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ACHIEVING SUSTAINABLE LEADERSHIP TO SUPPORT EDUCATIONAL TRANSFORMATION IN SAUDI ARABIA

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ABSTRACT

This study investigates the extent to which sustainable leadership is achieved in Saudi universities and its role in supporting educational transformation. Using a descriptive-analytical approach, a questionnaire was administered to a random sample of 583 academic and administrative staff members from several Saudi universities during the academic year 2023/2024. The study examined five dimensions of sustainable leadership: ethical behavior, strategic orientation, innovation and creativity, social responsibility, and investment and development of financial and human resources. The findings revealed a very high level of sustainable leadership practices across all dimensions, with social responsibility ranking first. In addition, the results indicated a very high level of educational transformation in Saudi universities. Regression analysis showed a statistically significant positive impact of all sustainable leadership dimensions on educational transformation, confirming the main and sub-hypotheses. The study concludes that sustainable leadership plays a critical role in enhancing educational transformation in Saudi universities and highlights the importance of strengthening leadership practices to support sustainable development in higher education.

KEYWORDS: Sustainable Leadership, Educational Transformation, Saudi Universities, Higher Education, Educational Sustainability.

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1. INTRODUCTION

This article investigates the degree of achieving sustainable leadership to support educational transformation in Saudi universities, focuses on identifying the requirements for implementing sustainable leadership in Saudi universities, and explores the extent of sustainable leadership dimensions implemented by academic educators in universities in KSA. To achieve that we selected a number of academic leaders and administrative staff from several Saudi universities.

The world has witnessed a distant and rapid changes and improvements in various economic, social, educational, environmental, political, and technological fields. Therefore, organizations, governments, and communities must adapt to many new and important roles to keep pace with these improvements and achieve development and continuity. The success of any institution and it is evolution requires advanced and modern leadership that can face difficulties and challenges, among these is sustainable leadership, which is considered one of the contemporary and advanced approaches for all institutions, aiding them in achieving continuity and excellence (Alamari & Alaiban, 2023).

Sustainable leadership is considered one of the most important new leadership approaches that address the major difficulties and complexities faced by universities, It emphasizes the need to change from the traditional focus that is illustrated in human resource and financial control, to enabling universities to contribute to social and environmental impacts through long-term approaches This change makes the evolution and growth of leaders and followers a vital part of organizational development processes (Al Ardan, 2020).

Sustainable leadership is a process of strategic integration of the principles of sustainability in all aspects of the organization. it is a process of integrating sustainability principles into all organizational activities, starting from the operation process to the decision-making process. sustainable leadership stand on the comprehensive awareness of economic, social, and environmental issues. it is not limited to meeting present needs but also includes anticipating future options and needs. Therefore, the sustainability leader must form a culture of continuous growth and innovation that is responsible for developing sustainability practices and technologies (Aljendan, 2024; Alamri & Alaiban, 2023).

Saudi Arabia is one of the countries that have focused on growing universities system. Since the beginning of 2004, the Kingdom has exerted considerable efforts to renovate and expand the higher education system. Moreover, it tripled the budget allocated to higher education in 2007, where spending on higher education reached 25% of the total GDP, making it the highest rate of education expenses the world (Alhazmi, 2018).

The interest in sustainable leadership in higher education began in 1997 when Taylor presented the first declaration for the higher education sector advocating, according to the principle of institutional ecological practice, for institutions of higher education to assume leadership and supervision responsibilities. Following this declaration, numerous initiatives and conferences were undertaken to support the integration of sustainability within the framework of universities and higher education institutions. UNESCO in 2012 also called in the Sustainable Development Conference, on the necessity for higher education institutions to commit to sustainability practices in their operations (Eid, 2022). Alhazmi (2022) asserted that one of the most significant shifts and developments they are experiencing is the transition to sustainability within universities, which requires leadership that supports, secures, and facilitates its adoption. Moreover, effective management must ensure continuity in achieving success and progress. Additionally, Farooq et al., (2017) underscored the importance of universities adopting modern management approaches and methods to facilitate sustainable leadership and provide a conducive work environment for all employees to achieve their goals.

The study of Özer & Suna (2024) has shown that in the middle of ongoing social transformations, education emerges as one of the most important and impactful systems. Due to its enormous resources, education has the unique ability to reach all classes of society, enhancing awareness and developing individual's fundamental skills. However, equipping society with the necessary skills to face the complex challenges of contemporary transformations is exceedingly challenging. Addressing this challenge requires educational systems to adapt to ongoing changes by updating their physical infrastructure, enhancing human resources, and revising policies.

Another factor to consider is the use of online technology in educational courses not fully online, such as mixed-mode, hybrid, blended, and web-enhanced courses, which are gaining popularity across various educational levels. However, there is a lack of reliable data across institutions regarding hybrid and blended learning models, and the complexities of definitions make collecting such data

a significant challenge. What may be considered a blended course in one institution could be seen as a "web-enhanced" course in another, making it difficult to determine the actual level of change represented by the use of the internet in education. Despite numerous studies and articles on blended and hybrid models, these studies often focus on individual experiences within a specific course, programme, or institution, particularly in higher education in the United States where course content and curriculum are typically determined by individual academic departments and instructors. It is indeed significant to conduct further research and analysis to understand the extent to which these models fundamentally impact educational transformation or whether the changes are superficial (Picciano, et al., 2010).

Based on the preceding observation the researcher observed the existence of many challenges and difficulties facing education in Saudi Arabia universities as a result of the changes and development of the era, this has led to the emergence of many modern leadership styles. Consequently, there came a need to introduce sustainable leadership in Saudi Arabia universities and shed light on the availability of sustainable leadership skills among leaders.

The importance of this study lies in it is exploration of a significant topic "achieving sustainable leadership to support the educational transformation in Saudi universities". Therefore, the study is determined by the theoretical significance which lies in the striving to provide a clear image of sustainable leadership and it is role in supporting educational transformation in Saudi universities, it focused on developing leaders in Saudi universities in accordance with modern management trends, and the rarity of studies that dealt with this topic. Also, Practical significance which lies in the benefits on society from this paper by understanding the outcomes and the attention paid to these outcomes by specialists in educational fields, developing positive aspects, and applying suitable solutions.

The study's problem becomes evident when answering the following main question: **What is the extent of implementing sustainable leadership to support educational transformation within Saudi Arabia's universities?**

This study investigates this main question by focusing on the sub-questions below:

- What is the extent to which academic educators can apply sustainable leadership dimensions in Saudi universities?
- What are the needs for implementing sustainable leadership in Saudi universities?

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

This study examines the literature related to determining the extent of achieving sustainable leadership in Saudi universities and its role in supporting educational transformation in them.

(Peng et al., 2024) spotlighted in his literature review the multiple effects of sustainable leadership on education quality. policies, organizational leadership, and curriculum development the literature review highlighted the significance of their improving. The review is established on a comprehensive of recent publications, because Sustainable leadership involves an effect on education standard, it is evolution inside the education context, and the opportunities and obstacles it present. the review has highlighted it is notable development.

2.1. Ethical Behavior and Educational Transformation

Ethics of sustainable leadership need to be seen as a process; it can be divided into a series of phases, a successively and seamlessly linked ones, first phase stresses on input, the second focus on the action taken, third one addresses output, these three phases may be seen as a support to achieve sustainability in leadership ethics, for summary ethics sustainable leadership is a continuous and iterative process (Svensson & Wood, 2007). Also, Leadership coordinated with proper ethical understanding, result in an organization that act ethically and operate in responsible manners. Ethical leadership helps improve employees "commitment, organizational citizenship behavior, motivation, fairness, employee desire and willingness in reporting conduct that are unethical, and a drastic reduction in absenteeism, corruption and incivility within the workplace" (Adamu et al., 2023). It is also important to Utilize ethical and analytical thinking by leaders is important to reposition their perspective of the purpose of leadership away from individuality and self-sufficiency. Leaders who exhibit democratic procedures and collegiality as part of a dispersed paradigm, setting priorities together for the benefit of their communities, are required (Sanford et al., 2019).

Among the prerequisites for establishing lasting leadership in academic institutions is transparency, because sustainable leadership is forthcoming, moral, and fearless for different stakeholders to investigate and challenge its company's facts and choices (Eid, 2022).

Digital transformation from an ethical perspective: A Three-Dimensional Approach First: The Learner in the context of digital education, the learner needs a strong moral compass guided by religious values to regulate their behavior, along with awareness of digital laws to protect themselves and their rights. Instilling values such as honesty and respect, and warning against unethical digital practices, are also essential. Second: The family, family holds the responsibility of instilling religious values and guiding children toward responsible use of technology. They must model appropriate digital behavior, monitor the content their children are exposed to, engage with them in digital learning, and maintain consistent communication with the school to address any ethical concerns. Third: The educational institution plays a pivotal role in promoting digital values through modeling behavior, guidance, and curriculum design. It contributes to building ethical and technological awareness among students, monitors their behavior, and supports them to ensure a safe and responsible learning environment (Al-Ghamdi, 2022, p. 270).

Lagura & Paglinawan (2024) stated that stablishing rules that ensure equal accessibility to digital materials for all students will reduce inequalities and create an inclusive learning environment, and educating educators in digital fluency and sustainable practices both are tactics for enhancing their capacity to lead sustainably in a digitally transformed setting.

Many Recent studies have investigated the connection between sustainable leadership practices and academic results; behaviors like inclusivity, ethical leadership, and resilience received a lot of scholarly attention (Peng et al., 2024).

Usually infusing an ethical analysis that supports the morality of the actions into the ongoing decision-making process that result from digital technologies related to their inclusion and use in education. These choices and actions are made in a setting that is both local and global, where people, values, and technologies come together (Olcott et al., 2015). Also, it makes sense to investigate how conflicts in the workplace may affect how ethics is seen both conceptually and practically, because the expectations for ethical compliance within the profession do not always align with the complex reality of working in the sector, even though education as a whole is thought to be an inherently ethical profession. Additionally, the reality may not always comply with practitioner idealism regarding individual professional and ethical identity (Cliffe & Solvason, 2022).

2.2. Strategic Orientation and Educational Transformation

Sustainability execution is probably influenced by Innovational strategy of an organization. The masterful capability of organization allows it to diminish the tension between "explorational and exploitational" innovation by Grapping and Rearranging itself to allow revenue retention (van Lieshout et al., 2021). Gupta (2018) also said that the ability to impact others to take routine decisions willingly for the sake of organization stability is the meaning of strategic leadership. Transforming critical situations to significant chances is what strategic leaders do. Creation of wealth in established and also in entrepreneurial firms is incessant contributed to by strategic leadership. The ability to impact others to voluntarily take routine decisions to improve growth and sustainability of organization is the strategic leadership. McCarthy et al. (2023) stated that Sufficient funding and resources to support digital transformation's growth and sustainability and strategic planning are extremely important, as stated by the organizations that were investigated in their officially accessible websites and written plans. Technology companies and educational systems emphasized the significance of strategic analysis and sustainability without specifically mentioning a business plan. This is in accordance with business planning's main purpose in consulting firms. As consulting firms went into more detail about what should be covered by a strategy and what adjustments have been successful in regard to planning and strategy. Also Fatimah & Syahrani (2022) stated that it is important for leaders to implement and take different actions to improve educational institutions. Due to its ability to help educational institutions overcome a variety of issues. A leader engages in strategic management in an effort to improve himself so that educational activities can continue and educational quality can rise. Also As Khoo (2017) stated that In addition to battling for the survival and future of its own institutions and practices, higher education leadership has to coordinate an important transition toward new creative multidisciplinary methods of operation.

Al-Jamal et al. (2023, p. 61) stated that recognizing digital transformation as an effective strategic direction in education necessitates enhancing the user experience for both teachers and students. This involves providing specialized digital tools that support various academic disciplines, and delivering electronic courses under the supervision of qualified academic staff and in accordance with international

standards. The transformation also includes shifting to fully electronic transactions through smart portals, eliminating paper-based procedures, and implementing integrated digital systems for document management, performance tracking, and automated evaluation. Additionally, the adoption of modern technological infrastructure plays a vital role in supporting both educational and administrative functions. Executive dashboard technologies are employed to enable management to efficiently monitor performance across all levels. Curricula are continuously updated to align with labor market demands and technological advancements. These efforts must be guided by a national vision and a comprehensive strategic plan to ensure that digital transformation effectively contributes to the enhancement of teaching and learning quality.

As said by Fatimah & Syahrani (2022) a leader must approach everything he leads with a sense of accountability. As a leader must be able to tackle any issues that arise in the educational setting and possess the appropriate leadership techniques to carry out the scheduled program of tasks, also a leader needs to identify the best way to get past the challenges that arise. The key to success of the organization in accomplishing what it wants is strategy.

And also, Sanford et al. (2019) said that educational leaders' ideas of leadership and tactics must adapt to the situations they find themselves in, making advantage of rather than disregarding the complexity of educational institutions. due to the fast pace changes.

2.3. Innovation And Creativity and Educational Transformation

Leadership and innovations concepts are connected. Continuously thinking about building a better future by presenting some changes is what define a leader, and for this we can assume that instinctive innovators are leaders. Prompting an environment that aid "cultivating the workforce psychosomatically and providing enough room for any innovation to bloom" is the responsibility of trend setter leaders. Innovativeness and far-sightedness are characteristics of sustainable leadership consequently it aids and support the innovation process without draining human or economic resources. Executing an analysis of previous life and learn from experiences that are worthy is what sustainable leadership do to thrive a new future. (Haroon et al., 2019), also Javed et al. (2021) stated that Workplace creativity and innovation need leadership as it preforms an important role in them.in the research field creativity, innovation and leadership are in-function and spreading. Evolution of corporate sustainability need innovation as it preforms crucial role in it consequently in Assuming Sustainable leadership methods innovation is important. Innovation, sustainable leadership and leader long term views are remarkably interconnected concepts at an organizational level.

Kenawi et al. (2024, p. 47) Educational transformation is a key factor in the development of students' creative skills through the use of digital technologies, enabling them to acquire critical and creative thinking skills. The integration of modern technologies provides an interactive learning environment that fosters creativity and contributes to curriculum updates that include innovation and problem-solving. Teaching creativity in schools is essential for developing critical and creative thinking skills, helping students apply their ideas in real-life situations. Despite challenges such as a lack of technological resources and teacher training, digital transformation remains a crucial step toward building an educational environment that supports creativity. Ultimately, educational transformation is essential for preparing students for success in the ever-changing digital age. Leal Filho et al. (2018) said that changes in both content and approach can be accomplished with the hard work, drive, and creative ideas of Academics and professors as they must be committed to transforming learning in education for sustainability. Galindo-Manrique et al. (2020) added that leadership behaviors can assist teachers in encouraging students' creative conduct and fostering an innovative and creative educational atmosphere. Also, teachers' play a key role in promoting students' creativity, particularly in the discipline of education, where teacher leadership has an insignificant effect on students' inventions and creative processes.

2.4. Social Responsibility and Educational Transformatio

The initial true planetary citizens in business world are leaders, their decision affect economics and socials, as they have responsibilities and worldwide capabilities. Social responsibility is complex and broad and leader duty is to guide business toward it, it is assumed that it need a unique arrangement of leadership skills and capabilities (Duca & Gherghina, 2019).

Digital transformation in higher education enhances research and innovation by leveraging technology. This includes access to digital libraries, research databases, and data analysis tools, as well as

enabling researchers to collaborate through cooperative systems, allowing them to explore emerging technologies and share knowledge globally (Al-Jamal et al., 2023, p. 18). Strielkowski et al. (2022) stated that higher education institutions have to make use of digital technology and take an active role in improving their own ecosystems. Because Higher education institutions, have an essential part of the national education system, help students, minors, and, to a limited extent, adults, catch up in a number of areas related to the development of digital skills. Also Dugan & Komives (2010) stated that developing students' leadership capability may be equally as important as effectively enhancing their capacity to uphold the principles of the social change approach. According to the fact that Teachers of leadership are urged to view successful leadership as a crucial developmental link in fostering students' potential for socially conscious leadership. Assisting students in effectively evaluate their own self-efficacy and connecting their leadership efficacy and capacity for socially responsible leadership. Requires Teachers to assess strategies to assist the students. Also Sanford, et al. (2019) said that each one of the framework's aspects requires the growth of the leader's and the ability of participants for both thought and action. Personal, interpersonal, community, structural, and ecological represent a few of these aspects. They serve as platforms for social justice leadership. For the purpose to support their friends, colleagues, and—above all—their students, leaders in today's school systems have to develop these skills.

2.5. Investment And Development of Financial and Human Resources

Al-Dhaen and Noor (2024) said that a collaborative duty that aims to prevent harmful impacts on society and the educational environment rather than losing funds or human resources, a form of leadership that persists, proliferates, and survives among people is termed as sustainable leadership. Also handling finances and human resources and towards an organization's strategy of making a broad influence on social and environmental concerns, by migrate away from the conventional strategy currently, is handled by sustainable leadership.

It is the responsibility of sustainable leadership to increase potential income and enhance organizational performance by reducing expenses. it encourages networking among all stakeholders to tackle climate change and creates an environmental vision by means of cultural change, sustainable leadership is regarded as a basis of green initiatives and ecological execution at the level of the organization Iqbal et al. (2020). Also Iqbal & Ahmad (2021) stat that Searching for potential business opportunities and decreasing the cost of operation enhance organizational execution is a sustainable leadership rule. And Ichaba (2021) said a Leader should have the capability to adjust to circumstances. Brand resonance, huge styles, strategic navigation, strategic vision, and networked intelligence all should be acquired by sustainable leaders. Assume Responsible Actions with beneficial outcomes, supporting, and sustaining nature are what the leaders assume. Leaders do not only think about revenue as the only goal but also consider the social and ecological factors as sustainability is entirely human-centered they pursue balance between revenue, people, and the planet.

Hargreaves (2007) stated that sustainable leadership early rather than later in a career, sustainable leadership uncovers and acknowledges the organization's leadership capacity. By encouraging its leaders to take care of themselves, it watches after them. It gives them fresh vitality. Human and material resources are cultivated and not wasted under sustainable leadership. Sustainable leadership is smart and innovative leadership that doesn't waste resources or people. They are not overwhelmed by excessive innovation or unrealistic growth deadlines.

Digital transformation is generally defined as the process by which government sectors or companies transition to a business model that relies on digital technologies, aiming to innovate products and services, provide new channels to increase returns, and enhance the value of products. The concept of digital transformation also refers to leveraging the information and communications revolution to deliver services and products in an innovative manner that contributes to creating a distinctive experience across all levels (Cantermir et al., 2023).

The opportunity for the generations to come to a sustainable planet and long-term and medium-term economic benefits is becoming steadily more necessary, and a novel education that combines both is the way to do so, digital transformation (DT) allows Students to rapidly acquire information, skills, and motivation when excellent education integrates with technology. (Trevisan et al., 2023). Also Fortier & Viens (2018) stated that our educational duties are to prepare future leaders to listen to and inspire their workforce to take part in sustainable development initiatives, as well as to be receptive to diverse ideas, because, when it involves tackling complexity and organizational human

resources strategy, there may be particular benefits to gathering together employees from different departments to work together on Sustainable development initiatives.

3. APPLIED FRAMEWORK

3.1. Study Design

The study relied on the descriptive analytical approach. The theoretical aspect used the descriptive approach, which clarifies the study variables. The field study used the analytical approach, which analyzes and links the results reached, interprets them, and then issues appropriate judgments. The study used a questionnaire as data collection tool, it consisted of two sections, Section One: Includes personal data of the study sample members (gender, age, educational level, years of experience, Job title). Section Two: Includes statements related to the study themes, including the axis of sustainable leadership dimensions in Saudi universities, which consists of five dimensions (Ethical behavior, Strategic orientation, innovation and creativity, Social Responsibility, Investment and development of financial and human resources), and includes 34 statements. The Educational transformation in Saudi universities axis, which includes 10 statements, was also used. All included survey items were rated on 5-point Likert scale (1= strongly disagree, 5 = strongly agree), except for demographic questions.

3.2. Validation And Reliability

Table 1: Validate Phrase Sustainable Leadership Dimensions in Saudi Universities.

Phrases	Correlation coefficient	Phrases	Correlation coefficient	Phrases	Correlation coefficient
Ethical Behavior		Strategic Orientation		Innovation and Creativity	
1	**0.663	1	**0.590	1	**0.691
2	**0.543	2	**0.545	2	**0.570
3	**0.506	3	**0.534	3	**0.580
4	**0.527	4	**0.550	4	**0.434
5	**0.511	5	**0.528	5	**0.576
6	**0.504	6	**0.570	6	**0.492
7	**0.555	7	**0.570	7	**0.466
Social Responsibility		Investment and Development of Financial and Human Resources		------	------
1	**0.670	1	**0.581	------	------
2	**0.507	2	**0.580	------	------
3	**0.524	3	**0.575	------	------
4	**0.485	4	**0.542	------	------
5	**0.444	5	**0.482	------	------
6	**0.458	6	**0.503	------	------
7	**0.531	------	------	------	------

All correlation for sustainable leadership dimensions in Saudi universities axes items was statistically significant in 0.01, which mean that the tool has structural validity.

Table 2: Validate Phrase Educational Transformation in Saudi Universities.

Phrases	Correlation Coefficient	Phrases	Correlation Coefficient
1	**0.673	6	**0.547
2	**0.595	7	**0.506
3	**0.540	8	**0.585
4	**0.502	9	**0.472
5	**0.527	10	**0.669

All correlation for educational transformation in Saudi universities axes items was statistically significant in 0.01, which mean that the tool has structural validity.

Table 3: Reliability Questionnaire.

Dimension	Alpha Cronbach	Number of Elements
Sustainable leadership dimensions in Saudi universities	0.926	34
Educational transformation in Saudi universities	0.765	10
Total	0.942	44

The value of Cronbach alpha for all study tool is high and the study tool is high Reliability.

3.3. Data Analysis

To analysis the data which has been collected by the study tool, the study used Pearson's Correlation Coefficient to Calculate Internal Consistency Validity, Cronbach's Alpha Coefficient to Calculate the Degree of Reliability of the Study Tool, Frequencies and Percentages to Describe the Characteristics of the Study Sample Individuals, Means and Standard Deviations to Describe the Level of Response of the Study Sample Individuals to the Statements of the Study Tool, and Simple Regression Equation: To Identify the impact of the Dimensions of the Independent Variable on the Dependent Variable.

3.3.1. Demographic Variables

Table 4: Sample According to Demographic Variables.

Demographic Variables	Categories	N	%
Gender	Male	525	90.1
	Female	58	9.9
Age	From 30 to less than 40 years old	31	5.3
	From 40 to less than 50 years old	364	62.4
	More than 50 years old	188	32.2
Educational Level	Bachelor's.	13	2.2
	Higher Diploma.	1	0.2
	Master's.	266	45.6
	Doctorate.	303	52.0
Years of Experience	1 year - less than 3 years.	1	0.2
	3 years - less than 5 years.	6	1.0
	5 years - less than 10 years.	230	39.5
	10 years and over.	346	59.3
Job Title	Faculty Member	571	97.9
	Administrative Staff Member	12	2.1

3.3.2. Analysis of the Study's Variables

V1. Sustainable Leadership Dimensions in Saudi Universities

Table 5: Phrases of the Ethical Behavior.

N.	Phrase	Mean	S. D	Degree	Arrangement
1	Tasks are distributed according to the capabilities of the workers.	4.76	0.64	Very High	1
2	The administration is keen on the quality of the educational process provided by Saudi universities	4.11	0.52	High	7
3	Management relies on integrity and transparency when evaluating employee performance	4.38	0.77	Very High	4
4	The administration encourages faculty members to take initiative in work	4.33	0.64	Very High	5
5	The management works to develop a sense of responsibility among employees.	4.44	0.65	Very High	2
6	The administration encourages faculty members to participate in decision making	4.30	0.69	Very High	3
7	The administration seeks to provide the educational process in universities with high quality.	4.39	0.70	Very High	3

The very high level of ethical behavior as a dimension of sustainable leadership was found in Saudi universities. The mean value was 4.39 with a standard deviation of 0.66 and Six statements were found to be at a very high level of agreement and one statement at a high level of agreement.

Table 6: Phrases of the Strategic Orientation.

N.	Phrase	Mean	S. D	Degree	Arrangement
1	The administration seeks to provide a clear picture of the university's direction in light of future aspirations	4.66	0.67	Very High	1
2	The administration provides distinguished human resources that seek to achieve the university's ambitions and goals.	4.19	0.63	High	7

3	The administration provides financial resources that contribute to achieving the university's ambitions and goals.	4.35	0.76	Very High	5
4	Management encourages subordinates to embrace the culture of change.	4.36	0.67	Very High	3
5	The administration meets all the needs of the university student with professionalism and high efficiency according to its available capabilities.	4.36	0.72	Very High	4
6	The administration seeks to give an international character to the university courses it offers	4.30	0.72	Very High	6
7	The administration supports twinning agreements to improve university functions with distinguished universities	4.38	0.77	Very High	2

The very high level of Strategic orientation as a dimension of sustainable leadership was found in Saudi universities. The mean value was 4.37 with a standard deviation of 0.71 and Six statements were found to be at a very high level of agreement and one statement at a high level of agreement.

Table 7: Phrases of the Innovation and Creativity.

N.	Phrase	Mean	S. D	Degree	Arrangement
1	The administration encourages employees to present new ideas in order to develop work within the university.	4.69	0.67	Very High	1
2	The management encourages talented and creative cadres.	4.14	0.61	High	7
3	Management offers many unconventional solutions to problems it or its members face.	4.38	0.78	Very High	4
4	The management provides various training courses to encourage employees to develop their performance.	4.31	0.67	Very High	6
5	The administration seeks to identify shortcomings in the work within the university.	4.39	0.73	Very High	2
6	The administration works to facilitate administrative procedures to ensure the speedy completion of work.	4.35	0.67	Very High	5
7	The administration uses modern technical methods in the educational process.	4.38	0.69	Very High	3

The very high level of innovation and creativity as a dimension of sustainable leadership was found in Saudi universities. The mean value was 4.38 with a standard deviation of 0.69 and Six statements were found to be at a very high level of agreement and one statement at a high level of agreement.

Table 8: Phrases of the Social Responsibility.

N.	Phrase	Mean	S. D	Degree	Arrangement
1	The administration offers many programs that contribute to meeting the needs of the community.	4.74	0.58	Very High	1
2	The administration seeks to develop academic plans in a manner consistent with market requirements.	4.19	0.57	High	7
3	The administration seeks to market scientific outputs within the community in order to benefit from them	4.46	0.74	Very High	2
4	The administration encourages volunteer work that seeks to serve the community	4.28	0.62	Very High	6
5	Management encourages employees to participate in community initiatives and activities	4.42	0.64	Very High	4
6	The administration encourages participation with community institutions in university activities.	4.33	0.63	Very High	5
7	The administration offers many sustainable development strategies in partnership with community institutions.	4.43	0.67	Very High	3

The very high level of Social Responsibility as a dimension of sustainable leadership was found in Saudi universities.

The mean value was 4.41 with a standard deviation of 0.64 and Six statements were found to be at a very high level of agreement and one statement

at a high level of agreement.

Table 9: Phrases of the Investment and Development of Financial and Human Resources.

N.	Phrase	Mean	S. D	Degree	Arrangement
1	The management encourages employees to apply for training courses and initiatives that contribute to developing their skills.	4.68	0.67	Very High	1
2	Management is keen on meeting the employee needs	4.18	0.65	High	6
3	The administration is interested in providing an academic atmosphere that contributes to attracting and recruiting distinguished human cadres	4.31	0.76	Very High	4
4	The administration promotes scientific dialogue among university members	4.30	0.68	Very High	5
5	The administration provides many opportunities and scholarships with other countries	4.41	0.69	Very High	2
6	The administration works to make university education outcomes a basis for achieving progress and advancement at the university	4.35	0.67	Very High	3

The very high level of Investment and development of financial and human resources as a dimension of sustainable leadership was found in Saudi universities. The mean value was 4.37with a standard deviation of 0.69 and Five statements was found to be at a very high level of agreement and one statement at a high level of agreement.

Table 10: Dimensions of the Sustainable Leadership Dimensions in Saudi Universities Axis.

N.	Phrase	Mean	S. D	Degree	Arrangement
1	Ethical Behavior	4.39	0.66	Very High	2
2	Strategic Orientation	4.37	0.71	Very High	5
3	Innovation and Creativity	4.38	0.69	Very High	3
4	Social Responsibility	4.41	0.64	Very High	1
5	Investment and Development of Financial and Human Resources	4.37	0.69	Very High	4

The very high level of sustainable leadership was found in Saudi universities. The mean value was 4.38with a standard deviation of 0.67 All dimensions of the axis of sustainable leadership was found in Saudi universities were found to be at a very high level of agreement. The Social Responsibility dimension ranked first, followed by the Ethical behavior dimension, then the innovation and creativity dimension, then the Investment and development of financial and human resources dimension, and finally, Strategic orientation, which ranked fifth.

Table 11: Phrases of the Educational Transformation in Saudi Universities.

N.	Phrase	Mean	S. D	Degree	Arrangement
1	The university has the right infrastructure to achieve successful educational transformation.	4.70	0.68	Very High	1
2	The university student has the skills to use modern technology used in educational transformation processes	4.22	0.66	Very High	10
3	The educational transformation in universities takes into account the talents and abilities of the university student	4.34	0.75	Very High	8
4	The university faculty members have the skills to handle and adapt to the educational transformation at the university.	4.37	0.67	Very High	6
5	The university faculty members have knowledge management skills.	4.42	0.67	Very High	2
6	The university faculty members have skills in managing education systems.	4.38	0.67	Very High	4
7	Both students and faculty members all participate in achieving the principles of educational transformation at the university.	4.41	0.67	Very High	3

8	The administration is keen on developing educational decisions in a manner that is consistent with the educational transformation process.	4.38	0.70	Very High	5
9	The administration provides a digital library and databases that serve the educational transformation process.	4.36	0.71	Very High	7
10	The administration provides the trained and qualified cadres for the educational transformation process.	4.31	0.71	Very High	9

The very high level of educational transformation in Saudi universities. The mean value was 4.39with a standard deviation of 0.69 and Ten statements was found to be at a very high level of agreement.

3.3.3. Testing The Study Hypotheses

Table 12: Results of Testing the Study Hypotheses.

Hypotheses	B	T	R	F	P-VALUE
Main Hypothesis	0.305	42.910	0.872	1841.276	0.000
1st Sub-Hypothesis	1.245	30.133	0.781	908.010	0.000
2nd Sub-Hypothesis	1.128	30.602	0.786	936.457	0.000
3rd Sub-Hypothesis	1.188	30.698	0.787	942.342	0.000
4th Sub-Hypothesis	1.358	31.527	0.749	993.923	0.000
5th Sub-Hypothesis	1.435	34.302	0.818	1176.617	0.000

Main Hypothesis: There is a statistically significant impact of the dimensions of sustainable leadership on educational transformation in Saudi universities.

There is a statistically significant positive impact of the dimensions of sustainable leadership on educational transformation in Saudi universities and positive correlation between dimensions of sustainable leadership and educational transformation in Saudi universities at 0.01, Which indicates the correct of the main hypothesis, it turned out that the more it increased dimensions of sustainable leadership level 1% is the educational transformation in Saudi universities has increased 0.305%.

H1: There is a statistically significant impact of the Ethical behavior on educational transformation in Saudi universities.

There is a statistically significant positive impact of the Ethical behavior on educational transformation in Saudi universities and positive correlation between Ethical behavior and educational transformation in Saudi universities at 0.01, Which indicates the correct of the first hypothesis, it turned out that the more it increased Ethical behavior 1% is the educational transformation in Saudi universities has increased 1.245%

H2: There is a statistically significant impact of the Strategic orientation on educational transformation in Saudi universities.

There is a statistically significant positive impact of the Strategic orientation on educational transformation in Saudi universities and positive correlation between Strategic orientation and educational transformation in Saudi universities at 0.01, Which indicates the correct of the second hypothesis, it turned out that the more it increased Strategic orientation 1% is the educational transformation in Saudi universities has increased 1.128%

H3: There is a statistically significant impact of the innovation and creativity on educational transformation in Saudi universities.

There is a statistically significant positive impact of the innovation and creativity on educational transformation in Saudi universities and positive correlation between innovation and creativity and educational transformation in Saudi universities at 0.01, Which indicates the correct of the third hypothesis, it turned out that the more it increased innovation and creativity 1% is the educational transformation in Saudi universities has increased 1.188%

H4: There is a statistically significant impact of the Social Responsibility on educational transformation in Saudi universities.

There is a statistically significant positive impact of the Social Responsibility on educational transformation in Saudi universities and positive correlation between Social Responsibility and educational transformation in Saudi universities at 0.01, Which indicates the correct of the fourth hypothesis, it turned out that the more it increased Social Responsibility 1% is the educational transformation in Saudi universities has increased 1.358%

H5: There is a statistically significant impact of the Investment and development of financial and

human resources on educational transformation in Saudi universities.

There is a statistically significant positive impact of the Investment and development of financial and human resources on educational transformation in Saudi universities and positive correlation between Investment and development of financial and human resources and educational transformation in Saudi universities at 0.01, Which indicates the correct of the fifth hypothesis, it turned out that the more it increased Investment and development of financial and human resources 1% is the educational transformation in Saudi universities has increased 1.435%

4. LIMITATIONS

This study is conducting in several of Saudi universities (The King Saud, The King Abdulaziz, The King Khaled, Imam Abdulrahman Al-Faisal, Hafer Albatin, Tabuk, and Jeddah University) during the academic year 2023/2024, we selected a random sample consisting of (583) academic educators and administrative staff to explore their perspectives on achieving sustainable leadership to support educational transformation in the universities in Saudi Arabia.

5. CONCLUSION

The very high level of sustainable leadership was found in Saudi universities. The mean value was 4.38with a standard deviation of 0.67 All dimensions of the axis of sustainable leadership was found in Saudi universities were found to be at a very high level of agreement. The Social Responsibility dimension ranked first, followed by the Ethical behavior dimension, then the innovation and creativity dimension, then the Investment and development of financial and human resources dimension, and finally, Strategic orientation, which ranked fifth. The very high level of educational transformation in Saudi universities. The mean value was 4.39 with a standard deviation of 0.69

There is a statistically significant positive impact of the dimensions of sustainable leadership on educational transformation in Saudi universities and correct of the main hypothesis, it turned out that the more it increased dimensions of sustainable leadership level 1% is the educational transformation in Saudi universities has increased 0.305%

There is a statistically significant positive impact of the Ethical behavior on educational transformation in Saudi universities and correct of the first hypothesis, it turned out that the more it increased Ethical behavior 1% is the educational transformation in Saudi universities has increased 1.245% and This result is consistent with the results of (Sanford et al., 2019; Al-Ghamdi, 2022; Adamu et al., 2023).

There is a statistically significant positive impact of the Strategic orientation on educational transformation in Saudi universities and correct of the second hypothesis, it turned out that the more it increased Strategic orientation 1% is the educational transformation in Saudi universities has increased 1.128% and This result is consistent with the results of (van Lieshout et al., 2021; Fatimah & Syahrani, 2022; Al-Jamal et al., 2023).

There is a statistically significant positive impact of the innovation and creativity on educational transformation in Saudi universities and correct of the third hypothesis, it turned out that the more it increased innovation and creativity 1% is the educational transformation in Saudi universities has increased 1.188% and This result is consistent with the results of (Galindo-Manrique et al., 2020; Javed et al., 2021).

There is a statistically significant positive impact of the Social Responsibility on educational transformation in Saudi universities and correct of the fourth hypothesis, it turned out that the more it increased Social Responsibility 1% is the educational transformation in Saudi universities has increased 1.358% and This result is consistent with the results of (Sanford, et al., 2019; Al-Jamal et al., 2023).

There is a statistically significant positive impact of the Investment and development of financial and human resources on educational transformation in Saudi universities and correct of the fifth hypothesis, it turned out that the more it increased Investment and development of financial and human resources 1% is the educational transformation in Saudi universities has increased 1.435% and This result is consistent with the results of (Iqbal et al., 2020; Ichaba, 2021).

6. RECOMMENDATIONS

Based on the finding of the study the study recommends working to improve the quality of the educational process provided by Saudi universities. Emphasis on providing distinguished human resources that strive to achieve the university's ambitions and goals. Efforts to encourage talented and creative individuals. Emphasis on developing academic plans in line with market requirements. Emphasis on meeting the needs of employees, and working to enhance students' skills related to the use of modern technologies used in educational transformation processes.

Also, the study recommends future researches, include "Expanding studies related to the implementation of sustainable leadership in educational institutions in the Kingdom of Saudi Arabia and identifying its effects" and "Expanding studies related to educational transformation in educational institutions in the Kingdom of Saudi Arabia and identifying the factors influencing it".

REFERENCES

Adamu, M., Abubakar, N., & Majin, D. (2023). The Value of Ethical and Sustainable Leadership to Business Organization in the 21st Century. *International Journal of Advanced Academic Research*, *9*(1), 64–85. https://www.ijaar.org/articles/v9n1/ijaar911.pdf

Al Ardan, A. (2020). The Reality of Sustainable Leadership Performance in Emerging Saudi Universities. *Arab Journal of Educational and Psychological Sciences, (13)*, 67–107. https://doi.org/10.33850/jasep.2020.67802

Alamri, M., & Alaiban, K. (2023). The Reality of Sustainable Leadership Practice: An Exploratory Study on King Saud University During the Period January to February of 2023. *Journal of Economic, Administrative and Legal Sciences (JEALS), 7*(8), 55–75. https://doi.org/10.26389/AJSRP.M130323

Al-Dhaen, M., & Noor, S. (2024). The Degree of Sustainable Leadership Practice among Faculty Members at the College of Basic Education in the State of Kuwait from the Students' Point of View. *Journal of Studies and Educational Researches (JSER), (10)*, 256–291. https://jser-kw.com/درجة-ممارسة-القيادة-المستدامة-لدى-أعض/

Al-Ghamdi, W. (2022). Requirements of Moral Education in Light of Digital Education: An Analytical Study. Journal of the Faculty of Education in Educational Sciences, 46(3), 251-282. https://doi.org/10.21608/jfees.2022.259627

Alhazmi, A. (2018). The Rapid Transition of the Saudi Higher Education System. *Fayoum University Journal of Educational and Psychological Sciences, 4*(10), 495–518.

Alhazmi, M. (2022). A Proposed Vision for the Development of Academic Leaders of Saudi Universities in the Light of Sustainable Leadership. *Journal of Educational and Psychological Sciences, 6*(11), 155–182. https://doi.org/10.26389/AJSRP.H200122

Al-Jamal, A. Q., Al-Hamad, B. M., ʻUbaydāt, T. I., Marjīn, Ḥ. S., & Sarḥān, N. B. M. J. (2023, September). *Digital transformation in Arab higher education institutions: Current status, challenges, and future approaches*. Union of Arab Universities Research Councils.

Aljendan, A. (2024). A Framework for Effective Implementation of Sustainability Leadership in Saudi Arabia Higher Education. *International Journal of Religion. 5*(10), 1155–1169. https://doi.org/10.61707/8shrf912

Cantemir, M., Gabriel, P., & Dorin, B. (2023). Drivers of Digital Transformation and their Impact on Organizational Management. *Studies in Business and Economics, 18*(1), 149-170. https://doi.org/10.2478/sbe-2023-0009

Cliffe, J., & Solvason, C. (2022). The Messiness of Ethics in Education. *Journal of Academic Ethics*, *20*, 101–117. https://doi.org/10.1007/s10805-021-09402-8

Duca, I., & Gherghina, R. (2019). Corporate Social Responsibility and Sustainable Business. In: I. Management Association (Ed.), *Social Entrepreneurship: Concepts, Methodologies, Tools, and Applications* (pp. 1001-1016). IGI Global Scientific Publishing. https://doi.org/10.4018/978-1-5225-8182-6.ch051

Dugan, J., & Komives, S. (2010). Influences on College Students' Capacities for Socially Responsible Leadership. *Journal of College Student Development*, *51*(5), 525–549. http://dx.doi.org/10.1353/csd.2010.0009

Eid, N. (2022). The Reality of Applying Sustainable Leadership and the Requirements Enhancement According to Avery & Bergsteiner Model at Umm Al-Qura University. *Reading and Knowledge Magazine, (249)*, 241–287. https://doi.org/10.21608/mrk.2022.256801

Farooq, M., Othman, A., Nordin, M., & Ibrahim, M. (2017). Analysing the relationship between sustainable leadership, talent management and organization health as predictors of university transformation. *Journal Of Positive Management, 8*(1), 32–50. https://doi.org/10.12775/JPM.2017.003

Fatimah, H., & Syahrani, S. (2022). Leadership Strategies in Overcoming Educational Problems. *Indonesian Journal of Education (INJOE)*, *2*(3), 282-290. http://dx.doi.org/10.54443/injoe.v3i2.34

Fortier, D., & Viens, N. (2018). Leadership Education and Sustainable Development: Guidelines for Updating the Curriculum. European Journal of Sustainable Development, 7(4), 53-63. https://injoe.org/index.php/INJOE/article/view/34

Galindo-Manrique, A. F., Pérez-Calderón, E., & Pache-Durán, M. (2020). Strategies for teaching sustainability in finance and accounting: Challenges for business schools. In: L. Carvalho, A. Noronha, & C. Souza (Eds.), *Learning Styles and Strategies for Management Students* (pp. 179-198). IGI Global Scientific

Publishing. https://doi.org/10.4018/978-1-7998-2124-3.ch011

Gupta, M. (2018). Strategic Leadership: An Effective Tool for Sustainable Growth. *SAMVAD: SIBM Research Journal, 15,* 1-5. https://www.i-scholar.in/index.php/samvad/article/view/174732

Hargreaves, A. (2007). Sustainable Leadership and Development in Education: Creating the Future, Conserving the Past. *European Journal of Education*, *42*(2), 223–233. https://doi.org/10.1111/j.1465-3435.2007.00294.x

Haroon, A., Sami, A., Rehman, S., Fahad, H., & Irfan, A. (2019). Sustainable Leadership Enhance Innovation: A Systematic Review of Past Decade. *Journal of Public Value and Administrative Insight*, *2*(4), 1–5. https://doi.org/10.31580/jpvai.v2i4.1151

Ichaba, M., (2021). Advancing Education System through Mobile Ad Hoc Networks (MANETs) in the Developing Countries. In: J. Ganu, M. Nyakora, & M. Razafiarivony (Eds.), *Rethinking Sustainable Development Goals in Africa: Emerging Trends and Issues* (pp. 25-30). CUEA Press.

Iqbal, Q., & Ahmad, N. (2021). Sustainable Development: The Colors of Sustainable Leadership in Learning Organization. *Sustainable Development*, *29*(1), 108–119. https://doi.org/10.1002/sd.2135

Iqbal, Q., Ahmad, N., & Halim, H. (2020). How Does Sustainable Leadership Influence Sustainable Performance? Empirical Evidence From Selected ASEAN Countries. *SAGE Open, 10*(4). https://doi.org/10.1177/2158244020969394

Javed, A., Iqbal, J., Iqbal, S., & Imran, M. (2021). Sustainable Leadership and Employee Innovative Behavior: Discussing the Mediating Role of Creative Self-Efficacy. *Journal of Public Affairs*, *21*(3), e2547. https://doi.org/10.1002/pa.2547

Kenawi, M., Elkhweet, S., Eletrebi, H., & Elwakil, F. (2024). Challenges of Creativity Education in the Age of Digital Transformation through the Lens of Public High School Principals and Teachers in Egypt. *International Journal of Instructional Technology and Educational Studies, 5*(1). https://doi.org/10.21608/ihites.2025.268461.117

Khoo, S-M. (2017). Sustainable Knowledge Transformation in and through Higher Education: A Case for Transdisciplinary Leadership. *International Journal of Development Education and Global Learning*, *8*(3), 5-24. https://doi.org/10.18546/IJDEGL.8.3.02

Lagura, M., & Paglinawan, J. (2024). Digital Transformation and Sustainable Educational Practices on Leadership Capability of School Administrator. *International Journal of All Research Writings, 6*(5), 55-61.

Leal Filho, W., Raath, S., Lazzarini, B., Vargas, V.R., De Souza, L., Anholon, R., Quelhas, O.L.G., Haddad, R., Klavins, M., & Orlovic, V.L. (2018). The Role of Transformation in Learning and Education for Sustainability. *Journal of Cleaner Production*, *199*, 286–295. https://doi.org/10.1016/j.jclepro.2018.07.017

McCarthy, A., Maor, D., McConney, A., & Cavanaugh, C. (2023). Digital Transformation in Education: Critical Components for Leaders of System Change. *Social Sciences & Humanities Open*, *8*(1), 100479. https://doi.org/10.1016/j.ssaho.2023.100479

Olcott Jr. D., Carrera Farran, X., Gallardo Echenique, E., & González Martínez, J. (2015). Ethics and Education in the Digital Age: Global Perspectives and Strategies for Local Transformation in Catalonia. *RUSC Universities and Knowledge Society Journal*, *12*(2), 59–72. https://doi.org/10.7238/rusc.v12i2.2455

Özer, M., & Suna, H.E. (2024). *Unveiling the Significance of the Recent Educational Transformation in Türkiye.* TRT World Research Centre.

Peng, Y., Alias, B., Wan, X., & Mansor, A. (2024). The Impact of Sustainable Leadership on Education Quality: A Systematic Review. *Journal of Law and Sustainable Development*, *12*(6), e3760. https://doi.org/10.55908/sdgs.v12i6.3760

Picciano, A., Seaman, J., & Allen, I. (2010). Educational Transformation through Online Learning: To be or not to be. *Journal of Asynchronous Learning Networks*, *14*(4), 17-35. https://doi.org/10.24059/olj.v14i4.147

Sanford, K., Hopper, T., Robertson, K., Lancaster, L., & Collyer, V. (2019). Sustainable Leadership Supporting Educational Transformation. *IN Education*, *25*(2), 3–22. https://doi.org/10.37119/ojs2019.v25i2.433

Strielkowski, W., Korneeva, E., & Gorina, L. (2022). Sustainable Development and the Digital Transformation of Educational Systems. *Intellectual Economics*, *16*(1), 134-150. https://doi.org/10.13165/ie-22-16-1-08

Svensson, G., & Wood, G. (2007). Sustainable Leadership Ethics: A Continuous and Iterative Process. *Leadership and Organization Development Journal*, *28*(3), 251–268. https://doi.org/10.1108/01437730710739666

Trevisan, L., Eustachio, J., Dias, B., Filho, W., & Pedrozo, E. (2023). Digital Transformation towards Sustainability in Higher Education: State-of-the-art and Future Research Insights. *Environment, Development and Sustainability*, *26*, 2789–2810. https://doi.org/10.1007/s10668-022-02874-7.

van Lieshout, J., Nijhof, A., Naarding, G., & Blomme, R. (2021). Connecting Strategic Orientation, Innovation

Strategy, and Corporate Sustainability: A Model for Sustainable Development through Stakeholder Engagement. *Business Strategy and the Environment*, *30*(8), 4068–4080. https://doi.org/10.1002/bse.2857