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The Role of Governance in Achieving Sustainable Development at Saudi Universities in the Shadow of Vision 2030 (Applying Study on King Khalid University During the Period 2022)

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Abstract

The study aimed to investigate the role of governance in achieving sustainable development (SD) at Saudi Universities in the shadow of Vision 2030 (applying study on King Khalid University (KKU) during the period 2011 to 2022). The problem of the study focuses on decreased indicators of achieving (SD) in the shadow of vision 2030 at Saudi Universities which maybe refer to the weakness of implementing governance. Where four hypotheses were developed and a questionnaire was designed. After data collection and analysis from the respondents. As the study reached a statistically significant role of governance in achieving (SD) at (KKU) with a multiple correlation coefficient of (0.718). Governance and Vision 2030 are sharing in achieving (SD) at (KKU) with a canonical correlation coefficient of (0.812), and vision 2030 moderates the relationship between governance and achieving (SD) at (KKU) with a change in the coefficient of determination (0.147). The study recommended there is a need to increase Employees at (KKU) awareness of the importance of implementing governance to be reflected in the indicators of (SD) in the shadow of vision 2030.

Keywords: Governance, Sustainable Development (SD), Vision 2030, King Khalid University (KKU).

Introduction

The future challenges facing global organizations in general and educational institutions in particular, in the foreseeable term indicate that they are facing many challenges following the financial crises caused by the (Covid 19) pandemic, which necessitated this era to be characterized by an orientation toward governance. This to strengthens oversight mechanisms and creates efficiency by obtaining less costly sources of funding than before to overcome the global financial crisis, enhance transparency, and combat the resistance of employees in institutions to continuous improvement in all areas. Also, with a need to focus on the

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environment and social aspects as well as the economic factors to create sustainable development and to strengthen the methods and strategies for managing and evaluating educational institutions as the beating heart that feeds all institutions with the human resources they manage. Sustainable development is considered one of the most important issues of this era, considering that environmental and social performance are important factors for the success of contemporary institutions, because governance, efficiency, and profitability are no longer valid as indicators of success without paying attention to non-financial indicators. In this study, we seek to study the role of universities in the field of achieving sustainable development in accordance with the 2030 vision as one of the most important goals of universities besides teaching, learning, and community service. In addition, it is necessary to measure and study the reality of governance in educational institutions and its role in achieving sustainable development, as it is one of the important topics worthy of study.

Study Problem

The problem of the current study lies in the low indicators of achieving sustainable development according to the vision of 2030 in Saudi universities, which may be due to the weak application of governance. Therefore, this study attempts to identify the possibility of a solution by answering the following main question: Can governance achieve sustainable development in light of the amendment of Vision 2030 at King Khalid University? And the following sub-questions are derived from it:

1. Is there a statistically significant role for governance in achieving sustainable development at King Khalid University?
2. Do governance and Vision 2030 share in achieving sustainable development at King Khalid University?
3. Does Vision 2030 modify the relationship between governance and achieving sustainable development at King Khalid University?
4. Are there significant statistically significant differences in the study variables due to the demographic variables of the respondents?

Importance of Study

This study derives its importance from two aspects:

1. **Scientific Importance:** the study contributes to filling a research gap that was not addressed by previous studies as far as the researchers know, and that is through exposure to the relationship between governance and SD in light of the amendment of Vision 2030.
2. **Practical Importance:** The practical importance of this study is that it provides data and information to decision-makers at Saudi universities that help them rationalize their decisions.

Study Objective

1. Defining the role of governance in achieving SD at King Khalid University.
2. Recognize the shared role of governance and Vision 2030 in achieving SD at King Khalid University.
3. Test for the amendment of Vision 2030 to the relationship between governance and achieving SD at King Khalid University.
4. To highlight the difference between the average responses of the respondents about the three study variables discussed.

Study Hypotheses

1. There is a statistically significant role in governance in achieving SD at King Khalid University.
2. Governance and Vision 2030 share in achieving SD at King Khalid University.
3. Vision 2030 amends the relationship between governance and achieving SD at King Khalid University.
4. There are significant statistically significant differences in the study variables due to the demographic variables of the respondents.

Study Methodology

This study follows the descriptive analytical method and the researchers also used the historical method. Data and information sources, a questionnaire, and personal interviews

Study Limits

The limits of the study were represented in time limits during the period from 2011 to 2022, spatial limits at King Khalid University, and human limits represented by workers at King Khalid University in the Kingdom of Saudi Arabia.

Study Variables

The study consists of three variables are:

The Independent Variable: Is governance and it is measured by the dimensions (financial resource management, human resource management, transparency, visual management). **The Modifying Variable:** It is Vision 2030 and is measured by the dimensions (Program for Strengthening of governance of government action, Human Capital Program, Vision 2030 Objectives, Performance Measurement Program). **Dependent variable:** It is sustainable development and is measured by dimensions (financial performance, administrative performance, environmental performance, social performance).

Study Model

To achieve the purpose of this study and to reach its specific objectives in determining the impact of the independent variable on the dependent in the presence of the modified variable. Researchers have designed and developed a model for this study based on previous literature. Figure (1) shows the schematic diagram of the model for these variables.

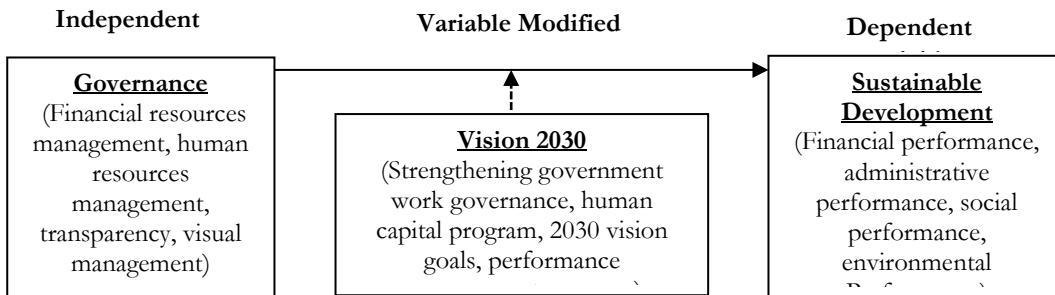


Figure 1: Shows the Schematic Diagram of the Model for Three Variables (Prepared by Researchers Regarding Previous Studies, 2022).

Previous studies

Hussain and Abdel conducted a study aimed at shedding light on the relationship between talent and total quality departments and their impact on achieving institutional excellence at Dongola University. The study followed the descriptive analytical method, historical method, and (SPSS) program to statistically process the study questionnaire data. It concluded that the level of application of the talent and knowledge departments and the achievement of institutional excellence at the University of Dongola was medium, and there is a joint effect of the departments of talent and total quality on achieving institutional excellence at this University, and there is a significant statistically significant difference towards the departments of talent and knowledge according to the variable (the educational qualification). (Hussain & Abdel Hamid, 2022). Al-dmagh conducted a study aimed at identifying the standards of governance and its requirements in the private Palestinian universities in the southern governorates and their relationship to the level of performance. It followed the descriptive analytical approach, historical method, and (SPSS) program to statistically process the study questionnaire data and concluded that there is a positive relationship between governance standards and the performance of private Palestinian universities. (Al-dmagh, 2021). Al-Abadi conducted a study aimed at identifying the role of visual management strategies in the success of the university administration's work to achieve outstanding performance at the University of Kufa. It reached a high level of visual management strategies and indicators of achieving outstanding performance, and there is a strong positive correlation between visual management strategies and indicators of achieving outstanding performance (Al-Abadi, 2007).

First: The Theoretical Framework

Definitions of the Terminology of Study

The Vision was defined as a mental image of the desired future of the institution (Al-Suwaidan & Al-Adlouni, 2004, 40). While the **university** has been defined as a scientific institution concerned with higher education, scientific research, community service, and the environment and it has a legal personality, independent financial responsibility, and it grants specialized courses for undergraduate, graduate, and doctoral degrees through its various colleges and departments (Muhammad & Fadil, 2016, 49). **Governance** is defined as a package of the institutional framework, policies, and main and supportive processes of the government department. Which it implements to produce results and outputs that have an impact on society to enhance the common good (Guide to Assessing and Improving Governance Practices in the Public Sector, 2017, 4). While the United Nations has defined **sustainable development** as the necessity of achieving the right to development so that the development and environmental needs of present and future generations are equally realized. It was pointed out in the fourth principle approved by the conference that the environment should be protected as an integral part of the SD process (Bahloul & Helmy, 2019, 493).

The Role of Governance in Achieving Sustainable Development in Saudi Universities

According to sustainable development, development is a coherent and integrated development in an interactive framework characterized by control and rationalization of resources, and its achievement can only be achieved by embodying the integration and close interdependence between basic elements represented in the various financial, administrative, environmental, and social dimensions. Saudi Arabia attached particular importance to the issue of governance given its role in achieving transparency and justice, enhancing the confidence of stakeholders, and

reducing risks, which was reflected in the stability of the financial market, the strength, and the development of the economy. The Council of the Capital Market Authority issued 2017 a compulsory corporate governance regulation applicable to Saudi universities.

The Modified Role of Vision 2030

Khan found that the use of the modified variable is of great importance in better developing and testing complex individual and organizational theories. Business administration researchers' studies focused not only on the main effects of independent variables on dependent variables but also on the role of modified variables (Khan, 2015, 374). Abdul Hamid and Kafafi define the modified variable as the variable that is not related to the measured variable or the test variable, but it is still active in the regression equation because of its important relationships with other predictive variables (Abdul Hamid & Kafafi, 1992, 2223). According to (www.saudi_vision2030_ar.com), how do we achieve our vision? The document set out a clear vision and ambitious vision for the Kingdom in 1452 AH 2030. This document is the first step in the Kingdom's new direction toward the application of international best practices in building a better future for the Kingdom and achieving the hopes and aspirations of the Kingdom. To ensure the realization of Vision 2030, the Government is working to launch a range of operational programs that will have a major impact on its achievement, including but not limited to (Saudi Aramco Strategic Transformation, Public Investment Fund restructuring, Human Capital, National Transformation, Enhancing Government Business Governance, Expanding Allocation, Strategic Partnerships).

The Reality of Governance and Sustainable Development in Accordance With Vision 2030 at King Khalid University

The above shows that governance is a modern mechanism for evaluating the work of the university's faculties and departments, which is how to organize its affairs, its decision-making processes, its policies, and strategies, how to manage its resources, how to provide its services and achieve the desired results. This is achieved through the application of the principles of good governance represented in the rule of law, transparency, accountability, participation, integrity, fairness, effectiveness, efficiency, and sustainability following the 2030 vision. The university administration seeks to adapt to changes in social, economic, and environmental conditions by trying to reach a balance between different goals and short and medium-term interests, to ensure the sustainability of financial and human resources, especially faculty members, achieving social development, and preserving the environment. In addition to carrying out comprehensive and future planning to ensure the sustainability of the strategy and its operational plans, the sustainability of human resources, in addition to the sustainability of financial management operations, and the adoption and application of concepts, procedures, mechanisms, and incentives necessary to encourage innovation in all fields, and the development of services to adapt to new and growing economic, social and environmental needs.

Second: Presentation, Analysis, and Discussion of Questionnaire Data

The Study Population and Sample

The Study Population: The study population consists of employees at King Khalid University, and the number of employees is (400), including all faculty members and employees from the various applied colleges at King Khalid University.

The Study Sample: The sample of the study is intended as a relatively specific number of members of the original community, who are dealt with within the limits of the available time

and the available capabilities and begin with their study, then generalize the results to the original community. Provided that you represent the community in the best way (Al-Fadni, 2008, 30). The following table shows the appropriate sample size at different levels of the original population size for the study.

Table (1) Shows the Appropriate Sample Size at Different Levels of the Original Population Size.

| Appropriate sample size | Original population size | Appropriate sample size | Original population size | Appropriate sample size | Original population size |
|-------------------------|--------------------------|-------------------------|--------------------------|-------------------------|--------------------------|
| 285 | 1100 | 152 | 250 | 10 | 10 |
| 322 | 2000 | 186 | 360 | 28 | 30 |
| 361 | 6000 | 201 | 420 | 59 | 70 |
| 375 | 15000 | 226 | 550 | 86 | 110 |
| 382 | 75000 | 242 | 650 | 118 | 170 |
| 384 | 100000 | 269 | 900 | 136 | 210 |

The researchers chose an intentional sample of workers within the categories (faculty members, employees), and the number of its vocabulary reached (65) individuals at the Applied College, King Khalid University in Khamis Mushait, where (65) questionnaires were distributed to all individuals the received (65) forms.

Study Tool

A questionnaire was developed for the study. The questionnaire consisted of two parts. The first part dealt with the personal data of the respondents. The second part dealt with the objective data, which included (48) phrases that were divided into three axes for the study. The first axis dealt with governance, the second axis dealt with Vision 2030, and the third axis dealt with SD.

The Method Used for Data Analysis

The Statistical Package for Social Sciences (SPSS) program was used to statistically process the study data, through many statistical methods, including Cronbach's alpha coefficient, Skewness test, frequencies, and percentages, arithmetic mean and standard deviations, one-sample T-test, correlation coefficient, regression model, Independent- Sample T-test and One Way ANOVA.

Validity And Reliability Test of the Study Tool

To test the extent of the internal stability and the subjective validity of the questionnaire items, the coherence of the questionnaire was evaluated by calculating the alpha value (α) to calculate the internal stability coefficient and the square root to calculate the self-honesty coefficient. The appropriate value Alpha is ($\alpha \geq 0.60$) is reasonable in research related to the human sciences, and the following table shows the reliability and validity coefficients of the variables.

Table (2) The Internal Validity Coefficient and the Reliability Coefficient of the Questionnaire Variables and Axes (Cronbach's Alpha) for the Field Study Sample.

| Reliability coefficient | Validity coefficient | Number of items | Axis | Variable |
|-------------------------|----------------------|-----------------|-------------------------|-------------|
| 0.961 | 0.924 | 16 | Governance | Independent |
| 0.961 | 0.924 | 16 | Vision 2030 | Modify |
| 0.961 | 0.924 | 16 | Sustainable development | Dependent |
| 0.983 | 0.966 | 24 | All questionnaire | |

It is clear from Table (2) that the coefficients of the reliability and validity indicate that the tool in general has high reliability and validity in the ability of the tool to achieve the purposes of the study. The questionnaire's total validity coefficient was (0.966) and the total reliability coefficient (0.983) is located in the range between zero and the correct one, which indicates the possibility of the sincerity of the results that can be obtained by the questionnaire as a result of its application.

Virtual Validity: The researchers verified it by presenting the list in its initial form to five arbitrators specialized in the field of accounting and business administration.

Constructive Validity: After the researchers confirmed the apparent validity of the study tool, they applied it to a sample of the community (university employees) with many (10) items. This step aimed to identify the degree of internal homogeneity between the items on the list of the questionnaire, by using the test of the normal distribution of the resolution data.

Table (3) Skewness Test for Normal Distribution of Resolution Axes for the Experimental Sample.

| Statistical decision | Error | Skewness | Number of items | Axis | Variable |
|-------------------------------|--------|----------|-----------------|-------------------------|-------------|
| Follows a normal distribution | +0.297 | +0.137 | 16 | Governance | Independent |
| | +0.297 | -0.048 | 16 | Vision 2030 | Modify |
| | +0.297 | +0.421 | 16 | Sustainable development | Dependent |
| | +0.297 | +0.407 | 48 | All questionnaire | |

It is clear from Table (3) that the skew coefficient is confined to the range (± 3), which is the level adopted in the statistical treatment of this study, and its standard error value is (+0.297), meaning that the data follow a normal distribution. Also, the three axes of the questionnaire follow a normal distribution.

Frequencies and Percentages of the Study Axes

Governance Axis

Financial Resources Management: Where It Was Shown

1. More than three-quarters of the sample numbering 61 individuals and a percentage of 93.8% confirm that the university is distinguished by its ability to maximize the benefit of its financial resources and make optimal use of them.
2. More than three-quarters of the sample numbering 57 individuals and 87.7% confirm that the university determines the actual and planned resources for each activity to tighten control over the use of financial resources.
3. More than half of the sample numbering 39 individuals and 60% believe that the university seeks to exclude activities that do not add value to increase its financial revenues.
4. More than three-quarters of the sample numbering 57 individuals and 87.7% confirm the university's commitment to rationalizing spending.

Human Resources Department: Where It Was Shown

5. The majority of the sample with 61 individuals and 93.8% confirm that the university has attracted the competencies it needs.
6. More than three-quarters of the sample numbering 53 individuals and 81.5% confirm that the university applies the best practices and principles of human resource management.

7. More than three-quarters of the sample numbering 57 individuals and 87.7% confirm that the university sets policies to identify and empower future leaders.
8. More than three-quarters of the sample 61 individuals and 93.8% confirm that the human resources strategy is developed based on the university's vision.

Transparency: Where it Shows

9. More than three-quarters of the sample numbering 51 individuals and 78.5% confirm that the university's goals are announced and known to all employees.
10. More than three-quarters of the sample numbering 51 individuals and 78.5% confirm that the university's plans are announced and known to all employees.
11. More than three-quarters of the sample numbering 49 individuals and 75.4% confirm that the university's performance measurement indicators are announced and known to all.
12. More than three-quarters of the sample numbering 49 individuals and 75.4% confirm the university's reliance on the transparency standard to curb financial and administrative corruption.

Vision 2030 Axis

Program for Strengthening Government Work Governance: where it was found:

1. More than three-quarters of the sample numbering 53 individuals and 81.5% confirm that the university adopts a program to simplify procedures
2. More than three-quarters of the sample numbering 57 individuals and 87.7% confirm that continuous surveys are conducted to identify the needs of workers and students.
3. More than three-quarters of the sample numbering 53 individuals and 81.5% confirm that the service provision processes at the university are subject to continuous control and improvement.
4. More than two-thirds of the sample numbering 45 individuals and 69.2% admit that the organizational structure is constantly updated.

Human Capital Program: where it was Found

5. More than three-quarters of the sample numbering 49 individuals and 75.4% confirm the focus of the training plan on enhancing the ability of human capital to perform its work.
6. More than half of the sample numbering 35 individuals and 53.8% believe that the university encourages the participation of human capital in decision-making.
7. More than two-thirds of the sample numbering 47 individuals and 72.3% admit that the university emphasizes collective action to develop its human capital.
8. More than half of the sample numbering 41 individuals and 63.1% believe that the university measures evaluates and analyzes the efficiency of its human capital.

Vision 2030 Objectives: where it was Shown

9. All respondents (65) 100% affirm that the 2030 vision aims to maximize the value of work.
10. All members of the sample (65) affirm that the 2030 vision aims to improve and develop human resources.
11. All respondents (65) 100% affirm that Vision 2030 aims to protect the environment.
12. More than three-quarters of the sample numbering 61 individuals and a percentage of 93.8% confirm that Vision 2030 aims to provide common services.

Performance Measurement Program: It was Found

13. All respondents, numbering 65 individuals and 100%, confirm that the university sets indicators to measure the performance of goals, plans, and programs.

14. More than three-quarters of the sample numbering 61 individuals and a percentage of 93.8% confirm the university's status as an indicator to measure the performance of employees.
15. More than three-quarters of the sample numbering 61 individuals and 93.8% confirm that the university's performance is measured to determine the performance gap (hopeful performance - established performance).
16. All respondents numbering 65 individuals and a percentage of 100% confirm that the performance of workers is measured to determine the performance gap (hopeful performance - established performance).

Sustainable Development Axis

Financial Performance: is Shown

1. More than three-quarters of the sample numbering 53 individuals and 81.5% confirm that the university uses effective mechanisms and processes to increase cash and future flow in a way that meets the requirements of its sustainable financial policy.
2. 64.6% are neutral, and 35.4% agree and strongly agree, and this indicates that the university's profits are somewhat disproportionate to the volume
3. 52.3% are neutral, 41.5% agree and strongly agree, and 6.2% strongly disagree, and this indicates that the university does not achieve a continuous decrease in the indirect expenses that are charged to its activities as required.
4. 52.3% are neutral, and 47.7% agree and strongly agree, which indicates that the university does not rely on financial and non-financial indicators to measure and monitor financial performance as required.

Administrative Performance: it was Found

5. More than three-quarters of the sample numbering 57 and 87.7% confirm that the educational services provided to students are characterized by a level of quality that meets their needs.
6. All respondents numbering 65 individuals and a percentage of 100% confirm that the university responds to students' complaints and addresses the defects in a short time.
7. More than three-quarters of the sample numbering 53 individuals and 81.5% confirm the university's interest in activities that add value
8. All respondents numbering 65 individuals and 100% confirm that the university gives priority to services that increase the possibility of student satisfaction.

Environmental Performance: As Shown

9. More than three-quarters of the sample numbering 57 individuals and 87.7% confirm that the university's plan includes environmental protection programs.
10. More than three-quarters of the sample numbering 61 individuals and a percentage of 93.8% confirm that the university contributes with the relevant authorities to maintaining a clean environment.
11. More than three-quarters of the sample numbering 61 individuals and a percentage of 93.8% confirm that environmental protection is one of the most important pillars of university values and employee culture.
12. More than three-quarters of the sample numbering 53 individuals and 81.5% confirm that the university is working on analyzing environmental activities to enhance its commitment to protecting the environment.

Social Performance: Where it Was Shown

13. All respondents, numbering 65 individuals and 100%, confirm that the university's plan includes social responsibility programs.
14. More than three-quarters of the sample numbering 61 individuals and 93.8% confirm that the university contributes to supporting local community institutions.
15. More than three-quarters of the sample numbering 57 individuals and 87.7% confirm that the university contributes to reducing the unemployment problem in society through employment.
16. More than three-quarters of the sample numbering 57 individuals and 87.7% confirm that the university is keen to raise the level of social responsibility of employees.

The General Arithmetic Mean and the General Standard Deviation of the Study Variables**Table (4):** Arithmetic Averages, Standard Deviations, and Level of Significance for the Three Axes of the Study Variables.

| Variable | Description | Axis | Arithmetic average | Standard dev. | t-value | t-statistic significance | Importance level | Ranking | | | | | | |
|-------------|--------------------------------------|--------|--------------------|---------------|---------|--------------------------|------------------|---------|------|-------|--------|-------|------|---|
| Independent | Financial Resource Management | First | 4.25 | 0.575 | 17.570 | 0.000 | high | 3 | | | | | | |
| | Human Resource Management | | 4.45 | 0.599 | 19.588 | 0.000 | high | 1 | | | | | | |
| | Transparency | | 4.11 | 0.619 | 14.435 | 0.000 | high | 4 | | | | | | |
| | Visual Management | | 4.31 | 0.473 | 22.268 | 0.000 | high | 2 | | | | | | |
| | Governance | | 4.28 | 0.484 | 21.340 | 0.000 | high | 2 | | | | | | |
| Modifier | Program for Strengthening Government | Second | 4.15 | 0.586 | 15.880 | 0.000 | high | 3 | | | | | | |
| | Work Governance | | 4.02 | 0.788 | 10.389 | 0.000 | high | 4 | | | | | | |
| | Human Capital Program | | | | | | | | | | | | | |
| | Vision 2030 Objectives | | | | | | | | 4.69 | 0.430 | 31.713 | 0.000 | high | 1 |
| | performance measurement program | | | | | | | | 4.40 | 0.482 | 23.432 | 0.000 | high | 2 |
| Vision 2030 | 4.32 | 0.480 | 22.088 | 0.000 | high | 1 | | | | | | | | |
| Dependent | Financial performance | Third | 3.73 | 0.687 | 8.582 | 0.000 | high | 4 | | | | | | |
| | management performance | | 4.46 | 0.510 | 23.099 | 0.000 | high | 1 | | | | | | |
| | environmental performance | | 4.34 | 0.635 | 16.995 | 0.000 | high | 2 | | | | | | |
| | social performance | | 4.28 | 0.426 | 24.317 | 0.000 | high | 3 | | | | | | |
| | sustainable development | | 4.20 | 0.488 | 19.902 | 0.000 | high | 3 | | | | | | |

Source: Prepared by researchers from field study data, 2022.

Table (4) showed the arithmetic averages of the three study variables. The highest variable was for the 2030 vision, and the lowest was for the sustainable development variable. For the

dimensions of Vision 2030, the highest for the objectives of Vision 2030, and the lowest for the Human Capital Program. For the dimensions of governance, the highest was for human resources management and the lowest was for transparency. For indicators of sustainable development, the highest was for indicators for measuring administrative performance, and the lowest was for indicators for measuring financial performance. It agreed with the result of (Al-Abadi, 2007) and disagreed with the results of (Hussein and Abdul Hamid, 2022), (Mubasher, 2021), and (Fitriani & Muljono, 2019).

Study Hypotheses Test

First Hypothesis: There is a statistically significant role for governance in achieving sustainable development at King Khalid University: To test this hypothesis, a multiple regression model test was used, as follows:

Table (5) Multiple Regression Model of the Statistical Relationship Between Governance and Achieving Sustainable Development at King Khalid University.

| independent variable | B | (T) | Sig* (T) | (R) | (R ²) | (F) | Sig* (F) |
|-------------------------------|--------|--------|----------|-------|-------------------|--------|----------|
| Constant | 1.690 | 3.783 | 0.000 | | | | |
| Financial Resource Management | 0.533 | 2.575 | 0.012 | | | | |
| Human Resource Management | -0.367 | -2.705 | 0.009 | 0.718 | 0.515 | 15.946 | 0.000 |
| Transparency | 0.198 | 2.171 | 0.034 | | | | |
| Visual Management | 0.248 | 1.488 | 0.142 | | | | |

Source: Prepared by researchers from field study data, 2022.

It was clear from Table No. (5) that this model has the authority to test the statistical relationship of governance in achieving sustainable development at the university where the value of (F) was (15.946) with a significant level (0.000), which is less than (0.05), which means that this model is valid for predicting the values of the dependent variable (sustainable development), it is also clear that the coefficient of determination (R²) was (0.515), which means that governance explains the amount of (51.5%) of the variance in achieving (SD), which is a medium explanatory power. And that (49.5%) is due to other variables that were not the subject of the study, including the random variable. It is also clear that the management of financial resources and transparency directly affect the achievement of sustainable development at King Khalid University, with a level of morale less than (0.05) and that human resources management adversely affects the achievement of sustainable development at King Khalid University with a moral level less than (0.05). This requires acceptance of the first hypothesis, which states that there is a statistically significant role for governance in achieving sustainable development at King Khalid University. This is consistent with (Lutfi and others, 2022 AD), (Al Braq, 2021), (Abdullah, 2021), (Mubasher, 2021), and (Al-Abadi, 2007).

Second Hypothesis: Governance and Vision 2030 share in achieving sustainable development at King Khalid University:

To test this hypothesis, a (Canonical Analysis) test was used, as it became clear from Table (6) that there is a statistically significant joint effect of governance in achieving sustainable development at King Khalid University. It was found that (the independent and modifier variables) explained (81.2%) of the variance in achieving sustainable development. The results also show that there is an unknown percentage of variance along with the dimensions of governance and the 2030 vision to predict the extent of sustainable development, where the

unknown percentage of variance is estimated at approximately (19.8%). The results of the synaptic correlation analysis showed that the value of (F) amounted to (30,161) and it is a function at the (0.000) level. This confirms the existence of a common, statistically significant effect of governance in achieving sustainable development at King Khalid University, which requires acceptance of the second hypothesis, which stipulates that governance and Vision 2030 share in achieving sustainable development at King Khalid University. The study agreed with (Hussein and Abdel Hamid, 2022).

Table (6): Synaptic Correlation Analysis of the Joint Impact Between Governance and the Vision of 2030 in Achieving Sustainable Development at the University.

| The independent and modifier variables | | Canonical | global construction | dependent variable | R Canonical | R ² Canonical |
|--|-------------------------|-----------|---------------------|--------------------|--|--------------------------|
| Governance | financial resources | 0.673 | 0.606 | (SD) | 0.901 | 0.812 |
| | Human Resources | 0.374 | 0.337 | | (F) | 30.161 |
| | Transparency | 0.626 | 0.564 | | Sig* | 0.000 |
| | Visual Management | 0.666 | 0.600 | | Percentage of the explained variance from the independent and modifier variables | |
| | strengthening program | 0.779 | 0.702 | | 81.2% Unknown variance ratio | |
| Vision 2030 | B. human | 0.823 | 0.741 | | Percentage of the explained variance from the dependent variable | |
| | Vision Objectives | 0.342 | 0.308 | | Percentage of the explained variance from the independent and modifier variables | |
| | Performance Measurement | 0.592 | 0.533 | | 32.2% | |

Source: Prepared by researchers from field study data, 2022.

Third Hypothesis: Vision 2030 modifies the relationship between governance and achieving sustainable development at King Khalid University:

To test this hypothesis, stepwise multiple regression was used:

Table (7) Stepwise Multiple Regression Model to Show the Modification Hypothesis.

| dependent variable | Model | | (R) | (R ²) | (F) | Sig*. F |
|-------------------------|----------|------------------------|-------|-------------------|--------|---------|
| sustainable development | First | Governance | 0.611 | 0.374 | 37.598 | 0.000 |
| | Second | Governance Vision 2030 | 0.721 | 0.520 | 33.634 | 0.000 |
| Change Statistics | | | | | | |
| R ² Change | F Change | Sig*.F Ch. | DF1 | DF2 | B | T |
| 0.374 | 37.598 | 0.000 | 1 | 63 | 0.616 | 6.132 |
| 0.147 | 18.955 | 0.000 | 1 | 62 | -0.041 | -0.235 |
| | | | | | 0.768 | 4.354 |

Source: Prepared by researchers from field study data, 2022.

It is clear from Table (7) that there are two models of influence, the first model shows the relationship of governance to sustainable development, as it is clear that it has the authority to test the influence relationship between the two variables where the value of (F) was (37.598) with a level of significance (0.000), which means that the first model is valid for predicting the

values of the dependent variable (SD). It is also clear that the coefficient of determination (R^2) was (0.374), which means that governance explains the amount of (37.4%) of the variance in achieving sustainable development, which is a weak explanatory power and that percentage (62.6%) is due to other variables that were not the subject of the study, one of which is the random variable. The second model shows the impact of both governments and the 2030 vision in achieving sustainable development. As it is clear that this model has the authority to test the impactful relationship of governance and Vision 2030 combined simultaneously in achieving sustainable development where the value of (F) was (33.634) with a level of significance (0.000), which means that this model is valid for predicting the values of the dependent variable (SD). The results followed the modification of the 2030 vision of the relationship between governance and sustainable development. It is a practical result that contributes to achieving part of the study's objectives. This requires the acceptance of the third hypothesis, which partially agreed with (Al-Sayyid, 2019), (Fitriani & Muljono, 2019), and (Abu Bakr, 2017), and differed with (Quni, 2017). This is because the implementation of governance in light of the modification of the Kingdom's Vision 2030 would generate a positive impact in achieving sustainable development in Saudi universities.

Fourth Hypothesis: There is a difference between the average responses of the respondents about the study variables. To test this hypothesis (Independent- Sample T Test) and (One Way ANOVA) were used.

Table (8) Results of an Independent-sample T Test and (One Way Anova) to Find Out the Differences.

| Dependent variable | Governance | | Vision 2030 | | Sustainable Development | |
|----------------------------|------------|-------|-------------|-------|-------------------------|-------|
| | T or F | Sig. | T or F | Sig. | T or F | Sig. |
| Type | -3.314 | 0.002 | -2.967 | 0.004 | -2.803 | 0.007 |
| Age | 4.305 | 0.018 | 3.556 | 0.035 | 17.718 | 0.000 |
| Qualification | 4.319 | 0.000 | 3.816 | 0.000 | 3.547 | 0.001 |
| Scientific specialization | 16.049 | 0.000 | 14.170 | 0.000 | 21.525 | 0.000 |
| Practical experience | 3.702 | 0.030 | 4.975 | 0.010 | 9.036 | 0.000 |
| Job Category | -4.319 | 0.000 | -3.816 | 0.000 | -3.547 | 0.001 |
| Type of training courses | 0.364 | 0.717 | 1.082 | 0.283 | -0.802 | 0.425 |
| Number of training courses | -1.627 | 0.109 | -0.245 | 0.808 | -1.683 | 0.097 |

Source: Prepared by researchers from field study data, 2022.

It was clear from Table (8) that there are differences according to gender, age, educational qualification, scientific specialization, practical experience, and job category towards governance, 2030 vision, and sustainable development. To find out the locations of the differences, the arithmetic averages and the (Schaffer) test were referred to as shown in the following tables:

Table (9) Arithmetic Averages of Study Variables According to Gender, Educational Qualification, and Job Category.

| Variable | Type | | Educational Qualification | | Job Category | |
|-------------------------|------|--------|---------------------------|--------------|--------------|----------|
| | Male | Female | Graduate | Postgraduate | Faculty | employee |
| Governance | 3.96 | 4.39 | 4.63 | 4.13 | 4.13 | 4.63 |
| Vision 2030 | 4.02 | 4.41 | 4.63 | 4.18 | 4.18 | 4.63 |
| Sustainable development | 3.92 | 4.30 | 4.50 | 4.07 | 4.07 | 4.50 |

Source: Prepared by researchers from field study data, 2022.

It is clear from Table (9) that the differences are in favor of females, graduates, and employees based on the result of the higher arithmetic mean. The study agreed with (Hussein and Abdul Hamid, 2022) and disagreed with (Mubasher, 2021). It is a result that confirms the existence of differences between the respondents' perceptions of the study variables, according to gender, educational qualification, and occupation.

Table (10) Results of the (Schaffer) Test for the Sites of Differences Between the Three Study Variables According to the Age Variable.

| Variable | Average | Age group | 30-40 years | 40-50 years | 50 years and over |
|-------------------------|---------|-------------------|-------------|-------------|-------------------|
| Governance | 4.47 | 30-40 years | - | -0.222 | -0.722(*) |
| | 3.75 | 50 years and over | 0.722(*) | 0.500 | - |
| Vision 2030 | 4.43 | 30-40 years | - | -0.111 | -0.681(*) |
| | 3.75 | 50 years and over | 0.681(*) | 0.570 | - |
| Sustainable development | 4.65 | 30-40 years | - | -0.589(*) | -0.965(*) |
| | 4.06 | 40 - 50 years | 0.589(*) | - | -0.376 |
| | 3.69 | 50 years and over | 0.965(*) | 0.376 | - |

Source: Prepared by researchers from field study data, 2022.

Table (11): Results of the (Schaffer) Test for the Sites of Differences Between the Three Study Variables According to the Variable of Scientific Specialization.

| variable | Specialization | Business Management | Accounting | Human sciences | Other specialties |
|-------------------------|----------------|---------------------|------------|----------------|-------------------|
| Governance | average | 4.03 | 4.22 | 4.25 | 5.00 |
| | Differences | -0.975(*) | -0.784(*) | -0.750(*) | - |
| Vision 2030 | average | 4.06 | 4.27 | 4.25 | 5.00 |
| | Differences | -0.937(*) | -0.733(*) | -0.750(*) | - |
| Sustainable development | average | 4.16 | 4.00 | 4.00 | 5.00 |
| | Differences | -0.838(*) | -1.000(*) | -1.000(*) | - |

Source: Prepared by researchers from field study data, 2022.

Table (12): Results of the (Schaffer) Test for the Sites of Differences Between the Three Study Variables According to the Variable of Scientific Experience.

| variable | average | Work Experience Category | 5 - 10 years | 10 - 15 years | 15 years and over |
|-------------------------|---------|--------------------------|--------------|---------------|-------------------|
| Governance | 4.45 | 10 - 15 years | -0.167 | - | -0.547(*) |
| | 3.91 | 15 years and over | 0.380 | 0.547(*) | - |
| Vision 2030 | 4.39 | 5 - 10 years | - | -0.031 | -0.546(*) |
| | 4.36 | 10 - 15 years | 0.031 | - | -0.516(*) |
| | 3.84 | 15 years and over | 0.546(*) | 0.516(*) | - |
| Sustainable development | 4.37 | 5 - 10 years | - | -0.335(*) | -0.647(*) |
| | 4.03 | 10 - 15 years | 0.335(*) | - | -0.313 |
| | 3.72 | 15 years and over | 0.647(*) | 0.313 | - |

Source: Prepared by researchers from field study data, 2022.

It is clear from tables (10) and (12) that the differences are in favor of the lower group based on the result of the higher arithmetic average. It was clear from Table (11) that the sites of the

differences between (business administration, accounting, humanities) and other specialties, and in favor of other disciplines based on the result of the higher arithmetic average.

Conclusion

This study aimed to investigate the reality of the role of governance in achieving sustainable development in Saudi universities according to the vision of 2030, as a modified variable from the point of view of (faculty members and employees) at King Khalid University for the period from 2011 AD to 2022 AD. It reached the following conclusions, recommendations, and suggestions:

Results

1. Governance represents a set of principles, rules, mechanisms, and systems that enhance control and limit manipulation and fraud practices, to achieve justice, transparency, and integrity to reach sustainable development.
2. Vision 2030 relies on three main axes: a vibrant society, a prosperous economy, and an ambitious nation. These axes are complementary and consistent with each other to achieve the objectives of sustainable development.
3. Sustainable development is concerned with achieving continuous interdependence that ensures opportunities for future generations.
4. The partial effect of the dimensions of governance in the multiple regression model showed that the human resource management dimension has a reverse effect, and the visual management dimension has no effect, which calls for a review of these two dimensions at King Khalid University.
5. The existence of a joint, statistically significant impact of governance (financial resources management, human resources management, transparency, visual management) and Vision 2030 (program for strengthening government work governance, human capital program, goals of Vision 2030, performance measurement program) in achieving (SD), with a factor Synaptic identification (0.812).
6. Vision 2030 amends the relationship between governance and SD, with a change in the coefficient of determination (0.147).

Recommendations

1. The necessity of the commitment and support of the senior leadership at King Khalid University, whether materially or morally, to governance because of its impact on the level of its financial, administrative, social, and environmental performance, which is reflected in sustainable development.
2. That the Human Resources Department at King Khalid University is interested in applying the best practices and principles of human resource management because of its importance in achieving sustainable development. Whereas, the result of its partial effect in the multiple regression model was inverse.
3. That the leaders of King Khalid University adopt the visual management strategy because of its importance in eliminating waste of resources and improving university performance. Whereas, the result of its partial effect in the multiple regression model had no effect.
4. King Khalid University continues and is keen on diligently taking care of the human capital program and trying to develop and develop it through training support, because of its great importance in achieving the 2030 vision.

Suggestions

1. Saudi universities continue to develop the program to strengthen government work governance and the performance measurement program to ensure the achievement of the goals of Vision 2030.
2. Saudi universities constantly review their financial performance indicators so that the volume of their profits is commensurate with the volume and quality of educational services provided to students and the community.
3. Saudi universities invest in environmental education programs to educate workers, students, and community members about green products, use non-polluting methods for the environment, recycle waste, and implement the environmental management standard (ISO 14001: 2015).
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References

1. Al-Suwaidan, Tariq Muhammad, and Al-Adlouni, Muhammad Akram, 2004 AD, How do you write a strategic plan?, King Fahd National Library for Publishing and Distribution, Riyadh, Saudi Arabia.
2. Al-Fadni, Abu Al-Hassan Muhammad Ahmed Al-Sheikh, 2008, Scientific Research and its Methods, Al-Sharif Academic Library for Publishing and Distribution, Khartoum, Sudan.
3. Abdel Hamid, Jaber, and Kafafi, Ola, 1992 AD, Dictionary of Psychology and Psychiatry, The Arab Renaissance, Cairo, Egypt.
4. Abu Bakr, Hamwi Leil, 2017, educational planning and its importance in achieving comprehensive development in the state of Niger (Moradi state as a model, unpublished Ph.D. thesis, University of Dongola, Sudan.
5. Khan, Ahlam, 2015, The importance of human resource re-engineering in improving human performance in the economic institution, an exploratory study of the opinions of human resources officials, an unpublished Ph.D. thesis, University of Mohamed Khider, Biskra, Algeria.
6. Al-dmagh, Ziad Jalal Khalil, 2021 AD, governance standards and requirements in private Palestinian universities in the southern governorates and their relationship to the level of performance, issue (47), p. 74.
7. Al-Abadi, Hashem Fawzi, 2007, The role of visual management strategies in the success of the university administration's work to achieve outstanding performance - an applied study at the University of Kufa, Journal of Administrative Studies, University of Basra, 1 (3), pp. 84-117.
8. Bahloul Latifa, Halimi, Sarah, 2019, Solid Waste Recycling to activate the dimensions of sustainable development - Presentation of international experiences. Journal of Economics and Human Development, Count (3), p. 491.
9. Hussein, Osama Muawiya Bakhit, and Abdel Hamid, Mahmoud Abdel Moati Hashem, 2022 AD, talent management and total quality and their impact on achieving institutional excellence at Dongola University, Al-Manhal Economic Journal, Algeria, 1 (5), pp. 113-136.
10. Abdullah, Bassam, 2021, Governance in the Public Sector and Comprehensive and Sustainable Development, The Arab Journal of Management, Issue (3), p. 3.

11. Muhammad, Abbas Abdullah Al-Hussein, and Fadil, Khalifa Al-Mabrouk, 2016, AD, Planning professional development programs for faculty members in the light of quality assurance standards in Libyan higher education institutions, a case study of the University of Sirte, *Journal of Administrative Sciences for Scientific Research in Business Administration and Accounting*, University of Science and Technology, Sudan, No. 1, pp. 41-142. http://www.saudi_vision2030_ar.com
12. Fitriani, O. & Muljono, H., 2019, Beyond Good Governance: An Ultimate Key Success for Higher Education Quality, *Journal of Education*, 4(1), P. 210-216.
13. Guide to Evaluating and Improving Governance Practices in the Public Sector, Second Edition 2017, Directorate of Government Innovation and Excellence Support, Ministry of Public Sector Development, Hashemite Kingdom of Jordan.

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