	19	9.5
42 and above	50	24.9	Fashion	6	3.0
Total	201	100	Finance	31	15.4
			Healthcare	8	4.0
			IT	25	12.4
			Logistics and Transport	31	15.4
			Material	7	3.5
			Pharmaceutical Industry	1	0.5

		Real Estate	12	6.0
		Technology	10	5.0
		Total	201	100

Source: developed by authors using SPSS software tools.

The table presents the age of the participants which divided into four groups: 25 -30 age group is 29.4%, 31-36 age group is 21.4%, 37-42 age group is 24.4%, 42 and above 24.9%. The results shows that the highest number of participants between the age of group is 25-30. The percentage of participants was 50.2% of male and 49.8% were female. Educational part of the survey shows 35,3%

of participants is master's degree Ph.D. Degree participants included 18,9%, among participants are bachelor's degree is 45,8%. Managers were from different industry sectors, the highest percentage is Oil& Gas sector 23,9%, the lowest percentage is pharmaceutical sector 0.5%

Table 4. Descriptive Analysis

N	Questions	Mean	Std. Deviation
1	In terms of training and development, my goal is to improve everyone constantly.	3,66	1,19
2	In terms of training and development my goal is to improve people selectively	2,78	1,26
3	In my interactions with my co-workers, I seek collaboration.	4,17	1,19
4	In my interactions with my co-workers, I tend to be aggressive	1,96	1,32
5	Long tenure at all levels is quite essential to me	3,41	1,14
6	I can accept excessive employee turnover on some levels	2,81	1,18
7	I mostly make promotions from within an organization from my employees	3,53	1,07
8	Wherever feasible, I like to appoint people from outside the company.	3,21	1,10
9	I'm quite concerned about the prosperity of my co-workers	3,47	1,15
10	Employees are replaceable for me, and employee cost is a substantial cost pen in accounting.	3,39	1,10
11	In my perspective, the CEO works as a top key member of the team or speaker	2,13	1,27
12	In my perspective, the CEO is a decision-maker and the idol of his/her employees	3,52	1,04
13	In business, "doing the right thing" is more essential than profit.	1,99	1,27
14	The assessable risk might be accepted in every scenario to improve profits.	3,28	1,10
16	I would rather short-term profits and expansion prevail.	2,65	1,19
18	I believe that change is a gradual and intentional process.	3,50	1,12
19	I believe individuals should perform as independently as possible to boost profits.	2,25	1,29
20	I believe employees should pursue and abide by (obey) managers.	3,49	1,10
21	In my business goals, I make a conscious effort to protect the environment	1,85	1,28
22	In my perspective, the environment exists to be exploited in order to increase profit.	2,31	1,48
24	I believe people and the community are exploited since they are both available to increase the profit of the corporation.	2,80	1,36
25	In my opinion, everyone matters, whether they connect to the business world.	3,35	1,50
26	In my opinion, only shareholders are important since we do business.	3,43	1,30
27	In my opinion, vision statements provide a common perspective of the future, which is an important strategic instrument.	1,93	1,15
28	In my opinion, the business does not have to be driven by the future.	3,19	1,13
29	Decision-making should be decentralized and cooperative.	3,95	1,04
30	Decision-making should be predominantly manager driven.	3,24	1,09
31	In my opinion, employees are capable of self-management.	3,48	1,12
32	In my opinion, managers should manage the employees.	3,80	1,15
33	Teamwork should be comprehensive and encouraged.	4,38	1,17
34	Teamwork should be restricted, and manager centered.	3,00	1,27
35	I believe that a widely shared culture encourages and facilitates the achievement of company objectives	3,89	1,00
36	I believe that culture may not be shared in order to fulfill short-term business goals.	2,78	1,18
37	In my perspective, knowledge sharing is critical and should be spread throughout the business.	3,79	1,14
38	In my perspective, information sharing is unnecessary; in fact, I believe that having certain people with expertise within an organization will suffice to fulfill the goal.	2,68	1,30
39	In business, I must have a high level of trust established via relationships and goodwill.	4,03	1,26
40	In business, control and monitoring must be essential in order to compensate for low trust	3,79	1,28
41	Strategic innovation is essential and should be supported at all levels of the organization.	4,28	1,10
42	Innovation is a high-risk endeavor that should be managed only by managers.	3,61	1,27
43	I place great importance on employees who are emotionally committed.	3,04	1,17
44	Financial rewards are sufficient motivators; thus, I do not require emotional commitment from my employees	3,79	1,35
45	Quality is entrenched in the culture.	3,60	1,05
46	Controlling is the only way to create quality.	3,95	1,37

Source: developed by authors using SPSS software tools.

We used a 5-point Likert range (1 =strongly disagree, 2 =disagree) 3 =neutral, 4 =agree} and 5 = strongly agree) for questions. Higher scores reflected more positive perceptions. According to the descriptive analysis

participants interested in 3rd question more than other questions with 4.17 score and less interesting question was 23rd with 1.85 lowest score.

Exploratory Factor Analysis

As a result of the analysis, it was determined that 43 variables could be grouped under the first 6 factors with an eigenvalue greater than 1. It has been determined that these three factors can explain 68.78% of the total variance (Eigenvalue), and it is considered sufficient that

the explained variance ratio is greater than 0.50 (Turanli et al., 2012). The result of factor analysis is given in Table 5. The KMO (0,912, $P < 0.05$) and Bartlett's test of sphericity (Chi square $[X^2(861)] = 6644,055$, $P < 0.01$) suggest that the dataset was suitable for Factor Analysis. The Cronbach-Alpha values of the five components obtained were 0,729 that indicating that these components were highly reliable (Hu & Bentler, 1999).

Table 5. Exploratory Factor Analysis

Factor names	Statements	Component						Cronbach's alpha
		1	2	3	4	5	6	
Manager centered leadership	44	0,894						0,925
	46	0,829						
	42	0,826						
	26	0,805						
	32	0,790						
	40	0,784						
	34	0,704						
	18	0,682						
	20	0,678						
	43	0,601						
	10	0,573						
	30	0,544						
	25	0,544						
Employee centered leadership	39		0,825					0,927
	33		0,815					
	29		0,810					
	41		0,789					
	35		0,788					
	45		0,764					
	37		0,698					
	31		0,641					
Organizational profit	3		0,560					0,927
	16			0,833				
	22			0,809				
	24			0,771				
	4			0,700				
	21			0,669				
	8			0,667				
	14			0,662				
	27			0,599				
	28			0,596				
	13			0,586				
Employee's engagement	11			0,537				0,779
	19			0,535				
	5				0,769			
	9				0,732			
	1				0,610			
Knowledge sharing culture	7				0,536			0,810
	6				0,446			
	38					0,709		0,810
	36					0,545		
	12						0,494	
KMO and Bartlett's Test								0,912
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.								6644,055
Bartlett's Test of Sphericity								861
								Sig. 0

Source: developed by authors using SPSS software tools

According to EFA, the author has named six components: First one is manager centered leadership behavior, second one is employee centered leadership behavior, third one is organizational profit, fourth one is employee's engagement last one is knowledge sharing culture. However, sixth component result came out 0,494 which is below 0.5 has been removed from factor analysis (Tuan et al., 2005)

Comparison Between Level of Non-Sustainable Leadership Approaches and Sustainable Leadership Approaches Among Hungarian Managers

Table 6: Level of Sustainable Leadership Approaches (Min-1 / Max-5)

	Average
Non-Sustainable Leadership	3.75
Sustainable Leadership	3.20

Source: developed by authors using SPSS software tools.

The analysis indicated that the managers' non sustainable leadership skills are not significantly higher than sustainable leadership skills. As a result, it is possible to conclude that there is room for improvement among the participating managers in terms of sustainable leadership abilities.

Comparison of Sustainable Leadership Practices Among Hungarian Managers

Table 7: The Level of Sustainable Leadership Practices Among Managers (Min-1 / Max-5)

	Average
Foundation Practices	3.35
Higher-Level Practices	3.56
Key Performance Drivers	3.69

Source: developed by authors using SPSS software tools.

When considering the sustainable leadership practices, it was discovered that key performance drivers are most applicable sustainable leadership practices by the managers who participated to survey. Therefore, the skills that support performance needed to be improved.

Table 8: The Level of Subcomponents of Sustainable Leadership Practices Among Managers (Min-1 / Max-5)

	Average
1. Manager centered leadership	3.4
2. Employee centered leadership	3.9
3. Organizational profit	3.2
4. Employee's engagement	3.4
5. Knowledge sharing culture	2.7

Source: developed by authors using SPSS software tools.

Hungarian managers consider more employee centered leadership for organizational success. Knowledge sharing culture is least considered by participants.

Conclusion

Sustainable leadership is trending topic within the fields of leadership, sustainable development and sustainability. Today's organizations require sustainable leaders to accomplish long term growth and continuous improvement in order to organization performance. Sustainable leadership practices are applied to business structure in order to aiming high organizational

performance. Sustainable leadership and sustainable leadership practices significantly become applicable by the managers and organizations day by day not only for organizations as well as for sustainable world which we must to preserve for our children, grandchildren and future generations.

Sustainability and sustainable leadership practices seen as a crucial strategy in order to organization's success for long term. Organizations that implement sustainable leadership practices are able to reduce organizational costs therefore sustainability is not only help to improve business in order to societal and environmental, also help business improve economically that lead to sustainability of organizations. As we mentioned earlier lower costs is one of the advantage of implementation of sustainable leadership practices besides that better management is other advantage of sustainable leadership practices in order to handle challenges and opportunities in the market that cause organizations are more stable in terms of economically and less vulnerable than organizations that do not apply sustainable leadership practices.

Managers who willing to apply sustainable leadership and sustainable leadership practices in a business must start to examine her or his own both successful and unsuccessful leadership skills in order to reduce unsufficient qualities to keep sufficient qualities of leadership for long term. Once manager begin to examine one's qualities and then examination process must be taken further step. Team qualities and organizational needs must be identified in order to create organizational sustainability.

The main purpose of this study is to examine the level of sustainable leadership skills of middle-level Hungarian managers in a variety of industrial sectors and which sustainable leadership practices with its subcomponents can be preferred to implement in organizations by Hungarian managers. Questionnaire method was used among 201 middle-level Hungarian managers in various sectors. General findings showed that sustainable leadership scores of the Hungarian managers (3.20) stayed below non- sustainable leadership scores (3.75) that indicates that there is a slight difference between level of non sustainable leadership and sustainable leadership skills of Hungarian managers. They need to improve themselves relate to sustainable leadership skills based on applying sustainable leadership practices in organizations. Among sustainable leadership practices key performance drivers (3.69) are the most applicable sustainable leadership practices among the middle level Hungarian managers comparing to foundation practices (3.35) and score of higher-level practices (3.56). According to subcomponents of sustainable leadership practices, employee centered leadership is the highest score (3.9) and lowest score is the knowledge sharing culture (2.7). Other scores of subcomponent of sustainable leadership practices are managers centered leadership (3.4), organizational profit (3.2), employee's engagement (3.4) among the middle level Hungarian managers.

In a nutshell, despite the presence of strong leadership skills of middle level of Hungarian managers, their sustainable leadership skills are not far below their

aspirations. According to sustainable leadership practices “key performance drivers” are most applicable practices by middle level of Hungarian managers and other practices must be implemented as much as “key performance drivers.” Studies on sustainable leadership have focused more on drawing its conceptual framework. In this context, future studies should be supported by applied research

References

- Albert, M. (1992). The Rhine model of capitalism: an investigation. *European Business Journal*, 4(3).
- Allen, J. B. (2006). The perceived belonging in sport scale: Examining validity. *Psychology of Sport and Exercise*, 7(4). <https://doi.org/10.1016/j.psychsport.2005.09.004>
- Arnott, J., Lacy, P., & Lowitt, E. (2009). The challenge of integrating sustainability into talent and organization strategies: Investing in the knowledge, skills and attitudes to achieve high performance. *Corporate Governance*, 9(4). <https://doi.org/10.1108/14720700910985025>
- Avery, G. C., & Bergsteiner, H. (2010). *Honeybees & locusts: The business case for sustainable leadership*. Allen & Unwin.
- Avery, G. C., & Bergsteiner, H. (2011). Sustainable leadership practices for enhancing business resilience and performance. *Strategy & Leadership*, 39(3). <https://doi.org/10.1108/10878571111128766>
- Basiago, A. D. (1998). Economic, social, and environmental sustainability in development theory and urban planning practice. *Environmentalist*, 19(2), 145–161.
- Brodhag, C., & Talière, S. (2006). Sustainable development strategies: Tools for policy coherence. *Natural Resources Forum*, 30(2). <https://doi.org/10.1111/j.1477-8947.2006.00166.x>
- Burawat, P. (2019). The relationships among transformational leadership, sustainable leadership, lean manufacturing and sustainability performance in Thai SMEs manufacturing industry. *International Journal of Quality and Reliability Management*, 36(6). <https://doi.org/10.1108/IJQRM-09-2017-0178>
- Chabowski, B. R., Mena, J. A., & Gonzalez-Padron, T. L. (2011). The structure of sustainability research in marketing, 1958-2008: A basis for future research opportunities. *Journal of the Academy of Marketing Science*, 39(1). <https://doi.org/10.1007/s11747-010-0212-7>
- Charter, M., & Tischner, U. (2017). Sustainable solutions: Developing products and services for the future. In *Sustainable Solutions: Developing Products and Services for the Future*. <https://doi.org/10.4324/9781351282482>
- Ciasullo, M. V., & Troisi, O. (2013). Sustainable value creation in SMEs: A case study. *The TQM Journal*.
- Cosby, D. M. (2014). Sustainability program leadership for human resource development professionals: A competency model. *Journal of Organizational Culture, Communications and Conflict*, 18(2).
- Çuhadar, S., & Çakmakçı, Y. (2021). THE RELATIONSHIP BETWEEN DIMENSIONS OF CONSUMER BASED BRAND EQUITY AND PURCHASING DECISION OF CONSUMER FOR SPORTS SHOES (CASE OF TURKEY). *Management (16487974)*, 37(2).
- Davies, B. (2007). Developing sustainable leadership. *Developing Sustainable Leadership*, 1–216.
- Dobson, A. (1996). Environment sustainabilities: An analysis and a typology. *Environmental Politics*, 5(3), 401–428.
- Dunphy, D. (2004). Sustainability: seize the strategic opportunity. *Executive Excellence*, 21(1), 19.
- Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment*, 11(2), 130–141.
- Eccles, R. G., Ioannou, I., & Serafeim, G. (2014). The impact of corporate sustainability on organizational processes and performance. *Management Science*, 60(11). <https://doi.org/10.1287/mnsc.2014.1984>
- Faber, N., Jorna, R., & van Engelen, J. O. (2010). The sustainability of “sustainability”—A study into the conceptual foundations of the notion of “sustainability.” In *Tools, techniques and approaches for sustainability: Collected writings in environmental assessment policy and management* (pp. 337–369). World Scientific.
- Ferdig, M. A. (2007). Sustainability leadership: Co-creating a sustainable future. *Journal of Change Management*, 7(1), 25–35.
- Fullan, M. (2001). The New Meaning of Educational Change. In *The New Meaning of Educational Change*. <https://doi.org/10.4324/9780203986561>
- Ghassim, B., & Foss, L. (2020). How Do Leaders Embrace Stakeholder Engagement for Sustainability-Oriented Innovation? In *New Leadership in Strategy and Communication*. https://doi.org/10.1007/978-3-030-19681-3_6
- Halişçelik, E., & Soytas, M. A. (2019). Sustainable development from millennium 2015 to Sustainable Development Goals 2030. *Sustainable Development*, 27(4). <https://doi.org/10.1002/sd.1921>
- Hallinger, P., & Suriyankietkaew, S. (2018). Science Mapping of the Knowledge Base on Sustainable Leadership, 1990-2018. In *Sustainability (Switzerland)* (Vol. 10, Issue 12). <https://doi.org/10.3390/su10124846>
- Hargett, T. R., & Williams, M. F. (2009). Wilh. Wilhelmsen Shipping Company: Moving from CSR tradition to CSR leadership. *Corporate Governance*, 9(1). <https://doi.org/10.1108/14720700910936074>
- Hargreaves, A., & Fink, D. (2006). Redistributed Leadership for Sustainable Professional Learning Communities. *Journal of School Leadership*, 16(5), 550–565. <https://doi.org/10.1177/105268460601600507>
- Hargreaves, A., & Fink, D. (2012). Sustainable leadership (Vol. 6). San Francisco, CA.
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1). <https://doi.org/10.1080/10705519909540118>
- Iqbal, Q., Ahmad, N. H., & Halim, H. A. (2020). How does sustainable leadership influence sustainable performance? Empirical evidence from selected ASEAN countries. *Sage Open*, 10(4), 2158244020969394.
- Jabłoński, M., Timmers, P., & Sarkis, J. (2020). Sustainability in business models in the network economy. *Electronic Markets*, 30(4), 675–678.
- Jiang, Y., Jia, F., Blome, C., & Chen, L. (2020). Achieving sustainability in global sourcing: towards a conceptual framework. In *Supply Chain Management* (Vol. 25, Issue 1). <https://doi.org/10.1108/SCM-12-2018-0448>
- Kalkavan, S. (2015). Examining the Level of Sustainable Leadership Practices Among the Managers in Turkish Insurance Industry. *Procedia - Social and Behavioral Sciences*, 207. <https://doi.org/10.1016/j.sbspro.2015.10.145>
- Kantabutra, S., & Avery, G. (2013). Sustainable leadership: Honeybee practices at a leading Asian industrial conglomerate. *Asia-Pacific Journal of Business Administration*, 5(1). <https://doi.org/10.1108/17574321311304521>
- Kim, E.-J., & Park, S. (2019). The role of transformational leadership in citizenship behavior: Organizational

- learning and interpersonal trust as mediators. *International Journal of Manpower*, 40(7), 1347–1360. <https://EconPapers.repec.org/RePEc:eme:ijmpps:ijm-12-2018-0413>
- Lobo, M. J., Pietriga, E., & Appert, C. (2015). An evaluation of interactive map comparison techniques. *Conference on Human Factors in Computing Systems - Proceedings, 2015-April*. <https://doi.org/10.1145/2702123.2702130>
- Lozano, R., Carpenter, A., & Huisingh, D. (2015). A review of ‘theories of the firm’ and their contributions to Corporate Sustainability. *Journal of Cleaner Production*, 106, 430–442.
- Mays, S. (2003). *Corporate sustainability-an investor perspective: the Mays report*. Assistant Secretary. Environment Protection Branch. Department of the
- McCann, J., & Sweet, M. (2014). The perceptions of ethical and sustainable leadership. *Journal of Business Ethics*, 121(3), 373–383.
- Metcalfe, L., & Bann, S. (2013). Leadership for Sustainability: An Evolution of Leadership Ability. *Journal of Business Ethics*, 112(3). <https://doi.org/10.1007/s10551-012-1278-6>
- Northouse, P. G. (2014). Leadership: Theory and Practice. *Journal of Educational Administration*, 52(1). <https://doi.org/10.1108/jea-08-2013-0093>
- Rok, B. (2009). People and skills ethical context of the participative leadership model: Taking people into account. *Corporate Governance*, 9(4), 461–472. <https://doi.org/10.1108/14720700910985007>
- Salzmann, O., Ionescu-Somers, A. M., & Steger, U. (2005). The business case for corporate sustainability: Literature review and research options. *European Management Journal*, 23(1). <https://doi.org/10.1016/j.emj.2004.12.007>
- Savage, E., Tapics, T., Evarts, J., Wilson, J., & Tirone, S. (2015). Experiential learning for sustainability leadership in higher education. *International Journal of Sustainability in Higher Education*, 16(5). <https://doi.org/10.1108/IJSHE-10-2013-0132>
- Scott, L. (2007, February 1). *Walmart CEO Lee Scott unveils “sustainability 360” Walmart Corporate.*
- Searcy, C. (2012). Corporate Sustainability Performance Measurement Systems: A Review and Research Agenda. In *Journal of Business Ethics* (Vol. 107, Issue 3). <https://doi.org/10.1007/s10551-011-1038-z>
- Shriberg, M., & Macdonald, L. (2013). Sustainability Leadership Programs: Emerging Goals, Methods & Best Practices. *Journal of Sustainability Education*, 5. <http://www.susted.org/>
- Sills, D. L. (1968). International encyclopedia of social sciences, 17 vols. *International Encyclopedia of Social Sciences*, 17 Vols.
- Šimanskienė, L., & Župerkienė, E. (2014). Sustainable leadership: The new challenge for organizations. *Forum Scientiae Oeconomia*, 2(1), 81–93.
- Sing, M., & Ali, F. (2018). *Global encyclopedia of public administration, public policy and governance*.
- Suriyankietkaew, S., & Avery, G. (2016). Sustainable leadership practices driving financial performance: Empirical evidence from Thai SMEs. *Sustainability (Switzerland)*, 8(4). <https://doi.org/10.3390/su8040327>
- Tideman, S. G. (2013). *Sustainable Leadership: Toward a Workable Definition*. www.greenleaf-publishing.com
- Tripathi, D., Priyadarshi, P., Kumar, P., & Kumar, S. (2020). Micro-foundations for sustainable development: leadership and employee performance. *International Journal of Organizational Analysis*, 28(1). <https://doi.org/10.1108/IJOA-01-2019-1622>
- Tuan*, H., Chin, C., & Shieh, S. (2005). The development of a questionnaire to measure students’ motivation towards science learning. *International Journal of Science Education*, 27(6), 639–654.
- Turanli, M., Taşpınar Cengiz, D., Bozkır, Ö., Ticaret Üniversitesi, D., Edebiyat Fakültesi, F., Bölümü, D., & Lisans Öğrencisi, Y. (2012). *FAKTÖR ANALİZİ DLE ÜNİVERSİTEYE GİRİŞ SINAVLARINDAKİ BAŞARI DURUMUNA GÖRE ÖLLERİN SİRALANMASI*.
- Van Marrewijk, M., & Werre, M. (2003). Multiple Levels of Corporate Sustainability. *Journal of Business Ethics*, 44(2–3). <https://doi.org/10.1023/A:1023383229086>
- World Commission on Environment and Development. (1987). Report of the World Commission on Environment and Development: Our Common Future (The Brundtland Report). *Medicine, Conflict and Survival*, 4. <https://doi.org/10.1080/07488008808408783>

RECEIVED: 02 May 2022

ACCEPTED: 28 November 2022

Sevinur Çuhadar is a PhD student in the Doctoral School of Economic and Regional Sciences, Hungarian University of Agriculture and Life Sciences. Her research profession is Leadership and Sustainable Leadership, Leadership Styles in Organizations. Sevinur holds a Bachelor of Arts degree in Economics from the University of Dokuz Eylül, Turkey and master’s degree in management and Leadership from Szent Istvan University in Hungary. Address: Hungarian University of Agriculture and Life Sciences, Péter K. Str. 1, H-2100 Gödöllő, Hungary. E-mail: sevinurcuahadar@gmail.com Telephone: +36 70 255 33 28.

Dr. Habil. Ildiko Rudnak is Associate professor at Szent István University, Institute of Social Sciences, Field of scientific research: multiculturalism communication organizational culture training - coaching culture shock adaptation competences. Address: H-2100 Gödöllő, Péter Károly u. 1, Hungary, Phone. +36 30 212-7545. E-mail Rudnak.Ildiko@uni-mate.hu

