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The Role of Talent Management in Achieving Sustainable Performance: an Analytical Study in Some Iraqi Universities

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Abstract: The objective of the study was to unveil the connection between sustainable performance and talent management. It has followed the descriptive-analytical method, and in order to present its goal, the research was implemented to the sample of (101) professors and employees who work in one of the Iraqi universities. The data were gathered and processed with the help of (SPSS.v26) program and several statistical techniques were taken into account. The study came to a series of results among them being the fact that the relationship between the human talent management system and sustainable performance of Iraqi universities is strong and statistically significant. Considering such observations, this study suggested the establishment of superior recruitment and selection processes, the establishment of strategies to retain the finest talents as well as the provision of motivation to mobilize the role of human talent management in promoting overall sustainable performance.

Key words: Talent Management, Sustainable Performance, Iraqi Universities.

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Introduction:

Due to technological, economic and social changes, learning institutions and especially the universities have had tremendous transformations in their internal and external environment. As competition among the universities has increased, there has arisen the need to consider modern administrative strategies, which can be used in improving efficiency of their performance and sustainability. The concept of talent management is one of these methods which can be applied to attract, develop, motivate and retain excellent people to enable maximum organizational performance.

Here, the relationship between talent management and sustainable performance is a significant issue because the Iraqi universities are trying to enhance the quality of their performance by investing in human competencies. The process of sustaining performance in Iraqi universities hinges on the process of mobilizing levels of performance by means of effective talent management as an essential element that forms a key part of driving the efficiency in the academic and administrative process.

Considering the problems of the Iraqi universities including the scarcity of resources, the labor market alterations, and the requirements of the sustainable development, the ability to adjust the learning process to the needs of the talent management of both the sustainable development and the personal growth would help to make the learning environment stimulating and shift towards innovation and increasing personal capacities. Recruitment and nurturing of skilled faculty and students is an important factor towards enhancing education and science research.

To this premise the proposed study investigates this role in several of the institutions of higher learning in Iraq. The research is split into four sections namely: the first section is about the methodology of the research; the second section discusses the theoretical framework; the third sections discusses the practical aspect and lastly, the fourth section summarizes findings and recommendations.

Chapter One: Research Methodology

First: The Research Problem

The Iraqi universities are confronted nowadays with the challenges of attaining sustainable performance which can be used to help create educational institutions that can adapt to the swift changes in their internal as well as external environments at the same time as securing continuity and long term growth especially in the case of the public institutions. Considering the disregard of true talents and sidelining of potential employees into training and promotions and hiring of the talented without taking into account their competency this has been a great challenge towards attaining sustainable institutional output in terms of fairness, competence, and professionalism.

It is clear that nothing can be sustained in universities without good management and development of their human talent.

Based on that, the research problem will be based on the following primary question:

How can talent management contribute to sustainable performance within the Iraqi universities?

Based on this primary question, various sub-questions arise and they include:

1. How well do the study variables and their dimension’s feature in the surveyed universities to the study sample?

2. Does the study variables in the surveyed field have a correlation?

3. Does talent management have an impact on sustainable performance in the surveyed field?

Second: The Importance of the Study

The significance of the present study relates to a number of interconnected points that presuppose the relevance of developing effective competencies in the university setting and advancing the idea of sustainability with the human factor in the following manner:

1. The significance of the research is that it pays attention to one of the crucial sectors the higher education sector as the area of exploration because it has been very crucial as one of the core pillars of development and advancement. This industry needs constant attention and the enticement of advisory potentials, which boosts the economy and economic prosperity.
2. The choice of a sample of universities as the object of study brings certain importance as universities are one of the most prominent organizations on the local and international levels, and the level of scientific approach is common to human resource management practices. Additionally, these institutions possess a bright elite of human talents, and this enables the researcher to carry out studies regarding administrative mechanisms of handling talented individuals so as to tackle the current or future issues. This also helps in promoting innovative

projects that enhance their academic competitiveness in the employment sector thus positively affecting the attainment of sustainable performance in these universities.

3. This paper aims to inform those making decision in the surveyed universities to take advantage of the hypothetical order of talent management and create current tools that can create flexibility in institutions to enable them to grow, change, and to successfully encounter future academic issues and crisis.

Third: The Objectives of the Study

The study will seek to attain the following:

1. To determine the level of the practice of talent management in the Iraqi universities.
2. To explore sustainable performance in academic setting focusing on its current situation.
3. To investigate the character of the study variables.
4. To make recommendations and propositions to help improve sustainable performance by offering an effective management of talent.

Fourth: The Study Hypotheses

The research is founded on a number of hypotheses which assist in testing the correlation between the variables:

Main Hypothesis 1: Talent management has a statistically significant relationship with the attainment of sustainable performance. Based on this primary hypothesis, there are a number of sub-hypotheses:

1. The relationship between sustainable performance and attraction of talent is statistically significant.
2. Talent planning and sustainable performance are statistically significantly related.
3. The correlation between sustainable performance and motivation of talent is statistically (significantly) high.
4. The relationship between the sustainable performance and talent development is statistically significant.
5. Talent retention and sustainable performance are statistically significantly related.

Main Hypothesis 2: Talent management has a statistically significant effect on sustainable performance. From this main hypothesis, several sub-hypotheses are derived:

1. Talent attraction has a statistically significant effect on sustainable performance.
2. Talent planning has a statistically significant effect on sustainable performance.
3. Talent motivation has a statistically significant effect on sustainable performance.
4. Talent development has a statistically significant effect on sustainable performance.
5. Talent retention has a statistically significant effect on sustainable performance.

Fourth: Research Methodology

The study relied on the descriptive-analytical approach, as it is the most suitable for the nature of the research. This approach helps in describing the phenomenon and analyzing the relationship between the study variables. Data were collected through a questionnaire distributed to a sample of employees in Iraqi universities and were then statistically analyzed using the (SPSS) program to test the hypotheses and derive the results.

Fifth: Study Population and Sample

The study population consisted of all directors of administrative and technical units, heads of departments, and assistant deans (for academic and administrative affairs) at the universities of Anbar, Tikrit, Mosul, Baghdad, and Al-Mustansiriya totaling five universities. The study sample to be targeted comprised of human resources directors and staff. One hundred and fifty questionnaires were sent to the employees in the university and 115 of these questionnaires were returned. The screening process excluded 14 questionnaires on the basis of being inappropriate to be statistically analyzed and the final study sample consisted of 101 respondents who work in different administrative departments and units of the identified universities.

Sixth: Sources of Information

In order to obtain the theoretical and practical goals of the study, I needed to use two primary sources of information:

1. Theoretical Sources: This is the theoretical framework and past research based on the notions, ideas and information that researchers have conducted on the subject of the current research.
2. Practical Source: The applied element relied on the questionnaire, which connotes the variables and objectives of the study. The study design and development of the questionnaire was done on the theoretical literature available on the study topic and is well-rounded in addressing the variables and hypotheses of the study. The questionnaire involved questions that were to answer the objectives of the study and the researchers employed a five-point Likert scale as follows, 1 Strongly Disagree, 2 Disagree, 3 Neutral, 4 Agree, and 5 Strongly Agree.

Chapter Two: Theoretical Framework

First: The Concept of Talent Management

The meaning of talent management can be defined differently, although it is commonly agreed that the concept was created after the research conducted by McKinsey called War for Talent, and then extended to the book that was published in 2001. This means that the concept is not as novel as one thought it to be despite the little research available on the same. In recent years, talent management has been crucial to the human resource strategies in organizations, and it has gained more relevance in human resource management research (Al-Dalahmeh, 2020: 116).

Talent management is also relevant in offering a coherent approach in terms of enhancing the processes of attracting, recruiting, developing, and retaining employees with the skills and qualifications required to fulfill the current and future organizational needs (Hussein et al., 2022: 133). In that regard, numerous definitions have been put forward. Others define it as the capabilities held by an individual or the fundamental processes used by the organization to create a considerable human capital to facilitate its competitive power and edge over others in terms of utilizing talent and innovation in its diverse operations and services offered to its customers (Yassin, 2024: 139).

Shreidem (2022: 273) defined talent management as a holistic process, which entails attracting, supporting, and utilizing talented people within definite plans to improve organizational performance and thus a crucial determinant of success, neglect or failure of sustainable development (Schnieder, 2018: 39).

The concept is similar to the view that talent management is an exclusive way of managing individuals as well as the inherent competencies, attitudes, readiness, aspirations, traits, behaviors, wisdom and experience in an attempt to work in the organization towards organizational comprehension and to make sure that when an organization requires talent, it has it so that it becomes effective and efficient in its operations (Sohel-Uz-Zaman, 2018: 99-100).

Having examined a wide range of definitions that are associated with talent management, the researcher considers talent management to be differentiated performance that is the results of the talent management. This aspect helps in unleashing the creativity potential of the skilled people, developing, honing and training the intellectual power, expertise and knowledge base and eventually delivering the most desirable results to the organization.

Second: The Importance of Talent Management

Talent management is important because it emphasizes investment in human resources which are inherent in organizational success. Workers spend large percentage of their time at workplace and talent management is crucial issue that needs to be handled carefully. The importance of talent management towards attaining institutional excellence has been highlighted by numerous scholars and researchers in the management field because the management factor plays a pivotal role in promoting organizational performance and guaranteeing its sustainability and success. It is a valuable instrument of building the skills and abilities of administrative staff, fostering a culture of sustainable development, raising efficiency, and streamlining organizational procedures (Hussein et al., 2021: 133).

Talent management also reinforces competitive environments because it serves as an intermediary between knowledge and human resource management practice particularly during the shift towards a knowledge-based economy with more technological competitiveness where the economy is based on manufacturing and service rather than knowledge. The significance of talent management is experienced in a number of ways such as aligning goals, establishing a road map to establishing collaborative working methodologies, and establishing an organization of high intrinsic capabilities (Naseef, 2023: 264).

This method prioritizes the strategic positions of the company by searching on the potential talent reserves of the organization who are capable of taking vital roles, investigating the untapped potential of various employees and forming an overall talent database concerning all the levels of the organization to increase the efficiency of recruitment and attainment of organizational objectives in the long term (Ahlam and Hameer, 2019: 91). The investment in talented human resources helps to achieve the optimal competitive advantage to the organization. Talent management enhances the ability of the organization by use of different approaches in order to maintain continuity, development of activities and human talent attention (Hassoun, 2021: 928).

2–3: Dimensions of Talent Management

To complete the practical frameworks of studies and research, it is necessary to have the measures allowing the writers and researchers to connect practical frameworks with theory (Wali & Abu Bakr, 2021: 44). Such considerations underscore the need to come up with viable measures to attract and nurture talent hence affecting the performance and innovation of the institution positively.

Besides, these methods help researchers to comprehend the way educational institutions react to the changing demands of the labor market (Hassan & Al-Jarjari, 2018: 181), their ability to establish a competitive educational setting increases. It follows that connecting the theory and practice can assist in offering effective solutions that would serve to strengthen human talent management and the realisation of the intended aims of the research.

The researcher, therefore, examined the pertinent sources, which would tell the researcher how to quantify human talent management in relation to the objectives of the current research. The works of Hassoun (2021: 289290) and Yassin (2024: 140) were particularly emphasized since their frameworks fit the nature of operations of the organizations being studied.

1. Talent Attraction: This aspect entails combined strategies of making recruitment and selection of the most suitable individuals whose qualifications suit the organizations requirements or who

hold key roles in other institutions and who are deemed to be highly effective human resource in terms of their ability to deliver on the organizational objectives. Among the major aspects are empty posts, both internal and external, dissemination of information, employment policies, and assessment of applications.

2. Talent Planning: Talent planning is a process that entails predicting the demand of the organization through comparison of the existing supply to the demand projected. It also seeks to come up with appropriate mechanisms which assist the organization to close the gap between the available and required human resource.

3. Talent Motivation: This starts with the cognition of the drivers that inform talent development in the organizational work. The second one is to calculate the impact of motivation on the performance, productivity, and attainment of organizational objectives of talents.

4. Talent Development: This dimension refers to learning and experiences, which deepen the skills and knowledge needed in the present and future positions in administration. It is believed to be the foundation of talent management and the one that helps to increase employee morale and confidence in working. There are four areas of talent development; strategic talent focus, taking into consideration differences in talent development, encouraging employee self-responsibility and provides timely development opportunities.

5. Talent Retention: To retain talented employees, organizations employ a tool set that can be summarized as high compensation packages, organizational culture that is supportive, and professional and personal development opportunities which are challenging. Retention also entails giving power to great workers and making sure that they are aligned to the organizational values, attitudes, and beliefs, which will give them a true feeling that they belong to the organization. This involves recruiting and nurturing new employees with the values, attitudes and beliefs of the organization.

Fourth: The Concept of Sustainable Performance

Given the current accelerated global dynamics in the contemporary world, sustainable performance has evolved into a core notion in which organizations tend to embrace it to guarantee the survival of their prosperity and attain a balance between the economic, social, and environmental goals.

Sustainable performance is stated as the outcome of how successful an organization employs and uses its resources in order to attain the intended objectives. It is indicative of how well the institution manages its material and human resources and utilizes them in the best way to realize goals in a sustainable way (Al-Sharmani, 2022: 226).

It has also been stated as realizing greater productivity with less consumption of resources without affecting its quality, profitability, and competitiveness, a factor that helps in environmental conservation. This form of performance is the economic, operational, social, and environmental performance because of the implementation of the green human resource management practices (Abu Ria et al., 2023: 54).

According to Mousa et al. (2022: 378), sustainable performance is a combination of economic, social and environmental performance. It does not just concern financial performance or shareholder maximization, its sustainability demands that it pays attention to the interests of employees, the local community, customers, the natural environment and future generations. It entails the attainment of economic, social, and environmental opportunities in a combination.

In line with the foregoing definitions, the researcher presents a broader concept: sustainable performance entails the acceptance by the organizations of the operational practices that take into consideration the economic, environmental, and social goals in order to increase the efficiency of

the operation in the long term. This performance is based on the innovative strategy and efficient organizational processes that help to guarantee the constant growth and development and consider the effect of operations on the environment and society.

Fifth: Dimensions of Sustainable Performance

Sustainable performance is assessed in four dimensions namely the economic, social, environmental and cultural which are commonly known as the four pillars of sustainability. The ample evidence among many researchers is that an organization is able to achieve sustainable performance when these basic dimensions are effectively integrated within the organization. The dimensions are the following (Aziz et al., 2021: 90):

1. Economic Dimension: This is the capacity of an economic unit to bring about financial objectives to the stake holders and share holders through the production of acceptable returns to their investments. The key indicator of gauging the economic aspect is the use of financial goals. Also, this dimension shows sustainability outcomes of performance and implementation success of the plan. The economic aspect also aids in measuring the performance of the economic unit as it measures the competitive indicators in the particular industry which aids in the determination of its long term continuity and success (Sabri & Hashem, 2023: 19).

2. Environmental Dimension: In the ISO, the environmental performance is described as the quantifiable measurable outcomes of the environmental management system, and attributed to certain aspects of the environment depending on the environmental policy and aims of the organization (Al-Sharmani, 2022: 227).

3. Social Dimension: This is the capacity of the organization to advance the social wellbeing by increasing the wellbeing of communities in terms of health and safety, minimizing the risks that are experienced by the individuals, such as occupational health and safety of the employees. This dimension underlines the role of the organization in maximizing its human resources towards social justice, offering equal employment opportunities to all groups in the society and the support of different communities. Social aspect also involves the provision of appropriate working environment and social responsibility of the organization to the society.

Chapter Three: Practical Aspect

First: Description of the Surveyed Sample

The following section has dealt with the properties of the study sample in regard to university and nature of work, gender, academic qualification, age, and years of experience. These are the characteristics in Table (1).

Table (1): Description of the Study Sample Individuals

Variable	Level	Frequency	Percentage
University	Anbar	**23**	**22.8%**
	Al-Mustansiriya	**19**	**18.8%**
	Baghdad	**27**	**26.7%**
	Tikrit	**21**	**15.8%**
	Mosul	**11**	**15.9%**
Nature of Work	Employee	**44**	**43.6%**
	Academic Staff	**57**	**56.4%**
Gender	Male	**83**	**62.9%**
	Female	**18**	**37.1%**
Academic Qualification	Diploma	**6**	**5.9%**
	Bachelor's	**23**	**22.8%**
	Master's	**39**	**38.6%**

	Doctorate	**33**	**32.7%**
Age Group (Years)	Under 20 years	**7**	**6.9%**
	20–25 years	**16**	**9.8%**
	26–30 years	**13**	**12.9%**
	31–35 years	**29**	**28.7%**
	36–40 years	**21**	**20.8%**
	41 years and above	**15**	**20.9%**
Experience	Less than 5 years	**10**	**9.9%**
	6–10 years	**17**	**16.8%**
	11–15 years	**52**	**51.5%**
	16 years and above	**22**	**21.8%**

Table (1) reveals that the following were the response rates of the universities to the questionnaires: Anbar University (22.8%), Al-Mustansiriya University (18.8%), Baghdad University (26.6%), Tikrit University (15.8%), and Mosul University (15.9%). It is noted that the most responses were obtained in Baghdad University, which is one of the largest and most expansive universities. The university has an organizational and administrative framework that enhances communication and relaying of electronic or paper questionnaires to different departments and colleges, which further boosts the chances of accessing more respondents in the study.

Concerning the type of work, the employee percentages were 43.6% and the academic staff was 56.4%. The reason why the proportion of the academic employees is higher is because the university delegates few administrative responsibilities to the scholars as earlier noted. The university has also automated most of the administrative and technical functions thus minimizing the presence of the administrative and technical staff. The questionnaires were sent to the heads of departments, divisions, and technical and administrative units, which are not occupied by staff with less than a masters degree, unless they have at least 10 years of administrative experience.

As far as the gender is concerned, 62.9% were male and 37.1% were female. This is explained by the fact that the Iraqi society is a male dominated one, and it is more likely to recruit male recruits. In addition, the work that is designated is usually demanding, and in this case, male performance is usually deemed more effective than female performance.

Regarding academic qualification, 5.9% of respondents held a diploma or lower, 22.8% held a bachelor's degree, 38.6% held a master's degree, and 32.7% held a doctorate. This distribution reflects the low proportion of diploma and bachelor's degree holders in administrative and technical positions, as the university has automated many of its functions.

Regarding the age group, the percentages were as follows: under 20 years (6.9%), 20–25 years (9.8%), 26–30 years (12.9%), 31–35 years (28.7%), 36–40 years (20.8%), and over 41 years (20.9%). This result is a positive indicator of the youthfulness of the population that Iraqi universities engage with and reflects another positive aspect, highlighting the universities' attention to experience while providing opportunities for young individuals to contribute fresh ideas and perspectives that serve the institutions.

In terms of years of experience, the percentages were as follows: less than 5 years (9.9%), 6-10 years (16.8%). 11-15 years (51.5) 16 years and above (21.8). These percentages would be acceptable considering the degree of experience that these universities need to achieve successful operations.

Second: Description of the Study Variables

To analyze the role of the talent management in the Iraqi universities, the researcher used arithmetic means, standard deviations, the level of importance of each item, and the level of agreement as follows:

1. Description of Talent Management Variable and Its Dimensions

a. Description of Talent Selection Dimension

Table (2): Arithmetic Means, Standard Deviations and the Importance Ranking to the Responses of the study sample on the Implementation of Talent selection in the target Universities.

Level	Item Importance Ranking	Standard Deviation	Arithmetic Mean	Item	No.	Field
High	**2**	**0.84**	**2.79**	The university announces its needs through media channels.	**1**	**Talent Selection**
High	**1**	**0.78**	**2.88**	The university announces benefits (salary, allowances, incentives).	**2**	
Medium	**6**	**1.08**	**2.21**	The university relies on high standards and specific procedures to select talented individuals.	**3**	
Medium	**4**	**0.95**	**2.47**	The university classifies the quality of required talent for each job level.	**4**	
Medium	**5**	**1.01**	**2.28**	The university evaluates scientific activities and conferences to attract and recruit talent.	**5**	
Medium	**3**	**0.82**	**2.50**	The university considers employee talents as a vital resource to make them feel valued.	**6**	
medium		**0.67**	**2.51**	**Overall Result**		

As it can be seen in Table (2) the level of practices of talent selection in the sampled Iraqi universities had an overall arithmetic mean of (2.51) and a standard deviation of (0.67). The values of the arithmetic mean at the item level were in the range of (2.21-2.88). The first item was item (2) and says that the university announces benefits (salary, allowances, incentives) whereby, the arithmetic mean is (2.88) with a standard deviation of (0.78). This outcome can be explained by the introduction of ministerial laws and instructions (Civil Service Council), as well as by the fact that the public universities followed the instructions of the Iraqi Ministry of Higher Education on salaries, allowances, and incentives.

The item with the lowest rank was item (3), which indicates that the university uses high standards and special procedures to recruit talented people, the arithmetic mean of which is (2.21) and the standard deviation is (1.08). This is an unsatisfactory score because there are no transparent and clear mechanisms in universities to identify the talents. That is, no exact and narrow criteria are used during the selection process, which results in the lack of efficiency of the institutional performance and the lack of equality of opportunities. It is a lack that indicates poor strategic

human resource planning and a negative impact on sustainable performance especially on the economic aspect that depends on the proper utilization of eminent competencies and talents.

b. Description of the Talent Development Dimension

Table (3): The Arithmetic Means, Standard deviations and the ranking of the importance levels of the responses of the Study sample to the development of talents in the targeted Iraqi universities.

Field	No	Item	Arithmetic Mean	Standard Deviation	Item Importance Ranking	Level
Talent Development	1	The university continuously analyzes employee data.	3.22	0.72	4	Medium
	2	The university develops plans to encourage new initiatives and ideas.	3.22	0.78	4	Medium
	3	The university places talented individuals in prominent positions within the organizational structure.	3.28	0.82	2	medium
	4	The university involves talented individuals in decision-making to develop their leadership skills.	3.15	0.77	6	medium
	5	The university provides the necessary resources to develop and support the ideas of talented individuals.	3.24	0.85	3	medium
	6	The university provides a suitable environment for talented individuals to work effectively.	3.41	0.89	1	medium
	Overall Result		3.25	0.64	Medium	

Table (3) clearly shows that the overall standard deviation of (3.25) at the overall arithmetic means of the level of practices related to the development of talent in the sampled Iraqi universities, had a standard deviation of (0.64). The arithmetic mean values were found to be within (3.153.41) at the level of items.

The top ranked item was the item (6) which narrates the fact that the university has the appropriate environment to work with talented individuals and its arithmetic mean is (3.41) and standard deviation is (0.89). As a matter of fact, not all of such efforts are based on consistent local policies but are rather based on external assistance like the projects of the Reconstruction Fund for Affected Areas, or provincial budget allocations. This reliance has the risk of influencing the stability of persistence in providing support to talented people, which will result in changes in the assessment of the sufficiency of the working environment by respondents.

The least ranked one was item (4), which explains that the university engages talented people in making decisions to build their leadership abilities with the arithmetic mean of (3.15) and the standard deviation of (0.77). This indicates a low extent of concurrence with the respondents as compared to other items. The lack of opportunity to integrate talents in administrative procedures and decision-making in the university, which causes a distinct deficit and marginalization of

talented people, can be explained in terms of academic opportunities related to this aspect and the development of leadership abilities and a negative impact on the investment of qualified human capital. One of the most remarkable points is that the inclusion of talented people into decision making is among the most important indicators of effective talent management which will have a sustainable performance in the long term.

c. Description of the Talent Motivation Dimension

Table (4): Arithmetic Means, SD, and Ranking Importance Level of Responses of the Study Sample to Talent Motivation.

Field	No	Item	Arithmetic Mean	Standard Deviation	Item Importance Ranking	Level
Talent Motivation	1	The university provides the necessary incentives to develop leadership talents.	**3.17**	**0.90**	**3**	Medium
	2	The university grants employees equal opportunities to occupy leadership positions.	**3.21**	**0.92**	**1**	Medium
	3	The university supports outstanding and creative ideas in work execution methods.	**3.01**	**0.80**	**4**	Medium
	4	The university provides appropriate training for holders of leadership positions.	**3.40**	**0.89**	**2**	Medium
	Overall		**3.15**	**0.60**	**Medium**	

Table (4) clearly shows that the overall standard deviation of the arithmetic mean of level of talent motivation practices in the sampled Iraqi universities had an (3.15) mean and a standard deviation of (0.60). On the item level, the arithmetic mean scores were within (3.01- 3.21).

The top-ranked item was item (2), according to which the university provides the employees with equal opportunities to hold leadership positions, the arithmetic mean of which is (3.21) with a standard deviation of (0.92). This can be explained by the fact that the universities are dependent on the principle of years of service in promoting and advancing.

The least important item was item (3), which is that the university promotes exceptional and innovative concepts regarding work implementation techniques, which has the arithmetic mean of (3.01) and the standard deviation of (0.80). This is an expression of a distance between the stated theoretical orientations and the actual application of the innovation policies in the universities. The deficiency in this respect might result in the absence of good incentives to promote creativity or the prevalence of conventional administrative and work approaches to restrain individual and outstanding initiatives.

d. Description of the Talent Performance Evaluation Dimension

Table (5): Arithmetic Means, Standard Deviations, and Ranking of Importance Levels for the Responses of the Study Sample Regarding Talent Performance Evaluation in the Targeted Universities

Field	No	Item	Arithmetic Mean	Standard Deviation	Item Importance Ranking	Level
Talent Performance Evaluation	1	The university establishes a specific system for evaluating the performance of talented individuals.	**3.32**	**0.92**	**1**	High
	2	The university relies on talent performance evaluation results to determine their training needs.	**3.22**	**0.85**	**2**	High
	3	The university uses innovative methods to develop the performance of talented individuals.	**3.21**	**0.93**	**3**	High
	4	The university adopts clear and announced criteria for evaluating talented individuals.	**3.22**	**1.03**	**5**	Medium
	5	The university ensures that talented individuals can complete their duties within the required time.	**3.25**	**0.93**	**4**	Medium
	Overall		**3.24**	**0.53**	**medium**	

As can be seen in Table (5), the arithmetic mean of the level of the practices of talent performance evaluation in the sampled Iraqi universities had an overall mean of (3.24) with a standard deviation of (0.53). At the item level, there was a range between (3.12 3.22) in the arithmetic mean values.

The best rated item was (1) indicating that the university has a definite mechanism of how it appraises the performance of talented people, arithmetic mean of (3.24) and standard deviation of (0.92). This finding can be attributed to the fact that the universities place a lot of emphasis on the concept of performance evaluation as a strategic human resource management instrument in the selection of talented individuals who are critical in the attainment of institutional excellence. The presence of such a specific system of performance evaluation proves the awareness of the organization to the necessity of measurement and constant development, which is often described in accordance with current trends in university management, in particular, under the pressure of the need to quality assurance, academic accreditation, and the approach to the publication of research in reputable journals as a measure of performance evaluation taken by the Ministry of Higher Education. The standard deviation shows a relative variation in opinion of the participants, which can be explained by the fact that the study population members have different views on the modern types of the performance evaluation forms in use.

The least ranked was item (4) indicating that the university uses transparent and declared standards to measure talented people, the arithmetic mean of (3.22) and the standard deviation of (1.03). This is explained by the weakness in the policies of internal transfers or lack of proper systems that would guarantee transparency and fairness in transfer of talented individuals across departments or positions. It can also mean that the process of moving talented individuals is done on ground of administrative or personal grounds instead of a proclaimed organizational structure on competence and performance basis. The large standard deviation indicates observable difference in the opinion of the respondents that might be caused by the differences in their experiences, level of awareness about these procedures or facilities which are not evenly applied. The lack of setting clear evaluation standards is an issue that affects sustainable performance in a negative way as it lacks trust in the organizational fairness among talented staff and deprojects their motivation to continue and innovate.

e. Description of the Talent Retention Dimension

Table (6): Arithmetic Means, Standard Deviations and Importance Levels ranking of the Responses of the Study Sample in relation to Retaining Talent in Iraqi Universities.

Field	No	Item	Arithmetic Mean	Standard Deviation	Item Importance Ranking	Level
Talent Retention	1	The university ensures the provision of a suitable and encouraging work environment for talented individuals.	**3.37**	**0.92**	**1**	High
	2	The university rewards talented individuals specifically for exceptional performance.	**3.12**	**0.85**	**2**	High
	3	The university develops self-confidence and a sense of achievement among talented individuals.	**2.72**	**0.93**	**3**	High
	4	The university gives priority to filling leadership positions with talented individuals.	**2.87**	**1.03**	**5**	Medium

	5	The university fosters a spirit of competition among employees to promote self-development.	**1.63**	**0.93**	**4**	Low
	Overall		**2.74**	**0.53**	**Medium**	

As it can be seen in Table (6), the overall mean of the arithmetic result of the level of talent retention practices in the sampled Iraqi universities was (2.74) with a standard deviation of (0.53). At the item level, the arithmetic mean values were in the range (1.63-3.37). The most significant ranked item was item (1), where it says that the university has put in place adequate and favorable working environment to the talented people with an arithmetic mean of (3.37) and a standard deviation of (0.92). Such a high score can be explained by the fact that the universities offer the necessary resources, scientific laboratories, and advisory offices which facilitate the preservation of talents.

2. Description of the Sustainable Performance Variable

The researcher relied on arithmetic means, standard deviations, item importance, and level of agreement, as shown in Table (7).

Table (7): Arithmetic Means, Standard deviations, and the ranking of the level of importance of the responses of the sample of the research population on sustainable performance in sampled Iraqi university (Ranked in descending order)

No	Item	Arithmetic Mean	Standard Deviation	Item Importance Ranking	Level
1	The university ensures the construction of buildings suitable for innovation and environmental preservation.	**3.72**	**1.16**	**1**	High
2	The university ensures the provision of environmentally friendly teaching methods.	**3.66**	**1.17**	**2**	Medium
3	The university implements the Environmental Management System ISO 14001:2015.	**3.65**	**1.18**	**3**	Medium
4	The university contributes to community development and the achievement of social well-being.	**3.53**	**1.24**	**4**	Medium
5	The university conducts workshops to encourage employees toward sustainable innovation.	**3.53**	**1.03**	**4**	Medium
6	The university fulfills its social responsibility through participation in programs that provide services to the community.	**3.51**	**1.08**	**6**	Medium

7	The university's electronic business model engages significantly with multiple entities and international organizations.	**3.20**	**1.12**	**7**	Medium
8	The university's electronic business model enables communication channels between talented individuals and higher authorities.	**3.20**	**1.16**	**7**	Medium
9	The university's electronic business model assists in attracting new talented individuals.	**3.17**	**1.17**	**9**	Medium
10	The university ensures the achievement of stakeholders' objectives.	**3.09**	**1.15**	**11**	Medium
11	The university's website contributes to task efficiency and cost reduction.	**2.97**	**1.01**	**12**	Medium
	Overall Score	**3.39**	**0.63**		**medium**

Table (7) reveals that the sustainable performance in the sampled universities was high and the overall arithmetic mean was (3.39) and a standard deviation of (0.63). The items in this domain were in high to medium levels mean arithmetic (3.72 -2.97).

The first and most ranked item is item (1) that says, The university makes sure it builds buildings that are appropriate to innovations and environmental protection, and arithmetic mean was (3.72) and standard deviation (1.16). This shows that the university is well concentrated in achieving scientific progress and at the same time be environmentally responsible through ensuring that it offers an environment that is open to innovation and at the same time, keeps to environmental standards.

The second-rated item was item (2) with the arithmetic mean of (3.66) and a standard deviation of (1.17) which was rated medium: The university ensures the provision of the environmentally friendly teaching methods. This is an indication that the university understands the relevance of attaining sustainability in education by giving relevance to practices to minimize environmental impact (i.e. reducing paper usage, adopting e-learning and offering recyclable or less harmful educational tools and materials).

This article (10) was the second-to-last item, and its content was, The university ensures the achievement of the stakeholders objectives, its arithmetic mean is (3.09) and the standard deviation is (1.15) which is medium. This implies that the majority of the respondents did not find the efforts by the university to address the expectations and needs of the stakeholders (e.g., students, parents, the local community, and the labor market) to be visible or direct, which may have been caused by a poor communication or a little number of initiatives indicating such focus.

The least ranked was item (11), The university website helps to make the task efficient and cost less and the arithmetic mean of the item was (2.97) and the standard deviation was (1.01) which is medium. This implies that the sample of the study finds the university website to be not very useful in achieving efficiency or minimizing costs which could be due to technical factors, lack of services available or the lack of user awareness on how to use it to complete a task or access the information.

3. Description of the Study Sample

In this section, the personal information of the respondents will be described, as shown in

Table (8): Description of the Surveyed Individuals.

Percentage	Number	Category or Group	Description
65%	**66**	Male	Gender Age Group
35%	**35**	Female	
%100.0	**101**	Total	
13.9%	**14**	Under 30 years	Educational Qualificatio Description
18.8%	**19**	31–40 years	
38.6%	**39**	41–50 years	
28.7%	**29**	51 years and above	
%100.0	**101**	Total	
12.9%	**13**	Higher Diploma	Gender Age Group
37.6%	**38**	Master's	
49.5%	**50**	Doctorate	
%100.0	**101**	Total	
13.9%	**14**	Less than 5 years	Educational Qualification
24.8%	**25**	5–10 years	
30.7%	**31**	11–15 years	
15.8%	**16**	16–20 years	
10.8%	**11**	21–25 years	
4%	**4**	More than 25 years	
%100.0	**101**	**Total**	

Gender: 65 percent of the respondents were males, and 35 percent were females.

Age: The respondents within the age group of less than 30 years constituted 13.9% and those within the 31-40 years bracket constituted 18.8% of the entire respondents and those aged 41-50 years constituted 38.6% of the total respondents.

Educational Qualification: Respondents who had a Higher Diploma were 12.9, Master degree were 37.6, and Doctorate were 49.5.

Years of Work Experience: The respondents who had been in the job less than 5 years and those who had 5 to 10 years experience constituted 13.9 and 24.8 percent of the respondents respectively. 11-15 and 16-20 years experience constituted 30.7 and 15.8 percent of the respondents respectively. Those with experience of more than 25 years accounted to 4 percent of the respondents.

4. The reliability test of the questionnaire will be carried out as follows:

Feldt and Brennan (1989) categorized the values of the reliability coefficient by taking it to be of two levels namely the high reliability coefficient which is between 70 and above and the low reliability coefficient which is between 70 and below.

The Alpha coefficient of Cronbach was estimated, and the results were obtained in Table (9) below:

Table (9) Reliability Measurement of the Study Variables.

Cronbach's Alpha Coefficient	Dimensions
0.87	Talent Attraction

0.83	Talent Planning
0.80	Talent Motivation
0.77	Talent Development
0.70	Talent Retention
0.83	Economic Dimension
0.81	Environmental Dimension
0.78	Social Dimension
0.92	Cronbach's Alpha for Combined Dimensions

Source: The researcher prepared it using SPSS outputs.

It is noted that the composite Cronbach alpha coefficient value was 0.92 which is higher than 0.70 that corresponds to high reliability of the study variables. Besides, the alpha of each dimension of the variables was above 0.70, which confirmed that, basing on the findings in Table (9), the study variables were highly stable.

Fifth: Internal Consistency

Internal Consistency is one of the significant steps to evaluate the relationships between the questionnaire items of one particular dimension. It is also possible to examine the correlation between all the items in one variable by using this measure. It is normally determined by taking the mean of the absolute correlation coefficients of all pairs of items in a dimension or variable. The presence of the internal consistency is identified by a value that exceeds 0.3 (Wu, M. et al., 2016).

Evidence of internal consistency at the level of the main variables is also present indicated by absolute mean correlation values up to 0.38 with the Talent Management variable and up to 0.40 with the Sustainable Performance variable, which are above 0.3, as indicated in Table (10).

Table (10): Internal Consistency Values at the Level of Main Variables

Inter-Item Correlations					
Main Variables	**Mean**	**MinimuM**	**MaximuM**	**VariancE**	**NO. of Item**
Talent Management	**0.38**	**0.015**	**0.766**	**0.020**	**20**
Sustainable Performance	**0.40**	**0.034**	**0.802**	**0.022**	**12**

Source: Created by the researcher using SPSS results.

Sixth: Hypotheses Testing

In this part, the researcher will examine the study hypotheses through the suitable statistical methods, which are based on the research problem and the research questions as follows:

A. Correlation Analysis

Correlation coefficient is another significant instrument that is used to identify the strength and the nature of the relationship between any two variables. The coefficient explains the relation between variables as to whether it is positive or negative and this can be determined by the sign of the coefficient. The range of correlation coefficients is -1 and +1. The more the coefficient is related to ±1, the better the relationship between the two variables. The significance of the relationship can also be determined with the help of the p-value of the correlation coefficient as well.

Main Hypothesis 1: There is a statistically significant correlation between the variable **Talent Management** and the variable **Sustainable Performance**.

Table (11) below shows the results of testing the first main hypothesis:

Table (11): Correlation between Talent Management and Sustainable Performance

First Variable	Direction of the relationship	Second variable	Correlation value	95% Confidence Interval		P-value
				Lower	Upper	
Talent Management	⟷	Sustainable Performance	Sustainable Performance	**0.655**	**0.855**	**0.002**

Source: Prepared by the researcher.

From Table (11) above, it is observed that the correlation coefficient between the Talent Management variable and the Sustainable Performance variable is positive, indicating a direct relationship between the two variables. The correlation coefficient value is 0.77, which is statistically significant as the P-value is 0.002, less than 0.05. Additionally, both the lower and upper bounds of the 95% confidence interval (0.655, 0.855) share the same sign at the 0.05 significance level. This indicates a significant correlation between Talent Management and Sustainable Performance. Figure (1) below illustrates the correlation between the Talent Management variable and the Sustainable Performance variable.

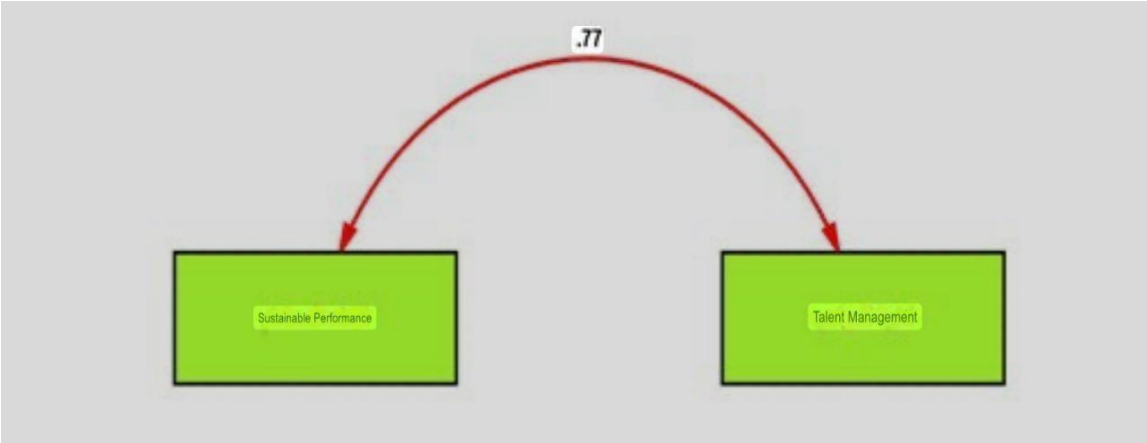

Figure (2) Correlation between the Talent Management variable and the Sustainable Performance variable

Source: Prepared by the researcher.

From this main hypothesis, the following sub-hypotheses emerge:

1. There is a statistically significant correlation between Talent Attraction and the Sustainable Performance variable.
2. There is a statistically significant correlation between Talent Planning and the Sustainable Performance variable.
3. There is a statistically significant correlation between Talent Motivation and the Sustainable Performance variable.
4. There is a statistically significant correlation between Talent Development and the Sustainable Performance variable.
5. There is a statistically significant correlation between Talent Retention and the Sustainable Performance variable.

Table (12) below presents the results of testing the above hypotheses:

Table (12) Correlation between the Dimensions of the Talent Management Variable and the Sustainable Performance Variable

First Variable:	Direction of the relationship	Sustainable Performance	Correlation Value	95% Confidence Interval		P-value
				Lower	Upper	
* Talent Attraction	⟷	Sustainable Performance	0.77	0.638	0.861	0.001
* Talent Planning	⟷		0.62	0.486	0.751	0.001
* Talent Motivation	⟷		0.66	0.445	0.785	0.001
* Talent Development	⟷		0.43	0.232	0.606	0.003
* Talent Retention	⟷		0.68	0.491	0.803	0.002

Source: Prepared by the researcher.

It is evident from the table above that all dimensions of the talent management variable exhibited a positive relationship with the sustainable performance variable, as indicated by the positive signs of the correlation coefficients. The correlation values for the dimensions (Talent Attraction, Talent Planning, Talent Motivation, Talent Development, Talent Retention) were (0.68, 0.43, 0.66, 0.62, 0.77) respectively. Furthermore, all dimensions of the talent management variable were statistically significant, as their p-values were less than 0.05. Additionally, the confidence intervals for the dimensions of talent management showed consistent signs, indicating the significance of the corresponding correlation coefficients.

The correlation between the dimensions of talent management and sustainable performance can be observed in Figure (3).

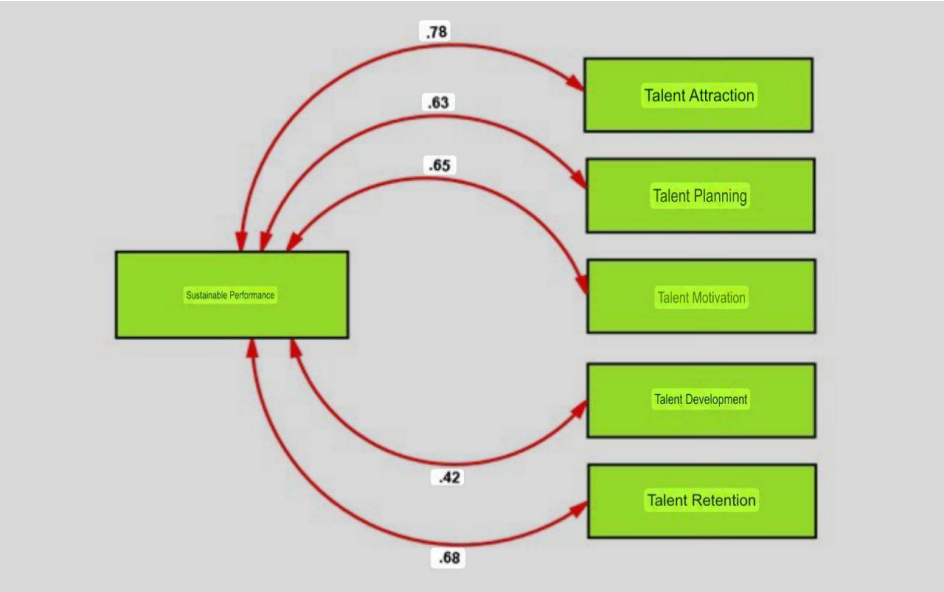

Figure (3): Correlation between the Dimensions of the Talent Management Variable and the Sustainable Performance Variable

Source: Prepared by the researcher.

Main Hypothesis 2: There is a statistically significant effect of the talent management variable on the sustainable performance variable.

Table (13) below presents the results of testing Main Hypothesis 2:

Table (13): Results of the Effect of the Talent Management Variable on the Sustainable Performance Variable

Independent Variable	Direction of the Effect	Dependent Variable	Regression CoefficientEstimate(β)	Standard Error of the Regression Coefficient Se.(β)	R^2	95% Confidence Interval		P-value
						Lower	Upper	
Talent Management	→	Sustainable Performance	0.873	0.101	0.60	0.670	1.080	0.001

Source: Prepared by the researcher.

The effect of the talent management variable on the sustainable performance variable is illustrated by the estimated coefficient for talent management, which reached (0.873). This indicates a positive relationship between talent management and sustainable performance, as shown by the positive sign of the estimated coefficient. The standard error (S.E.) was (0.101).

Additionally, the effect of talent management on sustainable performance was statistically significant, with a p-value of (0.001), which is less than (0.05). The 95% confidence interval also showed consistent signs, with the lower and upper bounds being (0.670, 1.080), respectively.

Based on these results, the alternative hypothesis stating that talent management has a significant effect on sustainable performance is accepted. The R^2 value was 60%, indicating that 60% of the variance in the dependent variable, sustainable performance, is explained by changes in the independent variable, talent management.

The effect of talent management on sustainable performance can be observed in Figure (4).

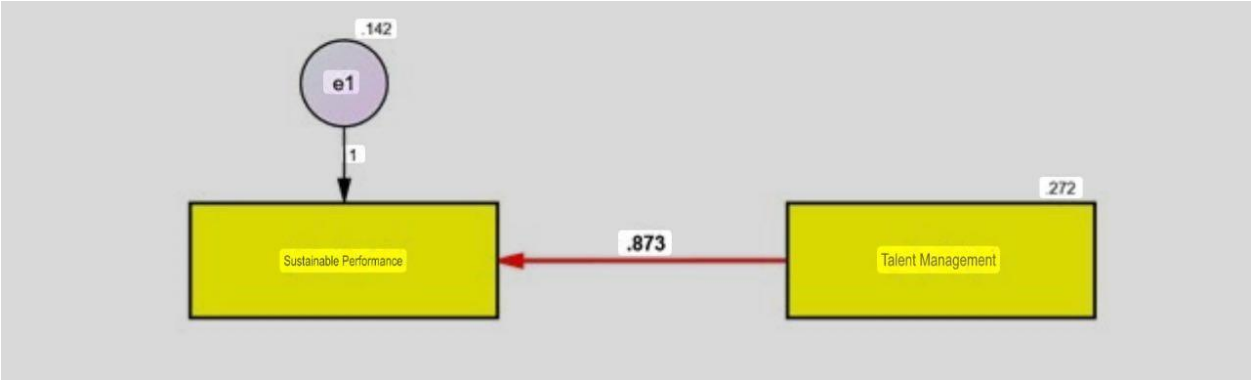

Figure (4): The effect of Talent Management on Sustainable Performance

From this main hypothesis, the following sub-hypotheses are derived:

1. There is a statistically significant effect of Talent Attraction on Sustainable Performance.
2. There is a statistically significant effect of Talent Planning on Sustainable Performance.
3. There is a statistically significant effect of Talent Motivation on Sustainable Performance.
4. There is a statistically significant effect of Talent Development on Sustainable Performance.
5. There is a statistically significant effect of Talent Retention on Sustainable Performance.

Table (14) below presents the results of testing the above hypotheses:

Table (14): Results of the Effect of Talent Management Dimensions on Sustainable Performance

Independent Variable	Direction of Effect	Dependent Variable	Estimate(β)	Standard Error of the Regression Coefficient Se.(β)	R^2	95% Confidence Interval		P-value
						Lower	Upper	
Talent Attraction	→	Sustainable Performance	0.579	0.069	0.68	0.431	0.692	0.001
Talent Planning	→		0.557	0.091		0.386	0.740	0.001
Talent Motivation	→		0.692	0.127		0.433	0.909	0.001
Talent Development	→		0.409	0.091		0.250	0.600	0.001
Talent Retention	→		0.743	0.115		0.508	0.959	0.001

Source: Prepared by the researcher.

From Table (14) above, it is observed that all dimensions of the talent management variable exhibited a positive relationship with the sustainable performance variable, as indicated by the positive signs of the estimated parameter values. The estimated parameter values for the dimensions (Talent Attraction, Talent Planning, Talent Motivation, Talent Development, Talent Retention) were (0.743, 0.409, 0.692, 0.557, 0.579), respectively. Moreover, all dimensions of the talent management variable were statistically significant, as their associated p-values were less than 0.05. The confidence intervals for the dimensions of talent management also showed consistent signs, indicating the significance of these dimensions. The R^2 value reached 68%, which means that 68% of the variations in the dependent variable, sustainable performance, are explained by the variations in the dimensions of the talent management variable.

The effect relationship of the dimensions of the talent management variable on sustainable performance can be observed in Figure (4).

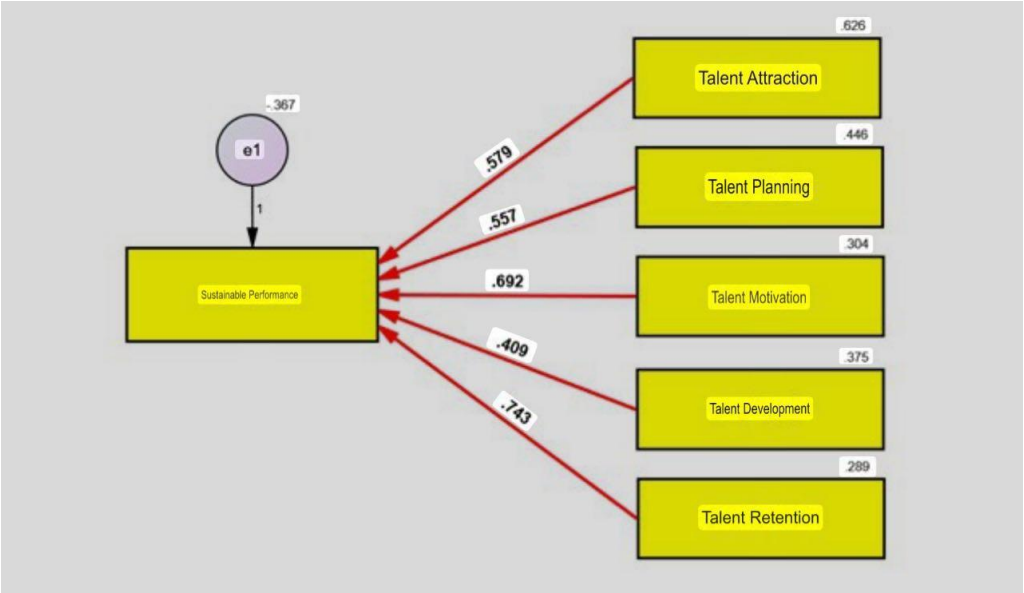

Figure (4) Effect Relationship of the Dimensions of the Talent Management Variable on Sustainable Performance

Source: Prepared by the researcher.

Chapter Four

Conclusions and Recommendations

First: Conclusions

1. The results of the study revealed that a percentage of the male participants was 65, whereas the female participants were 35 implying that the sample was very skewed towards males. The difference can be explained by the fact that the target academic or professional population consists of more males or that the males are more willing to be used as participants in such research projects.
2. The findings reveal that there is an imbalance in the mechanism of competencies selection and employment in the university, and the absence of clear and transparent standards, which adversely affects the performance efficiency of the university and restricts the ability to employ qualified human resources.
3. Results also indicated that offering talents a good and supportive working environment is positively correlated with the improvement of sustainable performance as it is one of the main conditions to attract and maintain talents.
4. The low-level approaches to attracting and appointing human resources in the researched universities impact negatively on the quality of sustainable performance.
5. The outcomes revealed that there is a positive relationship between the management of talents and sustainable performance which meant that the more the management of the talents undertaken by the universities conducting the survey, the more sustainable the performance of the university.
6. The findings affirm that there is statistically significant correlation and effects of talent management practices on sustainable performance, implying that the presence of talents is an effective contribution to sustainability of the performance of the universities.

Second: Recommendations

1. The study recommends achieving a greater gender balance in future research by encouraging wider female participation to ensure more accurate representation of all perspectives, reflecting reality comprehensively and enhancing the reliability of results.
2. Promote a culture of positive competition and self-development to provide a motivating and suitable work environment for talents.
3. Train leadership talents in planning through training programs and activate the concept of continuous learning in universities by recognizing the knowledge, skills, or previous experiences acquired by employees through work experience.
4. Develop regulations and policies to establish an entity for nurturing talents through the exchange of experiences and cooperation among them.
5. Formulate a strategy to retain top talents by focusing on the development and education of human resources through training and development, contributing to human resource growth.

References

Arabic Sources

1. Hussein, W., Fayyad, S., & Habib, A. (2022). The impact of talent management on achieving creativity in Iraqi museums. *Al-Rafidain University College Journal of Sciences*, (51). Al-Rafidain University College.

2. Shreidem, M. (2022). Talent management and its role in reaching the golden status: An exploratory study at Al-Rayan Dairy Company. *Gulf Economist Journal*, (58). University of Basra, College of Administration and Economics.

3. Nasif, A. K. (2023). The impact of human talent management on strategic success: An analytical study at the University of Anbar. *Iraqi Journal of Sciences*, 19(62), College of Administration and Economics.

4. Wali, A. I., & Abubakr, D. I. (2021). The role of talent management in building core competencies: An analytical study of college council members' opinions at Salahaddin University, Erbil. *Tikrit Journal of Modern Administrative Sciences*, (55).

5. Al-Sharmani, A. Z. F. (2022). Strategic capabilities and their role in enhancing sustainable performance: An applied study at Pepsi Kufa Lab, Najaf Province. *Warith Scientific Journal*, (9).

6. Sabri, H. A., & Hashem, H. N. (2022). The impact of creativity strategies on sustainable performance through the mediating variable of market leadership: A case study at Al-Narjis Pipe Production Company, Basra Province. *Administrative Studies Journal*, 17(34).

7. Aziz, K. A., Ubaid, A. J., & Ghadeer, I. M. (2021). Measuring the sustainable performance of the University of Kufa using the balanced sustainable scorecard. *Al-Ghari Journal of Economic and Administrative Sciences*, 16(55).

8. Hassoun, H. H. (2021). The contribution of organizational flexibility in human talent management: An exploratory analytical study of managers' opinions at the Directorate General of Education, Nineveh. *Dar Al-Manzuma Journal*, 17(55).

9. Ahlam, K., & Hamir, M. (2019). Principles and strategies of talent management in organizations. *Journal of Banking, Financial Economics and Business Administration*, 5(1), University of Biskra.

10. Abu Ria, M. J., Abu Zeid, R. M., & Hashad, M. E. (2023). The contribution of ethical leadership to sustainable performance in category (A) tourism companies and five-star hotels: The mediating role of entrepreneurial guidance. *Journal of Tourism and Hotels, Sadat City University*, 7(1).

11. Mustafa, H. J. A. (2024). Enhancing sustainable performance through digital transformation: A case study of Egypt Post Services (EGYSERV). *Journal of Financial and Commercial Research*, 25(1), Faculty of Commerce, Port Said University.

12. Al-Anzi, S. A. H., Al-Atwi, A. A. H., & Al-Abadi, A. R. J. (2011). High-performance work systems as a method to enhance talent management strategy in organizations. *Journal of Good Governance*, 74(33), University of Baghdad.

13. Radwan, M. A. F. (2021). Talent management in the organization. Cairo: Arab Group for Training, Publishing, and Distribution.

14. Yassin, M. H. (2024). The impact of talent management processes on reducing employee turnover: An exploratory study of managers' opinions at the Central Bank of Iraq. *Iraqi Journal of Administrative Sciences*, 20(79), Middle Technical University.

15. Hassan, M. M. H., & Al-Jerjary, A. H. H. (2018). The contribution of internal marketing to human talent management: An exploratory study of some administrative leaders at the University of Mosul. *Journal of Administrative and Economic Sciences*, 25(110).

16. Mousa, S. H., & Muteb, H. K. A. (2022). The impact of cyber-marketing practices on sustainable environmental performance: An applied study at the General Company for

Communications and Informatics. *Al-Ghari Journal, College of Administration and Economics*.

17. Seham, A., & Lamtoush, L. (2024). Competitive intelligence and its role in sustainable performance in the service sector: Telecommunications institutions in Adrar State as a model. 8(2).
18. Schnitter, A. T. (2018). The reality of human talent management implementation and its relationship to organizational performance levels. *Dijlah University College Journal*, (3).

References

1. Al-Dalahmeh, Maha Lutfi. (2020). Talent Management: A Systematic Review. *Oradea Journal of Business and Economics*, Volume V, Special Issue.
2. Bagozzi, R. P., & Yi, Y. (1991). Multitrait–multimethod matrices in consumer research. *Journal of Consumer Research*, 17, 426–439.
3. Feldt, L. S., & Brennan, R. L. (1989). Reliability. In R. L. Linn (Ed.), *Educational Measurement*. New York: Macmillan Publishing Company.
4. Sohel-Uz-Zaman, Abu Saleh Mohammad. (2018). Understanding the Fundamentals of Talent Management for Effective Business Application. *International Journal of Economics, Finance and Management Sciences*, ISSN: 2326-9553.
5. Wu, M., et al. (2016). *Educational Measurement for Applied Researchers*. Singapore: Springer Nature Singapore Ltd. DOI: 10.1007/978-981-10-3302-5_2