

T. C.
REPUBLIC OF TURKEY
FIRAT UNIVERSITY
THE INSTITUTE OF SOCIAL SCIENCES
THE DEPARTMENT OF MANAGEMENT



**NEED ASSESSMENT OF HUMAN RESOURCES FOR
RESEARCH AND INNOVATION PROFESSION IN SOCIAL
SCIENCE; CASE STUDY OF DUHOK UNIVERSITY**

MASTER'S THESIS

SUPERVISOR
Prof. Dr. Kenan PEKER

PREPARED
ARAZ SULAIMAN AHMED

ELAZIĞ – 2019

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Jürimiz,/...../2019 tarihinde yapılan tez savunma sınavı sonunda bu Yüksek Lisans tezini oy birliği ile başarılı saymıştır.

Jüri Üyeleri

- 1.
- 2.
- 3.

F.Ü. Sosyal Bilimler Enstitüsü Yönetim Kurulu'nun/...../..... tarih vesayılı kararıyla bu tezin kabulü onaylanmıştır.

Prof. Dr. Ömer Osman UMAR
Sosyal Bilimler Enstitüsü Müdürü

ABSTRACT**Master Thesis****Need Assessment of Human Resources for Research and Innovation Profession in
Social Science; Case Study of Duhok University****ARAZ SULAIMAN AHMED****Firat University****The Institute of Social Sciences****The Department of Management****Elazığ-2019; Page: X + 88**

The world today is evolving and advancing rapidly in all areas. Human is at the heart of these dramatic developments. Human are the manufacturer and beneficiary of this development. The developed world and the developing world have been working for decades to develop their human resources to varying degrees. The research problem here focused on education as the cornerstone of development in the present age, when practical knowledge is one of the key elements, productivity became very important within the concept of human resources development and modernization. Therefore, the research aims to present and analyse the natural development and dimensions of human development, with emphasis on the importance of education as an input to the investment of human resources and competencies in the present within modern concept of human development. The modern method of human resources development is training to give individual employees or enrich them with skills. Skills are tool that through training to develop abilities of an individual employee. The study attempts to identify need assessment of human resources which is essential for research and innovation on social sciences. The research was conducted through a questionnaire issued by the University of Duhok by selecting a number of faculties of Duhok University, which can extract the results obtained from the research and apply them to the whole university.

The data obtained from the survey was analysed by computer software in order to obtain the results using the links between the research variables and the regression analysis to understand the good ways in which university resource needs can be assessed. The research was reach a number of conclusions that explain the problem and the objectives of the study. The research was also provided a number of suggestions based on search results. From research point of view, this study was contributed to the development of Duhok government operations and to achieve useful benefits from the conclusion of research and suggestions.

Keywords: Assessment, Needs, Human Resources, Innovation, and Scientific Research.

ÖZET**Yüksek Lisans Tezi****Sosyal Bilimlerde Araştırma ve Yenilik Mesleğinde İnsan Kaynaklarının
Değerlendirilmesi; Duhok Üniversitesi Örnek Olay İncelemesi****ARAZ SULAIMAN AHMED****Fırat Üniversitesi****Sosyal Bilimler Enstitüsü****İşletme Ana bilim Dalı****Elazığ-2019; Sayfa: X+88**

Bugün dünya tüm alanlarda hızla gelişiyor ve ilerliyor. İnsan, bu çarpıcı gelişmelerin merkezinde üretici ve yararlanıcı olarak yer almaktadır. Bu düşünceyle gelişmiş dünya ve gelişmekte olan dünya, insan kaynaklarını farklı derecelerde geliştirmek için on yıllardır çalışmakta. Buradaki araştırma problemi, günümüzdeki gelişmenin, dönemin temel unsurlarından biri olan pratik bilginin, insan kaynakları geliştirme ve modernizasyonu kavramına girdiği yenilikler, eğitimin gelişiminin temel taşı olarak ele alınmıştır. Bu nedenle, araştırma, insani gelişmenin doğal gelişimini ve boyutlarını, modern insani gelişme kavramı içinde ve geçmişten günümüze insan kaynakları ve yetkinliklerin yatırıma bir girdi olarak eğitimin önemine vurgu yaparak sunmayı amaçlamaktadır. İnsan kaynakları geliştirme yöntemleri, bireysel çalışanlara önem vermek veya onları modern yöntemlerle zenginleştirmek için eğitmektir. Bireysel bir çalışanın becerilerini ve yeteneklerini geliştirmek için eğitmektir. Çalışma, sosyal bilimlerde araştırma ve inovasyon için gerekli insan kaynakları ihtiyaçlarının bir değerlendirmesini yapmaktadır. Araştırma, Duhok Üniversitesi'nden elde edilen verilerin tüm üniversiteye uygulanabilecek şekilde fakülteler seçilerek anket aracılığıyla yürütülmüştür. Anketlerden elde edilen veriler, üniversitede ihtiyaç duyulan kaynaklar şeklindeki değişkenleri ve regresyon analizi ile aralarındaki bağlantıları elde etmek için analiz edilmiştir. Araştırma sonuçlarına göre bir dizi önerilerde bulunmuştur. Çalışmanın sonuçları, Duhok Devlet Üniversitesi'nin araştırma ve inovasyon faaliyetlerinin yaygınlaşmasına katkıda bulunacak operasyonel gelişime açısından faydalıdır.

Anahtar Kelimeler: Değerlendirme, İhtiyaçlar, İnsan Kaynakları, Yenilik ve Bilimsel Araştırma.

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DECLARATION

I hereby declare that I am the solely author of this Master's Thesis and it is necessary to declare that all data and information in this document have been obtained and submitted in conformity with ethical demeanour and academic rules. I also mentioned that I did not submit this Thesis to any other institution to obtain a degree.

ARAZ SULAIMAN AHMED**Elazığ, 2019**

ACKNOWLEDGEMENTS

All praise to God, the cherisher and sustainer of the worlds, who has created the heavens and the earth, and brought into being deep darkness as well as light.

I would like to thank, and express my appreciations to my sincere gratitude to my supervisor Assoc. Prof. Dr. Kenan Peker for his support, kind, patience, constructive criticisms, great knowledge, motivation, advices and helpful during the preparation my Master's Thesis.

I would like to thank, and express my appreciation to my father and mother and my brothers, and my friends because they have a great role and they always support me to maintain my studying.

I would also like to thank, and express my appreciations to my colleague for developing my Master's Thesis project because people who willingly assisted me in their ability to carry out my master's thesis and it will not be as successful as possible without their support.

ELAZIĞ-2019

ARAZ SULAIMAN AHMED

CHAPTER ONE

1. NEED ASSESSMENT OF HUMAN RESOURCES FOR RESEARCH & INNOVATION

1.1. Introduction

The university is a centre of knowledge communication between the university represented by faculty members and the external environment. It is responsible for the development of human competencies. The success of universities is linked to the quality of education for human resources that based on the ability to transform good practices that products or services for the university's response. The needs of the community make the field of human resource work important for development. The increasing interest in teaching of higher education institutions is an important policy that must be taken into account at the local and international levels. Universities seek excellence and leadership in providing academic and research services to community members and the labour market. Therefore, investing in human resources in the education sector by choosing a good supplier or evaluating needs well helps develop and acquire skills. One of the important things in which universities can be achieved through the provision is research and innovation. The need assessment process is well-defined and includes important skills within human resources management areas in which coordinate between the individual and the job sector. The individual is the person who advances the nations, the economy has limited value if it is not exploited by the human forces that transfer wealth from mere quantities to different technological energies to achieve the desired progress. The needs of the organization as defined estimating the needs of human resources with skill and specificities within a specified time period and choosing the best ways to provide these needs is very important for sustainable development (Berber: 69: 2000). This process enables to exploit all the available potential of organizations in a way that gives the opportunity to invest in human progress, economic growth and social pluralism. Countries such as China, Japan and Southeast Asian have achieved high economic growth rates, managed to overcome the backwardness barrier, and take an advanced position. Human Resources Training has been keen to develop skills and abilities. Also, the world is witnessing a great scientific development, especially in information technology related to the use of computers, communications, and electronics where high skills required. Human resource have to focused on research and development studies for the new age.

1.1.1. Research Importance

The significance of the present study stems from the importance of its investigated variables and the importance of the study sample through several views namely for capability of the university for research & innovation.

This study is important in the academic approach by investigating two of the most important variables in the administrative literature that refer to the need assessment of human resources for research & innovation. The extent of creativity within the research activity was chosen as variables to be developed. The variables and enrichment of the subject were described by scientific references.

The field vision of university faculty members, the cost of exclusion, and its impact on university research performances were studied as highlighting the importance of the university. The university distinguished study in the surrounding environment were chosen as the impact of identifying the needs of the university for research & innovation.

1.1.2. Research Objectives

The main objective of the present study is to examine the training in human recourse management for research & innovation that interacts in performance of Duhok Governorate in Iraq. The other objectives can be explained as follows:

1. Providing a theoretical framework for the variables of the study that view the contributions of a number of researchers to the subjects of these variables with references from scientific sources to enrich the academic aspect of the study.
2. Investigate if there is agreement among the views of the study's sample towards the variables of the study represented by the training H.R.M & research performance of Duhok University.

1.1.3. Search Problem

This research explores the need assessment of human resources at Duhok University for efficiency of research & innovation. Different social institutions play a key role in the transfer of individual norms and values that the basis of the society. Through exposure to incidents occurring in the individual environment, one of the most common indicators of the social interaction is individuals within the groups which they belong. Therefore, the university must identify its human resources needs accurately that have become the focused on by philosophers, psychologists, sociologists, and business

administrators. These works reflect the urgency of the ideas for investing the resource for research & innovation.

The impact on the human mind and thinking, and its impact on the nature of performance and relations between humans and other individuals. Many intellectuals describe this era in several descriptions and ask in the form of questions such as is it the era of science and technology? Or the era of investment in resources? In light of this, they see that the crisis of contemporary man is due to how to train and develop in a way that achieves excellence in performance from others. It can be said that the main problem of universities in Iraq is clarification of the real needs of human resources and the effectiveness of these needs within the good research and innovative researches. Universities are mainly focused on education and do not have significant research & innovation programme. The problem of research & innovation can be explained by the following questions:

1. Is there a difference between the concepts of human resources requirements and needs within the university accurately for research & innovation?
2. What are the necessary human resources requirements that contribute to research & innovation?
3. Is there a significant correlation between the identification of human resource requirements and the research & innovation processes on the macro and micro level?
4. Is there a significant correlation between the determination of human resource requirements and the research & innovation profession?
5. Do research & innovation courses differ from human resources needs for training?

1.1.4. Research Design

Research design is a useful tool for the researcher in planning and implementing research, and helping in obtaining the results and findings. Questionnaire was used to collect the data from the respondents in lecture from University of Duhok Governorate. The research design is extremely important because it determines the success or failure of the study. Determining research design provides researchers a detailed plan which used to guide their research.

This part of the study primarily gives the researcher a heading as to the direction and how the research would be executed. Research could be conducted either through qualitative or quantitative methods. A proper understanding helps the researcher to differentiate the two methodologies and lead the researcher in the correct direction. As both methodologies have its own merits and setbacks the selection of an ideal methodology is crucial to the success of the research. Quantitative research is a methodology that involves deductive approach and gathering and analysing numerical data. The data gathered from questionnaire were analysed by computer software for statistical analysis. The following statistical methods was used:

1. Cronbach's alpha used to measure the reliability and credibility of the research variables.
2. Descriptive statistics involve means, standard deviation, and differences coefficient.
3. The multi correlation analysis used for examine the relationship between the research variables and their dimensions.

1.1.5. Research Framework

The research framework of this study includes only two variables in their dimensions:

1. The independent variable of this study is the qualification of human resource requirements for research & innovation.
2. The dependent variable is research & innovation performance of university.

1.1.6. The study hypothesis

The study adopted main hypothesis; H_0 ; Need assessment of human resource is significant input for university research & innovation performance. The other related hypotheses can be explained as follows:

1. Is there a clear perception by the sample of the study about the importance of assessing human resource needs?
2. Is there a clear perception by the study sample of the importance and understanding of the research innovations of the selected sample?
3. Is there a statistically significant correlation between human resource requirements and research innovation at the macro level for sample study?

4. Is there a statistically significant correlation between each dimension of human resource needs and research & innovation?
5. Is there a statistically significant effect between the identification of human resource needs and research & innovation at the macro level of the sample?
6. Is a correlation relationship of research significance between each dimension of the identification of research needs and research & innovation?
7. Is there research innovation varies according to its human resource needs?

The aim of this study is to identifies the basic human resource needs to determine creativity in research & innovation activity. Other objectives listed can be summarized as follows:

1. Provide a theoretical framework for the variables of the study, which presents the contributions of researchers in the subjects of these variables with references from scientific sources to enrich the academic side of the study.
2. Trying to answer the questions prepared to detect a problem in the study through the results obtained from analysing the field data for the study.
3. Investigate whether there is agreement between the same study on basic research variables.
4. Determine the importance of the study sample on the variables of the study and the dimensions of each variable.
5. Determine the impact of effective needs determination in human resources on effective research performance.

1.2. Literature Review

The performance evaluation in higher education institutions is means to ensure quality and a tool to increasing the effectiveness of university administration. It has had this concept with great interest by many researchers and those interested in the affairs of the improvement of the institutions. This is one of the most fundamental pillars in the development and advancement community as duty of the universities.

The issue of evaluating academic performance is still the biggest challenge that must be overcome by educational institutions that want to remain in a competitive environment, which is a means of achieving a greater goal of raising the level of scientific performance of these institutions in accordance with the requirements of the 21st century. The evaluation of the performance of educational institutions is one of the most important

tasks entrusted to the administration, which enables it to upgrade its performance to an advanced scientific level. The evaluation of its performance and understanding is the main focus of the success and excellence of educational institutions. The important relationship between the quality of teaching performance and the quality of higher education, the researchers tried to show the role of evaluation of teaching performance and its impact on improving the performance of higher education.

Hence, research was conducted in this area on how to develop university performance and found that training as one of the most important strategies by which universities try to improve the human performance (academicians) within the university, and has been obtained many studies that dealt with each of the variables on the side and there are addressed with each other but in different sectors. Clarifying some of priorities as follows;

1. Effectiveness of training in the development of human resources Islamic University - Gaza / Deanship of Graduate Studies / Faculty of Commerce / Department of Business Administration. The study aimed to detect the effectiveness of training in the development of human resources in the UNRWA office in Gaza, through discussing the axes of the training process, which is represented by analysing the training needs. Training planning, implementation and evaluation, as well as management support. The study population is composed of all administrative staff in the UNRWA regional office in Gaza (430) employees. The researcher used the analytical descriptive approach to reach the results of the study. The study was applied to a random sample of (172), 40% of the study population. The response rate was 82, and the information was collected using the questionnaire and analysed using the analysis program (n = 140) for data analysis. The most important findings of the study are that the training needs are determined according to the principles of human resources development in an acceptable manner.

2. The impact of human capital and human capital investments on company performance. Evidence from literature and European survey results Bo Hansson, Ulf Johansson, Karl-Heinz Leitner, third report on vocational training research in Europe, background report, Office for Official Publications of the European Communities, 2004, Luxembourg: This study consists of a literature review and an analysis of an existing database on human resource management (HRM) (the Cranet survey). It focuses on research that connects human capital with the firm and asks whether education,

skills/competence and training have any impact on company performance. The main results may be summarized as follows;

- It appears that training provided by firms for employees is not characterized by being general or specific but by what is needed to stay ahead of competitors. There is a growing body of literature suggesting that firms are financing both types of training.
- More recent research also suggests that investments in training generate substantial gains for firms even if employees can use this training in other firms. The evidence that employers profit from training investments comes from different countries including Britain, France, Ireland, the Netherlands, Sweden, and the US. Most of these studies indicate that training affects performance and not the other way around. The effects of education and skills/competence on aspects such as productivity and innovations.
- Generally, found to be positive and significant, though the connection with profitability might be less expected. Firms can also extract profit from prior education as they do from general training investments. Supporting employee development through training policies and methods for analysing training needs is important to explain the provision of training and training outcomes. Similarly, innovative (and comprehensive) HRM practices tend to be associated with positive company performance. Innovation and information technology (IT) both result in greater investment in training and also depend on education and skills in generating profits.
- Other findings suggest that training and comprehensive HRM practices are closely related to firms' innovative capacity. The lack of studies connecting small and medium enterprises (SMEs), labour market conditions (systems), and social partners with company training policies and performance measures such as productivity or profitability, makes it difficult to draw conclusions on these aspects. This suggests an incentive to research such matters more thoroughly in the future.

3. The Impact of Human Resources Management Strategies on Achieving Strategic Success / Field Study in the Light of Transport, The Journal of Dinars, Issue. The present study dealt with "The impact of human resources management strategies in achieving strategic success" as it has the objective of human resource management

strategies and strategic success increasing attention for being of important topics and relatively modern, which have a significant impact on the future of organizations. Objective of the study is to reveal the pattern of human resources management strategies in a sample of the study, and as if they were eligible for the leadership of the ministry towards the strategic success and for this purpose formulated the hypothesis as follows: no effect Significant positive between the two variables: human resources management strategies deportation (strategy analysis function, strategy selection, strategy training and development, strategy performance evaluation) and strategic success deportation (a specific strategy, the implementation of effective, the culture of motivational, creativity, customer satisfaction), and for tests of hypotheses used the field study and applied to a sample of managers and their assistants and department heads in the Ministry of Transport, and managers and their assistants in some of the companies and the Ministry of Transport (as a company of Iraqi Airways, the company's General Civil Aviation, the General Company for Railways, the General Company for Land Transport, the General Company for Maritime Transport), and the number of respondents (42) and to measure customer satisfaction has been taking a sample of the sector of air and rail, with a number of respondents to customer satisfaction (46), and data were collected through a questionnaire, and field visits, and interviews and some official documents to complete the study data. Has also been used a number of statistical tools for data processing, including: the arithmetic mean, percentage,

Standard deviation, for the purpose of description of the sample, and simple linear regression to test the validity of the effect. The study arrived at a set of conclusions and recommendations including: recorded statistical results that all the relations of influence for human resources management strategies and strategic success were strong and significant moral as well as the significance of all this. Which refers to the role of human resources management strategies to influence the achievement of strategic success of organizations. And concluded the study Group of the recommendations was the most important: the formation of work teams would be responsible for "analysis and the formulation and implementation and evaluation of" human resources management strategies in the Ministry of Transport and subsidiaries her to report to the Minister every 6 months for him to remember the activities and problems they may face, the study also recommended increased attention to removal of strategic success and activated within the Ministry.

4. Dr. (Ahmed Erekat, Nasser and Mahmoud Al-Otaibi, 2012) entitled: ("Role of applying the criteria of polarization and recruitment in the achievement of competitive advantage, the case of bank – bank Housing for Trade and Finance Jordan), The aim of the study was to demonstrate the importance of the human element as a core component of the Organization, If they possess material, financial and technological resources, and have no human resources which is suitable for experience and qualification, is destined to fail, and the study was exposed to the experience of the Housing Bank For Jordanian trade and finance by identifying the sources of polarization that used in order to recruit the best staff and to know the impact of the polarization criteria to achieve competitive advantage in the banking sector. The researcher relied on the analytical descriptive approach, which depends on the collection and interpretation of data on the phenomenon, The Housing Society is a member of the Housing Bank of Jordan (8211) employee and a random sample was chosen. 91 middle-level employees and above to find out the importance of human resources in achieving competitive advantage.

5. The Interaction between Human and Organizational Capital in Strategic Human Resource Management, Studies in strategic human resource management emphasize the contribution of human and human resource management to organizational performance achievement. Human and organizational capitals are strategic capability and mechanism to create value in an organization. This paper seeks to identify an interactive relationship between human and organizational capital in strategic human resource management theoretically, which so far, have not got adequate attention, particularly in a systemic relationship. Library research has been conducted either through books, articles and previous studies related to the issues have been analysed. It is found that there is an interactive relationship between human resource system as an element of organizational capital and role behaviour as an element of human capital, in strategic human resource management, systemically. Organizational capital refers to a human resource system can enhance the strategic value of human capital through their role behaviour. Role behaviour, then, not only is positioned as an output, but also an input for the desired human resource system, as organizational capital. The result of the theoretical study needs to be followed up by empirical research, to validate the proposed interactive relationship between human and organizational capital.

1.3. Material and Method

1.3.1. Data Collection

Primary data were collected by researcher using various tools such as questionnaires, observation, and interviews. These data are unique and tailored specifically to a particular study some institutions require students to undertake primary research, whereas in others may not be a necessity". For this research, primary data were collected by questionnaires. The researcher was meet all participants and let them know how to fill the questionnaire. Moreover, the researcher had interviews with a number of teachers and university leaders. For this study, secondary data were collected mostly from textbooks, journal articles, magazines, and Internet, which were presented in the literature review. Furthermore, findings from earlier research done in the same area have served as a valuable basis of supporting material.

1.3.2. Population and Sampling

The population of this study is all the teachers and university leaders at Duhok University. The study is depended on questionnaire, and interview to collect data. A sample of this population in Duhok were selected to participate in this study. A simple random sampling design was used to choose the sample of this study. The means were giving an equal chance for each member of the population to be a part of the study sample. The researcher was distributed 400 copies of the questionnaire to individuals working in the University of Duhok University in order to collect data related to the field side in the current study.

1.3.3. Study model

In order to analyse the problem of procedural variables, the study adopted model linkages between independent variables, represented by (determination of the needs of human resources management and the profession of research innovation), as it is shown in the following form:

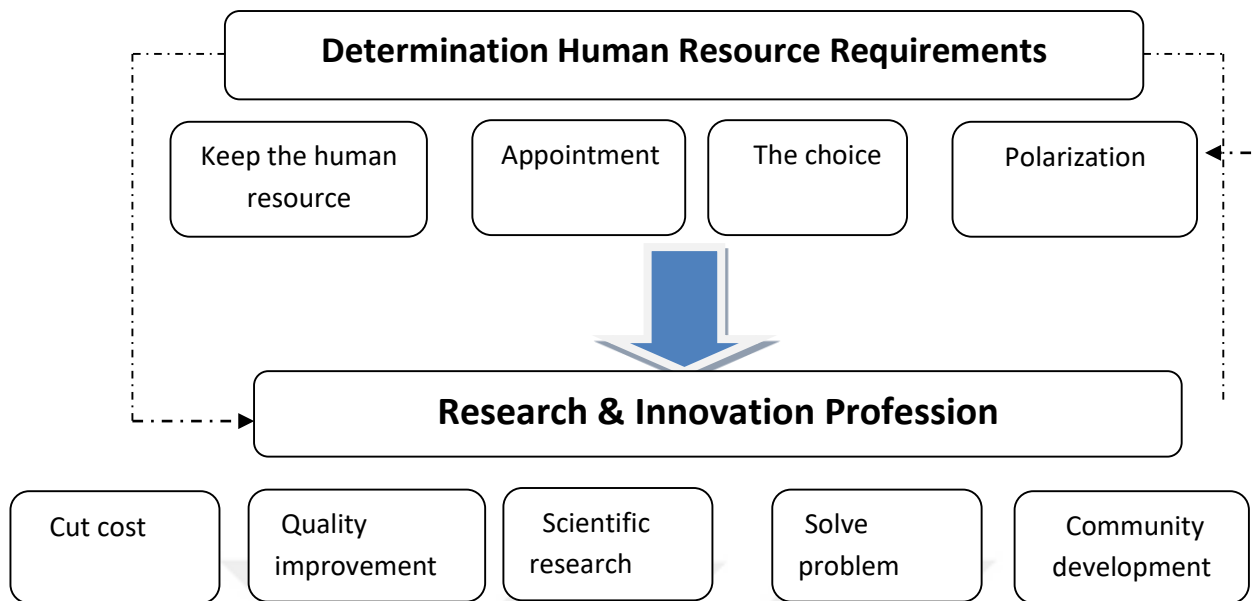


Figure 1. Study Mode

1.4. Introduction to Human Resource Management at Duhok University

The University of Duhok is one of the fast developing institutions in Duhok Governorate. It is located on the international road between Iraq and Turkey. The University has a vital role in the development of society by stimulating social, economic, cultural, scientific and educational progress in Iraq. Graduates of Duhok University are actively involved in the community by applying their knowledge and expertise to participate in the progress development of the region. Duhok University was established on 31/10/1992 according to the decision of Parliament to meet the growing demand for graduate studies in the region. The university initially included only two faculties: Faculty of Medicine and the College of Agriculture, starting with 48 medical students and 166 students for agriculture. After the end of establishment difficulties, the university found itself oriented towards progress and development. Therefore, Duhok University developed and today include 18 faculties containing 78 departments, 21,265 students, 1607 academic staff, and 2353 administrative staff. Duhok University is a member of the International Association of Universities (IAU), the European Commission for International Education (EAIE), and the Arab Universities Authority (AARU). Duhok University is looking forward to leadership and commitment to research and education. Students and staff with all the necessary facilities such as library, laboratories, computer

services, sports facilities, internal departments and many extra-curricular activities had strengthened and encourage ambition and mastery during an educational atmosphere at Duhok University. As a comprehensive plan to improve English language skills, the University's Development and Rehabilitation Centre offers intensive courses and new advanced courses in teaching and research methods that taught by native speakers.

1.4.1. Internal Environment Scanning of Human Resources for Research & Innovation Performance at Duhok University

The internal environment of human resources survey is an inventory of the workforce within the organization and the extent of the actual human cadre that exists within the organization which direct contact with the work. The internal environment plays an important role in organizational performance by influencing the nature of the organizational climate that reflected in the behaviour of its employees (Al-Qattamin, 2006). Thus shows the willingness of employees to make great efforts in favour of the organization. To have a strong desire to remain there and to accept the core values and objectives of the organization. Whereas the General Organization for Social Security contributes a vital role in achieving national goals in social and economic development and contributes to improving the quality and well-being of the beneficiaries and thus reducing the problems of poverty and unemployment. It consists of internal factors and forces that influence the work of the organization and identify the strengths and weaknesses of organizations. It consists of organizational structure (organizational structure), organizational culture, available financial resources, human resources, marketing resources, research and development resources, and management information systems. In this case, university structure and university culture are important for need assessment of human resources for research and innovation.

1. Organizational Structure

There are many definitions of organizational structure, but the common denominator among author is that the organizational structure of the institution determines the administrative patterns of the integrated roles played by individuals within the different administrative levels, as well as the responsibilities and powers so that the collective efforts of the organization to achieve the goals of the organization (Qattameen, 2002). The organizational structure of an institution is usually represented by an

organizational structure that can be a simple structure or divided by functions or strategic business units (Thompson & Strickland, 1993). Global environmental variables have led to the emergence of more adaptive organizational forms such as the matrix structure or the Miles and Snow network structure (Miles & Snow 1992). The organizational structure is the general form of the organization, which defines its name, form, competence, field of work, administrative division, the specializations of its employees, the nature of the functional relations between employees, supervisors and subordinates, and between the various departments and departments, and their administrative association with the higher and parallel organizations (Rashid, 1992). The organizational structure is considered one of the most important elements of the internal environment in terms of its suitability with the field of work of the organization, its specialization and assimilation of its needs of functions and disciplines and its ability to meet the needs of work with the functional relationship and its contribution in simplifying the work procedures and achieve smooth flow of decisions, orders and directives from senior management to the middle, supervisory and executive departments as well. The flow of suggestions and actions from executives and departments and its contribution to the achievement of these goals is reflected as a positive element in the organizational climate. However, if it contributes negatively to the achievement of these objectives, it is considered a constrained organizational element (Morsi, 2003). Whenever the organizational structures is flexible open and accommodating the circumstances of the situation, they are encouraging the creation, creativity and adaptation to situations (Kubaisi, 1998). These characteristics of the organic structure which flat with the least number of administrative levels that characterized by a small degree of complexity, the rigidity and routine and central decision-making, and formal procedures and functions in addition to hierarchy and the many administrative levels that make the pyramid more complex are characteristics of the functional pyramid (Me Jones (2003, Jones).

University structure is mainly consisting of administration, employee, and equipment of education, research & innovation, and outreach networking. Networking with global environment led universities to the emergence of more universal. Study fields, administrative division, the specializations of employees, the nature of the functional relations are main indicators as the most important elements of the internal environment. Collective research & innovation programs are need assessment of

competitiveness as combination of education, research innovation, and outreach duties of universities.

2. Organizational Culture

There is no single definition of organizational culture, and the concept of culture has been addressed from different angles and perspectives. Taylor defined culture as all complex, including a set of information, beliefs, art, law, ethics, customs, and any other abilities acquired by man and his mind from the objects and manifestations in the social environment, that is, all that was invented by man and had a role in the social process, such as language, Customs, traditions, social institutions, and concepts (Asswathappa, 2003) defined culture as all that includes knowledge, arts, ethics, laws, customs, and other abilities, as well as habits acquired in society (Collins & Porras, 2000) considered culture to be a system (Hellriegle, 2001). Culture was made up of common assumptions, cultural values, common behaviours, and cultural symbols that brought together members of the organization. According to (Robbins, 2001), culture navigates staff through stories and walsh air and rituals (Rituals'), symbols (Symbols), languages (Languages). In writing the theory of the organization (Jones, 2004) stated that the factors that influence the formation of the organization's culture are as follows:

1. Property rights
2. Characteristics of People
3. Organizational Structure
4. Organizational ethics

The nature of these each factor within the organization, and the interaction of different factors with each other is the one that generates different cultures, and pushes for change in culture over time, and pointed out that the people who work in organizations are the ultimate source of the culture of those organizations. Although writers, researchers and cultural workers have made many applications of organizational culture and the types of these cultures, the study finds that all cultures, no matter how many and many categorized, they fall under two main types of culture:

1. Traditional culture, also called classical culture, and some call it Conservative Culture, in other locations called bureaucratic culture. This culture adopts the official values and laws, which employees work according to official working procedures. This culture calls for the preservation of the status quo (Keeping Status Queue) and stability

and even the standardization of products and services developed by the company. In this culture, employees return to written instructions and official laws. Decision-making powers are in the hands of the higher administrative levels, and the level of control is high.

2. Contemporary Culture "Culture of Change" is also called a culture of quality (Quality Culture). Because it focuses on continuous improvement, a culture that deals with environmental variables and trying to understand and adapt to them, so that the organization is able to continue and grow. Organizations adopting this culture are openness, accepting new ideas, constant change, encouraging employees to innovate and take risks. The decision-making method is decentralized and the employees in the lower administrative ranks make decisions related to their work, because they are more aware of their working conditions and are able to this culture encourages values of achievement and differentiation, believes in informal organization, encourages difference and competition, and believes in conflict and its management to serve the work of the organization.

Culture plays a vital role in influencing the organization's people. It creates pressure on the organization's people to move forward in a way that is consistent with the prevailing culture. Culture contributes to the creation of an independent identity of the members of the organization. Contributes to the creation of commitment among workers and serves as a guide to appropriate behaviour and promotes the stability of the organization as a social system, and finally, organizational culture serves as a frame of reference to judge organizational behaviour and explain social activities (Al-Rukhaimi, 2000). According to (Qaryouti, 2000), many managers give the highest priority and adequate attention to organizational culture in their organizations because they consider the culture of the most important components of the organization so that many writers as it generates pressure on workers to advance in advance thinking and act in a manner consistent with the objectives of organization. The planning of the internal human resources survey is an ongoing management process aimed at providing the Organization's employment needs, in numbers and characteristics commensurate with the nature and size of the organization's activity, over a future period of time, as well as studying all policies and programs related to employment, to ensure that. The level of performance efficiency and achievement of the organization's objectives (Suhaila Abbas, 2003, 56). **First:** is the largest possible data and information on the structure of the past,

present and future employment, and on the environmental, economic, political, social and technological variables surrounding it. **Second:** is the experience of those in charge of workforce planning no matter how great, experience is indispensable to data and information. Together, they represent an integrated structure and a solid foundation for good workforce planning. The internal survey of human resources is fully linked to the policies, programs and objectives of the organization, since the needs of the organization of the workforce reflects to a large extent the capacities of education and training to be provided (Omar Wasfi Aqili, 2005, 299).

The concept of universities' culture including education, research innovation, and outreach duties as set of information for community development. The culture of universities has to includes knowledge, arts, ethics, laws, customs, and research innovation abilities in society. The characteristics of academicians, and property rights are very important for research& innovation efficiency. Interaction with different cultures pushes academicians into wondering as movement of research& innovation. Classical culture of academicians is called bureaucratic culture that just usually teaching. In this culture, academicians return with their instructions of teaching. The culture of quality continuous with improvement as outputs of research& innovation. Openness, accepting new ideas, constant change, encouraging academicians to take risks are some opportunities of academicians for research& innovation efficiency. Creation of new ideas, contributing to community problems, and serving a guide to appropriate behaviours are some final outcomes of research& innovation. The priorities of universities are knowledge, science, and technology production as information on the structure of the past, present and future on the surrounding environment. The experiences of those in international level are matter to get experiences of information. Need assessment of human resources are linked to the policies, programs and objectives of research& innovation. The strategy of universities for education, research& innovation, and outreach is required organizational structure as figure 2.

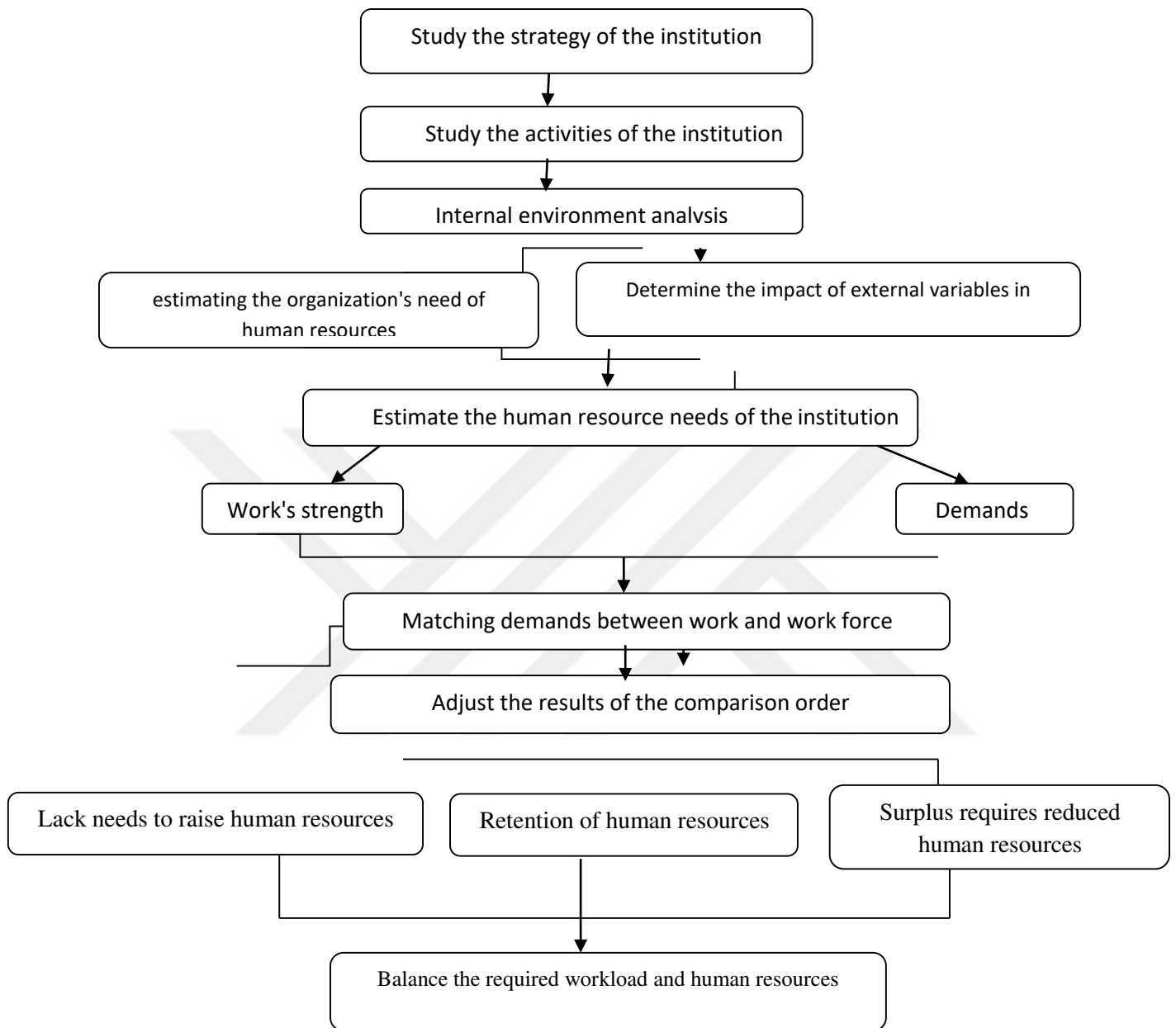


Figure 2. Strategy within the organizational structure

Source: Omar Wasfi Aqili, Contemporary Human Resource Management, 2005, p. 231.

1.4.1.1. Situational Analysis (SWOT) for Research&Innovation Performance

The SWOT analysis, as it is known, deals with the examination and exploration of two business-controlling environments, internal and external. On the one hand, it tries to examine the internal system of the business to determine the strengths and weaknesses of the various systems of the business. With regard to the external environment, SWOT forecasts the opportunities that the environment presents to the organization as well as the threats it may face from the external environment.

Attempting to seize the opportunities offered by the external environment of the organization certainly involves a risk ratio, whether it is to produce a new good or service, enter a new market, expand the existing market, or increase the diversity of goods and services offered. The process of confronting threats to which an economic institution may be exposed is part of the risk of not taking appropriate action at the right time based on an accurate and efficient forecasting system.

Therefore, SWOT analysis is an important and necessary analytical tool for all businesses, especially industrial ones, because it enables the management of those institutions to determine the necessary directions to formulate appropriate strategies in light of the ongoing environmental changes and work to reduce the risks that may be exposed to them.

Rapid and ongoing changes in the environment, economically, technologically, socially and culturally, make risk an ability faced by all institutions, activities and economic events around the world, so that the departments of those institutions to effectively and continuously account for all kinds of risks and formulate the means to avoid and prevent.

Therefore, the quadrilateral analysis, which is known as (swot) analysis of the important analyses within the administrative piece, which we will deal in some detail (Al-Douri Zakaria Matlak, 2005).

1.4.1.2. SWOT Analysis

SWOT analysis is an important tool used by strategic management to determine its trends and future strategies as exposed to the concepts. The researchers differed in the definition of quadrilateral analysis, each of them defined the analysis according to its own needs and the angle at which they look for the analysis you can mention some concepts, including;

1. It is an analysis of internal factors of strength and weakness, and external factors of environmental opportunities and threats (Cyclical)
2. SWOT analysis is a useful tool for analysing the overall situation of the organization based on strengths, weaknesses, opportunities and threats
3. SWOT analysis is an effective method to know and understand your strengths and weaknesses, and to consider the opportunities and threats for the development
4. It is a situational analysis - a basic view of the internal and external factors affecting the economic institution and the use of acquired knowledge to improve and implement planning.

The analysis is concerned with the study of the internal and external environments with the aim of revealing the strategic elements that may have a negative or positive impact on the organization in the future through SWOT analysis (Al-Qattamin, 1996, 154). Future goals and objectives through the actual study of them and their relationship and impact with external factors and forces (Abdul Moati, 2010, 264), as can be defined analysis (SWOT) as a process by a team to identify the strengths and weaknesses in the internal environment of the organization and opportunities and threats in the external environment E) that affect their potential effectiveness, contributing to the development of strategies, the development of strengths and opportunities and overcoming vulnerabilities and threats (Meredith, 2005, 445). SWOT analyses for research& innovation efficiency helps movement of the universities for development.

1.4.1.3. Internal Environment

The analysis of the internal environment is intended to take a detailed look inside the organization to determine the levels of performance on the areas of strength and weakness (Idris and Morsi, 2002, 70).

A. Strength

Intended by a set of factors within the institution, a set of aspects that distinguish the institution from other institutions that contribute positively to the performance of the work in an excellent manner and satisfy the needs of its customers and the requirements of the labour market and increase its competitiveness (Al-Mursi et al., 2002, 218).

B. Weaknesses

Means the negative aspects, weaknesses and deficiencies in the capabilities, skills or resources within the institution that have a negative impact on the performance within the institution and impede them from achieving the desired future goals (Shazly, Faraj, 2004, 13). The external environment within the quartet analysis was referred to by analysing the situation outside the institution, ie, all surrounding external factors. Opportunities are the supportive elements of the organization through services offered by the external community to help organizations and institutions to develop and progress, and must be exploited to achieve its strategic objectives (Shazli, Faraj 2004, 102).

C. Threats

The process of monitoring, following up, evaluating, identifying and threatening one or more of the organization's operations may be a threat from several external, local, regional or global environmental or economic sources, from the economic, political, legislative or cultural environment, etc. (Mustafa, 2003, 121).

Universities' strengths are institutional structure with distinguished research institutions that contribute positively to the performance of research & innovation for community development. Universities' weaknesses are the capabilities of human resources and structure. The main threats of universities for research & innovation are monitoring of developed countries, evaluating and identifying the need of human resources as local, regional, and global environment. The process management of internal and external environment management is the matrix of research & innovation efficiency.

The management of universities systems, rules and procedures of research & innovation is requiring physical facilities of human resources, coordination available resources, and analysing of the current position for community development.

1.4.1.4. Environmental analysis

The process of environmental analysis of the organization goes through a series of stages, beginning with the analysis of the internal environment (strengths/weaknesses), then the analysis of the external environment (opportunities/threats), followed by the work of a matrix of internal factors, then identify or draw alternative strategies, and ultimately the trade-off between strategies.

1.4.1.5. Analysis of the internal environment (Strengths/Weaknesses)

Means all factors under management control such as systems, rules and procedures of work, physical facilities and working human resources, physical working conditions and available resources, and ends with an analysis of the current position of elements of the internal environment or self-capacity by identifying strengths and weaknesses. By force (the self-abilities of the educational institution, which distinguishes it from its competitors, whether resources or human resources or material systems have been working and can be used efficiently and effectively in achieving the objectives and mission of the educational institution.

The identification of strengths within the school will help to optimize these points and rely on them to determine the priorities that can be achieved. Vulnerability: Limitations, shortcomings or lack of subjectivity, whether in resources, human resources, physical or applied work systems, can hinder the educational institution from achieving its mission and objectives, while identifying weaknesses helps in alerting the need to work hard to overcome these points and transform them. To identify the opportunities available to the institution, it helps in planning to take advantage of these opportunities and take advantage of them, while identifying the threats and risks that face the institution in the convergence of its risk and willingness to face it so as not to surprise the institution is not ready to face and deal with, This helps in minimizing the negative effects that could be caused to the institution because of these risks and threats if no arrangements are made to address them.

1.4.2. External Environment Scanning of Human Resources for Research&Innovation Performances

Strategic analysis and survey of human resources is one of the important components of the operations of the strategy management, where it is concerned with the follow-up analysis of the internal and external environment of the institution, ie, it includes how to manage its relations with the environment to ultimately emerge from the identification of strengths, weaknesses, opportunities and current and anticipated environmental threats, leading to Ultimately to determine the nature of the appropriate strategic choice of the organization.

The strategic diagnosis is based on the diagnosis of the internal and external components of the organization to reach the strengths and weaknesses of its internal

environment and to discover the potential investment opportunities and threats that hinder the work of the organization in its external environment. To reach the various convictions concerning the management of the organization where (Michel Crozier) pointed out that the strategic diagnosis is that diagnosis, which is concerned with understanding how to build collective actions based on individual behaviours and coordination A set of individual actions is the diagnosis of the strategic level when the behaviour of the actors in relation to the clear objectives and consciousness that they set within the environment and the resources available to them, on the other hand away from the strategic analysis of the balance of contradictions in the facilitation and management to focus on clarifying the basic choices of public administration and avoid mistakes that may threaten life The organization makes strategic analysis an internal examination and the essence of the external examination, which deals with environmental variables and variability (Abdelkader, 2011, 2). He also mentioned within the same approach to solving and strategic survey of human resources (Johnson and Scholes) as the strategic position of the organization through which the internal or external environment is surveyed to know all the resources and skills that may be available to business organizations and the university in particular (Ismaili Mohamed Sarayra, 2012), also known as a systematic diagnosis of internal strengths and weaknesses, opportunities and external threats, and senior management should work to find the best compatibility among them (Mohammed Hussein, 2012, 275) pointed out (Ismael) on the other hand that it is a set of means used by the administration in determining the extent of change in the external environment and determine the competitive advantage or distinctive efficiency of the organization in control of Their internal environment, Bah W contributes to increasing the capacity of senior management to define its goals and strategic position (I Mohamed 2012, p. 23) , Strategic analysis also refers to the ongoing and complex process of leading strategic change (Delahaye, B. L. 2000, 16) It is a systematic effort to shape relevant decisions to determine the nature of business and its strategic orientations (Mintzberg, H. 1998, 53). Strategic analysis or surveying strongly contributes to the formulation of a vision, mission and business strategies in an uncertain environment characterized by complexity, standardization and heterogeneity, it helps to reduce the uncertainty gap, environmental ambiguity, and identify future trends in business (Christen, CM ,1997,141,150) , (SOMA) pointed out that the strategic diagnosis helps business organizations and universities in

particular by providing many benefits, which may be internal and sometimes external, which can be referred to the following:

1. Strategic diagnosis helps in identifying the organization's mission and objectives.
2. Continuous strategic diagnosis of the internal environment of the organization makes strategists a permanent knowledge of all the strength of their employment and strengthening to benefit from them by strengthening them in the future and weaknesses must be overcome and addressed.
3. Continuous strategic diagnosis of the external environment makes strategists with permanent awareness of the opportunities available to him and which can be invested as well as threats that must be dealt with and effectively addressed.
4. Strategic diagnosis helps to allocate available resources and determine ways to use them.
5. Strategic diagnosis helps to identify the possibilities and options available to the organization where the trade-off between which can be exploited and which can be excluded.
6. Strategic diagnosis contributes to assessing the physical, human and moral abilities of the organization and clarifying the position of the organization in relation to other organizations in the environment (Mohamed, 2012, 24).
7. By helping strategic diagnosis identify what is called the organization's distinctive capacity, which is defined as the capabilities and resources of the organization and the operational processes used to employ those capabilities and possibilities to achieve the goal, the success of the organization depends largely on the extent of its study of environmental factors (Soma, Ali Sultan, 2008, 36),

Through the above, we find that the accurate survey or strategic diagnosis of personnel (as human resources), both from home and abroad, raises the improvement of performance in the organization well as performance was linked to efficiency and effectiveness of the organization's pursuit of profits but with rapid developments and radical transformations that touched The various aspects of the ocean, it is no longer enough for the organization to adapt to its surroundings and seek only to achieve the profitability goal by reducing costs and maximizing profits, but the competition of the

ocean and anticipation of changes, which imposes on them kind of flexibility in various areas, became a well-performing organization is the organization that The main way to do this is to stand at the level of performance, which requires the organization to improve its performance from normal to high levels of excellence through the permanent development of various resources, ie how efficiently and effectively the organization exploits its resources and achieve its objectives and ensure survival and continuity.

1.4.2.1. University Environmental Analysis for Research &Innovation

The task facing strategic managers is to analyse the nature of industry in order to identify and diagnose opportunities and threats in order to develop strategies for the organization that fit the nature of that industry and consistent with its objectives, and that the analysis of the nature of industry helps to understand the environment and provide indications for the use of quantitative methods to make appropriate strategic decisions, and that The environment of the industry is characterized by a dynamic and complex nature rather than being static, especially within the last decade of the twentieth century and the outcome of economic, technological and international developments. Modern institutions are located in an environment of a rapidly changing nature, which It may require the institutions to go in order to adopt methods in dealing with the environment and this thinking represents a case forward for the institutions.

The process management of internal and external environment of university is the matrix of research &innovation as university concept of universities systems.

1.4.2.1.1. University concept for research &innovation

The smuggling of the structure of the university is used to denote the basic organizational features such as monopoly or monopolistic competition under which the institutions can have a tangible impact on the behaviour of these institutions. The community is meant to be the unit of activity within the society, so it regulates all production units that produce goods. Convergent or using the same raw material or the same method of education and through this concept can be divided into several fields (Ahmed Said, 1994, 3). It is possible to refer to the concept of the structure of the universities to express the basic characteristics of community under which the universities enterprises and their constituent organizations operate, which can have an impact on the behaviour and performance of these institutions. In the analysis of universities, the

strategies that must be addressed or taken into account the strategies of Porter's competitive, as Porter pointed out that the competitive advantage in business organizations is determined by the competitive field you deal with (such as market size) before the organization determines the type of strategy that you intend to Its followers (minimum cost or excellence) must determine the size and type of goods they are producing, the distribution channels they will use and the type of customers they will serve. Michael & porter combining competitive strategies (minimum cost and differentiation) on the one hand and the size of the market in four strategic options that can be followed, namely:

Cost Leadership Strategy: to achieve the lowest cost in the market and therefore the minimum price to serve the entire market. The organization is doing all its activities more effectively and efficiently than any other competitor in the market and thus achieve the lowest possible costs, meaning that universities must follow this strategy on the desire to obtain the best human resources, but at the lowest cost and cost here are the sources of access on human resources at the lowest costs such as advertising and promotion used by some organizations, the resources may be internal and at zero cost and full performance and sometimes good.

Differentiation strategy is the strategy of providing goods and services with different advantages from all competitors in the market, and thus providing those goods or services to the market in general without any specialization, that is, the human resource that want to get distinct in many aspects in order to work to reduce costs on the one hand and excellence performance on the other (Porter, M. ,1980). Universities can prefer research and innovation as differentiation strategy for development.

Focusing strategy: means focusing only on the necessary costs and avoiding other costs that would raise the costs of the organization. Minimizing the training courses, the less you say the costs distinguish the supplier and able to focus costs in other aspects can be better utilized (Wheelen, L. & Hunger, D. 2004). Universities' focusing strategy can be combination of research & innovation with education and outreach as collaboration of the universities, government offices, and civil society as well as private sectors.

1.4.2.1.2. Synthesis of External Factors for Research & Innovation

Universities do not live in a vacuum. In order for organizations to grow, progress and continue their work, they must adapt to the environment in which they operate, and

their departments have to conduct a scanning of their external environment to identify opportunities in that environment to take advantage of them and threats to neutralize or address them. It also examines its internal environment to identify elements of strengths in order to take advantage of them in exploiting opportunities and facing threats in the external environment, and elements of vulnerability. Weaknesses to address them so that the organization is able to adapt to the environment in which it operates, and develops for itself a competitive advantage. Competitive Advantage enables them to compete and excel others (Harem, 2009). The regulatory environment is defined as the group of forces and elements that surround the organization (Dahl and outside the organization) and have a direct or indirect impact on the way it operates, and affect the way it obtains the resources necessary to continue its work such as raw materials, qualified workers to produce goods and services, and the information it needs to improve The technology used or determine its competitive strategy, and ways to support external stakeholders in Jones (Jones, 2004). Although there are many classifications of the environment in which organizations operate, many researchers and writers such as Jones (2004, Jones, Wheelen & Hunger, 2002), Thomposon (2004), (Harem 2009) & Al-Salem, 2008) and (Qaryouti, 2009) that the environment of the organization is divided into three levels.

Universities are organizations to grow, progress and continue society development that requires conduct a scanning of their external environment to identify opportunities. Rather than the regulatory environment, universities have to contact with best practices' universities that have produce outcomes for society development as technology products.

First: The general external environment of the universities

It is a group of forces and elements in the external environment that affect all organizations or universities in the general environment, such as the economic environment that includes economic factors such as the rate of national product, per capita income level, inflation rate, currency exchange rate, unemployment rate, etc. and the technological environment such as machinery, machinery, new goods and services, innovations, patents, etc., the political and legal environment affecting government policy towards organizations and their stakeholders, as well as laws and regulations such as import tariffs, or conditions of respect. natural environment , ... etc. The demographic, cultural and social environment such as age, level of education, lifestyle, values, norms,

customs and traditions that govern people's relations in the society in which the organization operates.

Second: The specific external environment of the universities

It is a group of elements in the external environment that have a direct impact on the organization (similar universities) and composed of stakeholders such as customers, distributors, competitors, suppliers, professional associations, and government organizations, all of which by virtue of their differing interests are able to exert influence and pressure on the universities for research & innovation.

Third: The internal environment of the universities

It consists of a set of internal factors and forces that influence the work of the universities and identify the strengths and weaknesses. It consists of organizational structure (organizational structure), organizational culture, available financial resources, human resources, marketing resources, research and development resources, and management information systems.

External environmental analysis tools include PESTEL analyses Politics, Economics, Social, Technological, Environmental, and Legal. Task environment variables analysis, and PORTER analysis input. PESTEL analysis includes analysis of the general environment variables of political, legal, economic, social, cultural and technical variables. The analysis of the task environment variables is done through the preparation of individual reports on all the variables of this environment and then summarizes the information in the form of strategic factors sent to senior management for adoption in decision-making. The PORTER model is based on an analysis of competition forces affecting a particular activity. These forces are represented by new and potential competitors, producers of alternative goods, processors and buyers, and other stakeholders to identify the general structure of the industry and identify the competitive position.

There are many attempts to define the economic environment of the universities, there are those who consider the periphery of the universities part of the administrative environment consisting of customers, suppliers, workers, competitors and lobbying groups, such as governments, labour unions and others (Harem, 2009,15). Therefore, it is part of the administrative environment that suits the process of setting and achieving the objectives of the universities.

P. FILHO indicates that there are three groups operating within the ocean.

1. Set of variables at the national level (economic, social, political).

2. Set of operational variables for each institution (governmental and administrative bodies and universities and distribution institutions).

3. Set of variables related to the internal environment of the universities (workers, managers, ...).

What distinguishes this definition is its integration of the internal and external surroundings of the universities.

While Abdellatif Khamkham defines the surroundings as: "Everything is non-enterprise".

However, the study accepts universities as enterprises of education where outputs are economic, ethical, and environmental products. In this case, it is argued that the definition of the word "ocean" in management sciences means: economic and social factors affecting competition; laws, lobbying groups, trade union, and therefore the ocean consists of the economic, social, financial, environmental, and technological environment.

From this, the following definition of the periphery of universities can be deduced:

The ocean is a group of elements or variables affecting the activity of the universities, the latter is not active in a vacuum, but it is a reciprocal relationship with each of these elements, and therefore the ocean may be a catalyst, and may be an obstacle to the universities.

II- Importance of the external environment in shaping the strategies of the universities.

The study and analysis of external environmental factors is an important issue when choosing the appropriate strategy, which depends on the results of analysis of both the external and internal environment of the universities.

The importance of assessing the external environment lies in the following points:

1. The foundation is composed of a network of individuals and groups that may differ in its objectives and trends. These individuals are individuals from their surroundings and all the economic and social factors that affect them and are influenced by them. The foundation is linked in front and back of networks of dealers, markets, individuals, universities and others.

2. The success of the universities depends to a large extent on the extent to which it examines the environmental factors influencing and the extent to which they benefit from the trends of these factors and the degree of the impact of each of them, where this study helps to determine the objectives to be achieved, indicating the available resources and the scope of the market expected, and patterns of values, customs and traditions.

3. The success of the universities depends on the extent of its adaptation to the external environment in a manner that increases the degree of benefit from opportunities, and its ability to resist threats, and this requires knowledge of what is happening in the environment of positive and negative variables.

4. Many universities endeavour to adapt to their changing external environment and to have a positive impact on this environment, thus playing an active role towards the development and growth of the national economy.

1.4.2.1.3. Components of Universities' External Environment

The external environment can be viewed as consisting of two parts of variables or factors (Wheelen Hunger, 2002.44), (Robbins, 2001), (Jones, 2004);

- 1- The general environment of the universities
2. Special environment the universities

1.4.2.1.4. The Overall Environment of the Universities

They are all external factors and variables that affect institutions in general, and their impact does not depend on a particular type of business, or a particular place of the state, and are called factors of the general environment such as the prevailing economic conditions, the political climate, or some social, cultural and international variables.

I. The Economic Environment

The building of some strategies depends on the estimates of the economic situation; these factors are the group of economic forces that affect society in all its institutions and the institution is affected by these forces at the local and global level. These factors include income, demand, and availability of factors of production, inflation, monetary and fiscal policies of the state, unemployment rate, and financial institutions.

2. Political Environment

The political system is a group of bodies, systems and individuals, whose main objective is to manage the society as a whole. It is an important element in the overall

environment, the forces driven by political decisions, and is closely linked to economic factors. Many political decisions are in fact a reflection of an economic interest. Political decisions to protect the environment from pollution pose a threat to industrial enterprises, while an opportunity for elephant-producing enterprises.

The following political factors represent either an opportunity or a threat to institutions, including taxes and fees, the degree of political stability (Hellriegle, 2001).

3. Social Environment

The social environment has an important impact on enterprises, especially that their impact is on the demand side of products, as well as on the values, customs and practices of the employees within the universities.

When studying social environment variables, it is noted that:

1 Population growth presents opportunities for some the universities, where there is an increase in demand for their products,

2. Women's exit to work leads to an increase in demand for products, which means increasing household income and women's participation in purchasing decisions

3 Increasing the level of education has led to an increase in the aspirations and aspirations of individuals towards products and work, thus providing a good and stable working environment.

4. Technological Environment

Outputs of the universities are mainly qualified people who can produce technology.

5. Legal and Legislative Environment

The legal environment is one of the most important factors affecting the institution, through the laws of labour legislation, trade unions and tax laws that affect the economic policy and activity of the institution, in addition to legislation on the protection of the environment, consumer laws, import and export laws, and others ... Many Algerian institutions suffer from legal problems and obstacles that negatively affect their activity and process because of their inability to apply the laws enacted by the State in a way that allows them to face whatever they encounter in the performance of their activities (Al-Qahtani, Mohammed Ali Manea 2002).

1.4.3. Strategic Plan for Research & Innovation Efficiency of Universities

The universities rely on the development of human resources mainly in achieving their tactical and strategic objectives and resilience in the face of environmental and rapid

fluctuations by managing the activities that lead by developing human resources and based on increasing and improving the capabilities of human resources and refine their skills and acquire new knowledge, which helps them to determine the career path for their future.

The development of human resources is an appropriate entry point that enables academic organizations to manage their talents, and the application of appropriate planning strategies within the specified time will contribute to determining the future needs of human resources within the internal and external environment. During the other two decades, which has been characterized by rapid and deep changes in the shadow of organizations of various types, which no longer fit with him systems and traditional planning methods based on forecasting and past experience in the analysis of historical events with the emergence of strategic planning as the latest form of planning in the universities.

The type of planning changes to how the universities plan to develop their own strategies. Strategic management has become an essential tool for the universities to learn and develop if they want to formulate a state of excellence and respond effectively to the rapidly changing global changes. The term “strategic management” is used to express the same concept that leaning reflects strategic. Perhaps the first to care of contemporary management scientist's strategy in management research. Professor Harvard University administrative history (Alfred Chandler) when reviewed in book issued in 1962 by the organizational structures of major corporations in America and came up with four strategies related to emphasizing that the development of organizational structures depends primarily on strategy.

Strategic planning is an important element of strategic management, as the concept. The terminology for strategic management is that it is "the decision-making process associated with defining the universities' mission. Its main objectives are far-reaching, and the selection and identification of strategic plans, allocation and recruitment plans. The capabilities and resources available to the universities in line with its objectives and with environmental changes, as well as development. The internal conditions, systems and procedures of the universities, and then work to implement these decisions and choices (Al-Ain and Abdel Shafi Mohamed 1994 , 27).

Human resources planning is concerned with estimating the amount of future need for the workforce within a specified period of time; through the development of

appropriate strategies aimed at providing the required quantity; by analysing the dimensions of the current state of work, a study of the previous case, and anticipate future changes and developments, and the development of expected alternatives. From the definition of human resources planning can be inferred as a method that helps to provide human resources by relying on the enterprise's efforts to anticipate its future needs of employees. The budget and planning functions at the facility, and to identify the specifications and quantity of human resources needed in the future [https://mawdoo3.com/).

Planning is also defined as a system of matching the supply of human resources internally and they are the current and externally staff that will be contracted in the future, and are searched within a certain time frame.

As for the efficiency of research & innovation within the human resource, there are many aspects that have studied that competence, which they have sometimes distinguished from effectiveness, according to the strategic human resource management's (SHRM) point of views. National HRM practices are considered a vital part in employees' success, development, skills, behaviour, and competence to accomplish OI (Ang, S.; Van Dyne, L.2007). Researchers further believe that NHRM practices highlight the role of e-recruitment and selection, new compensation methods, developmental training, and innovation performance which tend to define employees' innovation in the organization (Kooij, D.T.; Jansen, P.G.; Dijkers, 2010). Employees that innovate behaviour in the context of NHRM practices generate organizational innovation motivation which is helpful for innovation performance (Donate, M.J.;2015). Employees' implementation of innovation ideas can also boost the confidence in employees and may lead to absolute organizational innovation. Hence, NHRM practices' general perspective of HRM that can improve the performance of organization through use the bundle of HRM practices include a high level of commitment [Guest, D.E.1997,263-276], involvement of employees (Lawler, E.E.,1996), and innovation processes in organizations (Salavou, H.; 2004, 38) which may encourage NHRM practices in small-, medium-, or large-sized organizations (Alexy, O.; 2011,165). Notably, HRM practices can be useful to achieve a high intensity of performance (Delery, J.E.;1996,39), and previous studies highlighted the positive significance of performance with HRM practices (Posthuma, R.A., 2013,1184). However, the current work is checking the role of NHRM practices influencing innovation performance. By motivating

employees, HRM has an effective impact on research & innovation performance (Dekoulou, P., 2017, 385). Researchers further provided evidence of HRM's impact through employees' performance in organizations and discussed the motivational drive of employees which enhance the employees' abilities and performance level (Jiang, K.; Lepak, 2012, 55). Likewise, NHRM practices can increase the motivational level of employees and enhance innovation performance through the advocacy of reinforcement in practices. If organizations may provide NHRM practices than their performance level must be superior. Thus, the previous findings have the concept of NHRM, but they have no further implementation in their studies (Laursen, K, 2003,27). Organizational innovation is defined as a new idea or term, exploring the new creative idea, process, and techniques which may increase the improvement of the innovation performance. It was important to identify the value of new and external information by increasing the knowledge of semi-government employees about the term organizational innovation. By contributing achievement of competitive advantages, organizational innovation dares to promote innovation performance (Kostopoulos, K., 2011.64) and adopt innovation in the workplace that triggers positive stimulus while concurrently decreasing costs and improving productivity (Thomas Hurt, H., 1977,377). Moreover, organizational innovation gives preferences to the customers' needs and achieves positive outcomes (Prajogo, D.I., 2006, 499) In organizational innovation, new products furnish new initiatives that reflect innovation performance (Prajogo, D.I., 2006, 515), motivate employees to show their new skills, seek new initiatives, and achieve high rewards. Thus, it is a continuing entrepreneurial advantage that authorizes the enterprising organization to obtain benefits by using a short monopoly.

New technologies in organizational innovation are also an essential part of organizational achievement globally. Thus, forgetting innovation performance, organizational innovations are necessary to build new technological resources, absorptive competency, and creative products.

Inventions and innovations are today a weapon to control production and markets such as the use of computer and robotics and so on. The rapid change in technology requires that the institution remain at the level required in terms of access to new technology, used in goods and services to maintain its competitive position.

Technology relates to the technical means used to convert inputs into outputs, and technology affects enterprises in terms of demand and production processes, and may entail the need to train workers on how to use such modern technology.

1.5. Situation of Duhok University for Research & Development

1.5.1. University skills in research & innovation

Duhok University is characterized by many skills within the research and innovation, despite its short life within the research process can be seen by the number of research carried out by the university, either by its teaching or by the research centres' associated with the university. The university has many research centres' that are distributed on the basis of colleges (18) centre for training and research rehabilitation or what is known as engineering, legal, medical and administrative consultancy offices, as well as training and rehabilitation centres for teaching staff in terms of raising the teaching capabilities of him or through increasing the scientific knowledge of the teaching staff. The research skills of the university through the number of research that the university works teaching by publishing through international journals of Thomson Reuters, Scope, and international standards, as find that there are many patents obtained by the university through its teaching staff in the fields of medicine and medicine Dental and engineering at the level of Iraq have been patented. Hence it can be said that the university and within that cadre of some kind of them, despite the modern founding that they are competitors that must be taken into consideration compared to other universities. The University seeks to achieve this development within the scientific research and the development of those capabilities through some important indicators that must be taken into account when desiring any university to develop its capabilities within the areas of scientific research.

1.5.2. Relations for research & innovation

Universities should have good relations with all other universities within the region or abroad within the country or abroad, and this enables the university to gain scientific expertise from the surrounding environment. The University of Duhok is one of the universities that have very good relations with neighbouring countries and others through cultural exchange between teaching within universities. In addition to cultural exchange for students as well, within the concepts of graduate studies of both types, where annually the university relies on sending many students to many international universities

and recognized within the international education organization (America, Britain, Australia, India, Turkey and other universities). The cultural perceptions of students, teaching, and improve the fields of scientific research from the experiences that gained by students through those cultural missions, whether at the expense of the university or through the facilities provided by the university, this by. On the other hand, the expansion of university relations may contribute by opening the horizons of seminars and joint projects between universities through the partnership between the teaching by the university with the teaching of the graduates by conducting conferences, workshops and research together to promote the educational reality of the university. The university contributes with what is known as civil society organizations to develop the environment around the university and help the companies that work the private sector activity through field consultations for those companies, as well as helping graduate students through the work of training courses for them on how to do small projects that may be the core that foundation for the advancement of society.

1.5.3. Quality development of research and innovation

Through the concepts of scientific research, Dahul University focuses on the quality of research presented rather than the quantity of research. Through the teaching assistant to publish those researches in international journals by providing all the material and financial requirements that the researcher may need to publish research of good quality. Therefore, it was one of the objectives of the university or its mission within its research and scientific activities to focus and urge teachers on the quality of published research and urge them through financial rewards that may be granted by the university and very rewarding amounts for sober research by. Helping hand and teaching on how to prepare research within those conditions that some may find difficult in terms of implementation that is possible, but working in group teams within the university makes this possible, and this finding that the university last year.

1.5.4. University system

Last but not least, one of the most important methods adopted by the university to develop the scientific and research aspect of it through the changes that have been made within the university system currently in force in all universities, which depends on us called (qualitative education system), this system is the research staff on the use of the

latest resources. During the educational process, in addition to the use of electronic techniques in giving lectures, including computers or using e-learning programs with the coating through examinations and daily work,

Therefore, this system is to take the views of medicine as the main engine within the university on how to perform the teaching of his tasks within the daily and quarterly debates, through which it is possible to judge the behaviour and standing of the teaching.

The system depends on the granting of points or degrees for the teaching on the annual activities carried out by research seminars and workshops, which ultimately works to promote the perceptions of teaching within the scientific research, which in turn due to the University of scientific benefit and sometimes material

The university system of the University of Dohuk has become an electronic system based on the evaluation of teaching on the basic degree of disruption of annual activities in all aspects, through which it is possible to obtain financial gains such as promotions or administrative positions.

CHAPTER TWO

2. EFFICIENT RESEARCH & INNOVATION

2.1. Innovation in Language

Language does not differentiate between creativity and innovation in terms of meaning or significance, but it can be pointed out that in the dictionaries of English came the term creativity in the broad sense of the Latin word (Innovate) which refers to the making or doing something new (Tidd et al., 2001). The Webster lexicon referred to creativity as the ability to find all that was new (Webster, 2006). The Oxford Dictionary referred to creativity as a term that referred to the introduction of new ideas, methods and working methods (Swannen, 1993, 549). In the dictionary (the resource) the term (Innovation) means creativity or innovation, while the business dictionary found that creativity work based on the idea, or B (Collin, 1995, 148).

In terms of the Arabic language, creativity is one of the strains of the Arabic language, as stated in the tongue of Arabs to Ibn Manzour that the word creativity came from innovation, innovation or creation of the thing means created and shown first.

It follows from the words of Al-Azhari: that innovation gives the fact that the interruption, but to say the other it calls the interruption metaphorically. The novelty of all is called the invention or creation, but not a real example, and the dictionary of social sciences defined the word (creativity) as meaning a new idea or behaviour or something different from the existing things (Azzawi, 2000, 37). This suggests that Arabic and foreign lexicons have agreed linguistically that creativity means being able to find something other than a previous example.

2.2. Concept of Innovation

The definitions that dealt with the concept of innovation varied as a result of the multiplicity of trends and theories that dealt with its concept according to their scientific disciplines, cultural frameworks and directives.

Based on this, the researcher considered that these definitions and their sources should be collected and presented in Table (1) according to the chronology, as follows:

Table 1. Some concepts of creativity as agreed by researchers

Name of researcher and year	Definition
Hage & Aiken, 1970, 13	The implications of new products and services offered by the Organization to its clients following the adoption of change.
Daft, 2001, 245	Adoption of a new idea or behaviour for the industry, market and the general environment, more clearly defined in the context in which the new idea or behaviour adopted by the organization can be used.
UK DT innovation Unit definition, 1994, 20	Innovation in its broad sense involves both new technology and new ways of doing things.
Moorhead & Griffin, 1998, 952	The processes of making new things (goods, services, and processes) and introducing them into marketing sites.
Fadlallah, 1996, 59	Creating something new is the pinnacle of innovation
Carroll, 1996, 3	The concept is used to describe processes when innovative ideas are put into concrete things, open new or apply new.
Daoudi, 1997, 73	Any scientific advances in research that make a substantial contribution to enrich the knowledge balance of any discipline.
Dean, 2000: 2	Transforming innovative options and ideas into useful applications that indicate a state of change and improvement
Tidd <i>et al.</i> , 2001, 38	Processes translate opportunities into new ideas and put these ideas into wide applications
Bernard, 2003, 88	Ability to generate innovative and useful ideas and provide solutions to everyday problems and challenges
Guilford, 2005, 60	Organizing a number of simple scientific capabilities that differ among them according to the field of creativity. These capabilities represent flexibility, originality, and energy.
L. K. Mishra & A. P. Singh, 2010	The ability of a company or manager to generate good ideas and better ways of doing things.

Table prepared by the researcher based on the sources contained therein

Hence, there is a diversity of concepts, but it is not a discrepancy or contradiction in the concept of innovation. On the contrary, innovation is a multifaceted human and organizational activity such as the researchers' tendency to the concept that is consistent

with the requirements of their research and studies contributed to this diversity and plurality.

Thus, it can be said that the overall concept of organizational innovation (the organization's behaviour in adopting and using new ideas and methods for the purpose of providing a new good or service fulfils its objectives of growth and commissioning and others makes it more competitive).

Thus, it can be concluded that innovation, whatever its concept, must include a set of basic variables - that you will - that is, each creator has the capacity to achieve and accomplish:

1. Is the process of adopting and using new ideas and methods applicable?
2. Expand using a new idea in new areas.
3. Giving the organization outstanding competence to face competitors.
4. The ability of university teaching staff to think openly beyond traditional frameworks of thinking.
5. Adoption of the university and its adoption of creativity behaviour through the creation of a creative environment and fostering creativity and attention to creators.
6. Creativity is not an individual phenomenon, but can be practiced at the individual, community and organizational levels.
7. Creativity is a human behaviour that is not confined to a certain category but is a potential energy characterized by all individuals to varying degrees, depending on the genetic factors and objective conditions in which the individual lives and interacts with them, working to refine and develop their creativity.

All that came in terms of similarities between researchers and thinkers of the concept of innovation, which can be considered within the scope of this study: Therefore, creativity is defined as a behaviour followed by the individual to achieve all that is good, valuable and authentic.

In other words, an individual's behaviour, which may be due to genetic or acquired factors, may be creative in nature or imitator.

After reviewing the definitions dealing with the concept of innovation, we should distinguish and clarify the relationship between the concept of innovation and some other common concepts that may be used as synonyms for innovation as shown in Table (2).

Table 2. Similarity and difference between innovation and other terms

Concept	Guaranteed
Creativity	The process of translating opportunities into new ideas and putting them into broad applications (Tidd et al., 2001, 38).
Innovation	Generates ideas and options, but creativity transforms them into useful applications that indicate a state of change and improvement (Deen, 2002, 2).
Invention	The idea reached by an inventor and produces a solution to a particular problem or the provision of services or the adoption of methods that have not previously been adopted and indicating technological changes make the organization the first user of this technology and the work is accordingly creativity and classified as creative and therefore the invention is part of the process of innovation or degree Of his grades (Piatie, 1984, 1-5)
Skill and excellence	There is a difference between creativity and skill. It is the skilled worker who reshapes what others have mastered perfectly (Al-Qaryouti, 2000, 296). However, excellence can sometimes reach the point of creativity and the superiority of the language of (outnumbered) against the under, while creativity came from the act of innovation and creation (Razi, 1982, 43).
Talent	Innate ability or inherited readiness in one or more areas of mental, creative, artistic, sports, linguistic, social and humanitarian needs to be detected and cared for, to the fullest extent possible (Salama and Abu actual, 2002).
Intelligence	A mental ability, or group of abilities, that enables an individual to learn, acquire and use knowledge, simulate, solve problems, make decisions, adapt to the environment, and others. Intelligence is measured in terms of optional paragraphs in the field of verbal, numerical, abstract or visual simulation and memory (Jardan, 1999).
Organizational Change and Development	The change according to Daft & Becker reflects the adoption of something different or a change in the current situation and at the level of the organization. Organizational development is defined as a holistic, planned effort that aims to change and develop employees by influencing their values, skills, patterns of behavior, and by changing the technology used, as well as organizational processes and structures to develop human and material resources or achieve organizational or both goals (Al-Azzawi, 2000, 42).

2.3. The importance of creativity and innovation in higher education

The university is currently experiencing profound shifts in its surroundings on the one hand and geopolitical side on the one hand, and in the behaviour of its partners on the other.

As a whole, the university is confined to a canned space, starting from near to far: from the neighbourhood to the state, the nation, the union, globalization, etc., so the development and change of national and international laws leads to the loss of the university's leading role in the production of knowledge. Workplace venues have become competitive with the University as any university source of new knowledge.

According to Henri H. Savall, professor of management sciences at the University of Lyon and director of the laboratory "L'I.S.E.O.R" tomorrow's university is the environment for the creation of knowledge based on the cooperation system and the perception of a university outside the fences with special interests in the management of integration.

It is also in the interest of the university to develop its work and communication and improve its image. It calls for openness to various activities through informal speech but also to serve the citizens.

Its role became effective in enlightening and supplying the political class.
- If we want to establish tomorrow's university, there are three scenarios to consider:

A) The first perception: It depends on the monopoly of the university knowledge and is in the perception cannot be adopted.

B) The second scenario: The university's reliance on other organizations by knowledge, which in turn re-sent it also cannot be adopted.

The third scenario is based on the fact that the university is the source of knowledge in the broad sense in addition to its known role of training, research and employing knowledge in the service of the economy.

Hence, the University deserves the main source of innovation for renewable knowledge and the main place for knowledge to develop, which can be developed in a system based on cooperation and integration of the University in its surroundings with all partners.

(Zipple, 2001 & Cortese, 2000, 20) agreed to count how to think away from traditional contexts while evoking all forms of adventure from embracing and supporting change processes in order to achieve creative transformations in the environment and

operations of organizations as well as their outputs to their environment, and his knowledge (Kwasniewska & Necka ,2004, 40) as the first or early use of an idea by one of the organizations belonging to the group of organizations with similar objectives, and endorsed this aspect (Kratzr et al., 2004, 60) as creative behaviour: adopting a new idea or behaviour for the industry and market of the organization. Their general environment so as to be more clearly defined and the framework within which they can be used The new idea or behavior adopted by the organization.

(Zainab, 2005, 12) also pointed out in her concept of creative behaviour by having a person's creative personality, knowing that (the individual has a sense of happiness for what she does, whatever her difficulty, honesty, justice, observance of human values, enjoying the spirit of humour, optimism and a great personal presence) .

Whereas (Zoghbi & the West, 2007) focused in their concept of creative behaviour on counting the behaviour that precedes creativity and distinguishes the individual or the group in the workplace, which does not have to be accompanied by a new production or service and starts from recognizing attitudes and attention to others and collect information and analysis and choose the best information To embrace creative behaviour or idea, (Nawaysa, 2009, 207) referred to creative behaviour as: the process of creating new ideas and away from the traditional context of thinking, and the development of all methods and methods that will convert these ideas into a reality and a value of benefit for all while bearing all Forms of magnetism Time of change and support operations to achieve organizational goals.

2.4. Innovation Strategy

The strategy represents the long-term direction and direction of the Foundation To achieve all the advantages resulting from the overlap and integration of enterprise resources with the changing environment to achieve expectations There are many innovation strategies that can be adopted by the institution, so as to help achieve innovation and make it a renewed and inherent phenomenon. Innovation strategies refer to organizational policies designed to promote the innovation process and create an innovative environment within the organization (Salim Boutros Jeladah & Zaid . 69). If we consider that the strategy is how to create excellence and preference from others, the concept of innovative strategy is based on creating a precedent to new and precedent to the best and precedent to the different.

The essence of innovation from a strategic point of view is essentially the fact that the institution is the ball. Be the first actor in finding the new product and the new market (Najm Abboud Najm, 2003, 17).

If the innovation strategy is the strategy to head to the new idea or to the new product or to the market, the institution can be a precedent in all or only one of these elements, or that They are also late in some or all of the elements. From this several cases can be distinguished proactively

The economic institution and judging its characteristics, strategy and degree of innovation.

1. Resource self-development policy: This method relies on the exploitation and internal resources, It relies mainly on human resources, and the policy is based on the principle of learning, knowledge and efforts Research and development function and the actual application of innovation, giving it the right to exploit financial returns Of technological innovation and monopoly of its exploitation, with the freedom to give licenses to others.

2. The policy of development through imitation: the institution resort to this method in the absence of the financial capabilities necessary and sufficient to exploit the patent or incorporate the search function And development, which is the policy that most institutions resort to avoid risk:

A. Affiliate Case: In this case the institution tries to take the results of applied innovation and works on Discover the basic components and techniques of it and try to access the basic knowledge on which it is built, then The organization is adding changes and improvements to the original product, and there may be changes Radical to come out in the latter in the form of a new product.

B. Case Mimic: This is the way the institution tries to avoid the risks of research and resort to Exploiting the technology of other enterprises through contracts and production licenses, however The enterprise risks product obsolescence and therefore has to investigate products and innovations prevalent in the market in . Present and future, this will only be provided by an effective information and vigilance system (Siddiqui Massoud, 2005 . 1).

2.5. Dimensions of research & innovation

Throughout history, universities pursuing a successful future have relied on the discovery of the next “great idea”, which often follows an accidental discovery of a brilliant idea that has pushed the university forward. But in order for the university to succeed in competition, and to continue to grow in the current ever-changing work environment, it must learn how to develop a culture of research innovation - an ongoing ability to generate, accept, and implement creative ideas - within the institution, as we see in Figure (3) .

Hence, we find that there is no general agreement on the dimensions of research innovation. It can be considered as the basic dimensions of research innovation and development through which it is known as (Five Dimensions of Research Innovation) which will be referred to as the following:

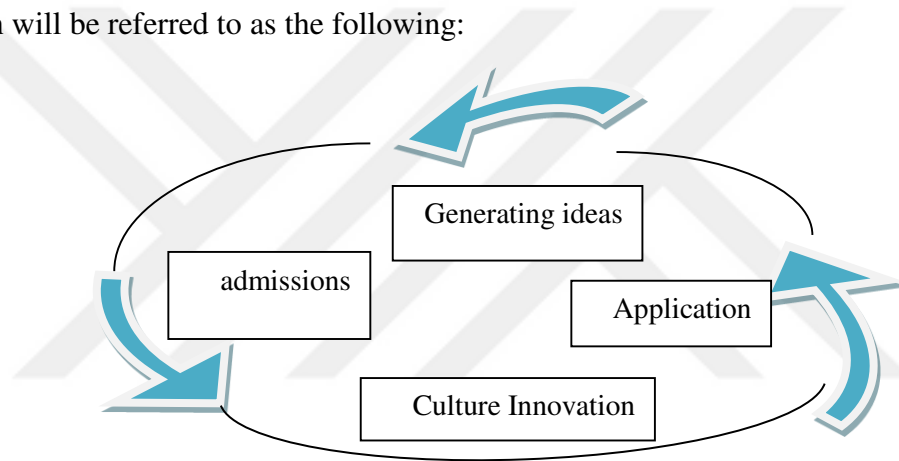


Figure 3. The three-step innovation process

2.5.1. Quality improvement

There are many evil concepts addressed by writers and researchers specialized in this area, which is affected by an agreement in terms of content and content and differing in the method of presentation and formulation of the definition, as the organization defines the international standard of continuous improvement as "actions taken through the company to maximize the efficiency of activities and processes and effectiveness in order to provide Double benefits for a company and its customers "(International Organization for Standardization: 1996: 42)

The Strategic Reference Manual 1000/2002 defines quality improvement as "recurring events to increase the ability to meet customer requirements". (Central Organization for Standardization and Quality Control: 2001, 47). It is also known as the

methods that improve processes. This includes a benchmarking of discriminatory applications and the development of a sense and awareness among individuals of their ownership of activities and operations. So that all employees do their jobs better every day than before, it is an endless phase under the idea that there is always room for improvement (Financial and Banking Management, 2001: 42), either (1999, Heizer & Render) that it is a continuous and comprehensive process involving all personnel, equipment, materials and processes, and that the basis of this philosophy is to focus on continuous improvement in all aspects related to the production process or Service (Abdul Rahman: 2010, 193), through the above researchers draw the importance of philosophy (improve quality) through the following:

1. Improvement needs the support of senior management and the commitment of all administrative levels in the organization, as the needs and desires of customers are constantly changing, which requires continued pursuit through improvement in its advanced products with a focus on avoiding mistakes and diagnosing problems and address them to face these changes.
2. Improvement is a race without an end line is an endless phase within the concept that there is room for improvement always and there is not a single summit, but a number of peaks.
3. Improvement stems from the belief that anything and everything in the field of work is the subject of continuous evaluation to answer two questions: Is this necessary? Can it perform better?

2.5.2. Scientific Research

About scientific research there are distinguish between the terms (research) and scientific). The first means seeking and finding facts from the truth, which requires exploration, reflection and reflection to reach something the researcher wants to reach (Mohamed, Zidan, 2004 , 114), while scientific research is a The term translated from foreign language depends on the scientific method, which in turn depends on the methods organized in the observation and recording information and describe events and the formation of hypotheses.

Hassana Mohiuddin defines scientific research as: "Organized human behavior aims at investigating the health of information or an important incident or clarifying a particular situation or phenomenon, or reaching a successful solution to an academic or

social problem of interest to the individual and society. Scientific research is an organized activity and a way of thinking. And a fact-finding method based on verified objective approaches to find out the correlation between these facts and then draw general principles or explanatory laws (Hassaneh, Mohieddin, 2016, 106).

Scientific research is a cornerstone of human knowledge in all fields as it is also a prominent feature of the modern era has increased its importance with the increasing awareness of nations that the greatness and superiority depends on the development of the capabilities of scientific, intellectual and behavioural, and that scientific research needs many means and complex and requires considerable funds. However, developed countries aware of the value of scientific research reject any default towards it as the mainstay of the development of the economy and the achievement of comprehensive development. It can be said that scientific research is no longer academic welfare practiced by a group of researchers in closed offices, but in the era of globalization has become the engine of the new world economic system, which contributes to the renewal process practiced by nations and civilizations to achieve a practical reality embodying happiness and well-being.

2.5.3. Solving problems in the organization

(Henger, James, 2004, 100) pointed out that this dimension is the key element in the innovative process, which involves diagnosing many problems within multiple situations or one situation and then identifying their dimensions, aspects and shortcomings in order to reach creative solutions. The experts of the Center of Designated Expertise, 2004, 99 pointed out that the use of innovation and the ability to solve problems makes the individual able to identify the problem accurately and increase his ability to solve it, because of the production of multiple ideas, and rationalize the resources used to solve problems and improve work methods. Resolves pain Kalat from its roots as a result of the originality of the idea, and pointed out (Moroccan, 2004.65) to solve the problems expressed in the flexibility and rapid adaptation, which is characterized by the worker and make him able to change behaviors quickly in order to reach a solution to the problems faced.

(Daft, 2001, 60) pointed out that it is possible to develop and develop the capacity of creative workers training, especially for employees who are willing to learn and continuous training, and that the simplest way to increase the level of creativity of

employees in the institution is to develop the skills of workers through training in methods that enhance their self-learning, In addition to training them on creativity, especially in the field of problem solving, and increasing creativity within the organization is possible through the development of skills of workers to generate multiple solutions to the problems facing them, and provide training programs enjoy abundant software based on self-directed e-learning software .

The researcher finds that solving the problem involves answering a question or facing a problem or satisfying a need in a situation that involves a certain challenge In the end, solving the problem in which something of creativity was the basis of creativity in choosing the problem or creativity in solving it or creativity in making a change in anything.

2.5.4. Community Development

Society is the basis for the emergence of universities and business organizations. Without society, these organizations have no role in the current environment, so organizations should try, especially universities through scientific research to promote the community to the greatest extent of research development and search for what is best for him through the available resources At the same time,(Daft ,2004,66) pointed out that universities must take into account the demand and need within the current environment , the community in which the organization lives.

Therefore, we find that through the development of society research or provide research facilities to all researchers and encourage them to research creativity within all fields opens the way for organizations and universities to provide all the best that on the one hand, on the other hand, we find that the identification of human resources needs of organizations within the current and future Needs research and development within all professionals, community development, on the other hand, is a process in which community members come together to take collective action and generate solutions to common problems. Community welfare (economic, social, environmental and cultural) often develops from this type of collective action at the grassroots level. Community development ranges from small initiatives within a small group to large initiatives involving the wider community.

Community development is an inclusive process Community member with a shared vision and a sense of belonging to their community usually initiate the community

development process. It is important, however, that the process be expanded to include the wide range of interests (i.e. economic, social, environmental) and organizations (i.e. government, labour, business, social services) that are part of the community. Don't make assumptions about traditional roles and responsibilities or levels of interests. For example, many private sector businesses have become increasingly interested in social development issues and some government agencies are now entering into partnerships with community organizations to provide effective programs and services covering a wide range of interests. The individual make-up of a community influences who needs to be involved and what activities will be viewed as legitimate. Ensuring that different cultures and interests are respected and involved (in a meaningful way) is important. For example, respecting cultural traditions and religious holidays, being aware of different styles of communication and ensuring that persons with disabilities can participate fully are all ways that you can build credibility and support (Frank and Anne Smith, 2000.36)

Who's Involved in The Process?

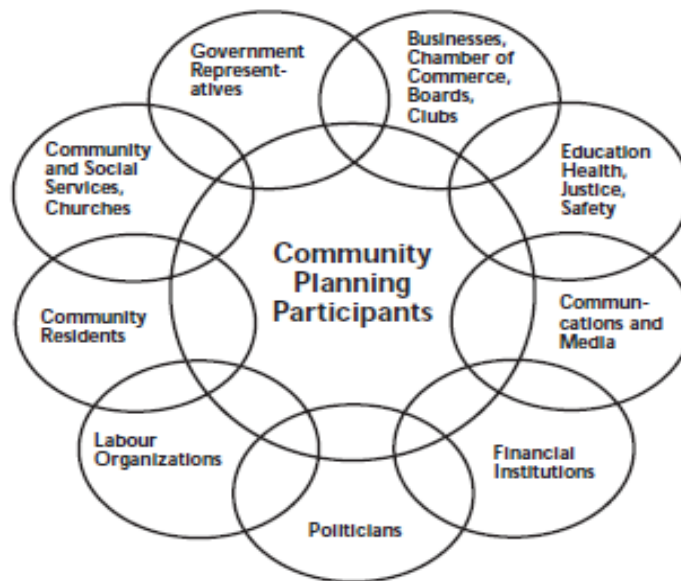


Figure 4. Community Development Model

Hence it can be said Effective community development should be:

- A long-term Endeavour
- Well-planned

- Inclusive and equitable
- Holistic and integrated into the bigger picture
- Initiated and supported by community members
- Benefit to the community
- Grounded in experience that leads to best practices

Community development is a grassroots process by which communities:

- Become more responsible
- Organize and plan together
- Develop healthy lifestyle options
- Empower themselves
- Reduce poverty and suffering
- Create employment and economic opportunities
- Achieve social, economic, cultural and environmental goals

Community development seeks to improve quality of life. Effective community development results in mutual benefit and shared responsibility among community members. Such development recognizes:

- The connection between social, cultural, environmental and economic matters
- The diversity of interests within a community
- Its relationship to building capacity

Community development helps to build community capacity in order to address issues and take advantage of opportunities, find common ground and balance competing interests. It doesn't just happen – capacity building requires both a conscious and a conscientious effort to do something (or many things) to improve the community.

Often when we think about society, we find ourselves thinking about geographical terms. Our community is the city, town or village we live in. When a society is defined by physical location it has precise boundaries understood and accepted by others. In terms of geography there is only one way to look at. Communities can also be defined as shared cultural heritage, language, beliefs or common interests. These are sometimes called communities of interest. Even when a community refers to a geographical location, it does not always encompass everyone within the region. Of

For example, many indigenous communities are part of a larger non-indigenous geography in large urban centres, often defined in terms of particular neighbourhoods, most of us belong to more than one community, whether we are aware of it or not, for

example, an individual can be part of a living community, a religious community and a community of common interests all at the same time. Relationships, whether with people or land, define a society for everyone

Development the term development often carries the assumption of growth and expansion. During the industrial age, development was largely associated with increasing speed, volume and size. However, many people are now questioning the concept of growth for many reasons - realizing that more people are not always better, or growing respect for reducing external dependencies and lowering levels of consumerism. So, while the term “development” may not always mean growth, it always means change.

The community development process is responsible for the circumstances and factors affecting society and changing the quality of life of its members. Community development is a tool for managing change but it is not:

A quick solution or short-term response to a particular problem within the community; A process that seeks to exclude community members from participation; or an initiative that occurs in isolation from other relevant community activities.

Community development is about building society in this way, where the process is as important as the results. One of the key challenges for community development is balancing the need for long-term solutions with daily realities that require immediate decision making and short-term action. (www.hrdc-drhc.gc.ca/community.)

2.5.5. Cut Cost

Cost is one of the most widely used accounting terms. Its meaning is different depending on its function, the purpose for which it will be used, and the field in which it is used. Therefore, different concepts of cost and cost price must be presented and the difference should be clarified between them. Cost in the current sense is the value of cash paid for economic benefit represented in a particular good or service, below we explain this term accurately by showing some definitions where margarine defines costs as "a set of accounting burdens attributed to something" (Margerin base de 1991, P14.). Storm, Beck defined it is the financial expenditure incurred by the project management in order to accumulate the productive resources for the purpose of producing goods or services that can be sold. Mohamed Nour, 2004 defines it as “sacrifice of economic value, in order to obtain a commodity or service now or in the future (Ahmed Mohamed Nour, 2004, 65). within concepts costs are the basis of the research process, as all areas of research

and research innovation or creativity within the research side depends on costs. What Porter emphasized within competitive strategies is focused on cost leadership.



CHAPTER THREE

3. FIELD STUDY FRAMEWORK

This chapter aims to present and analyse the results achieved by the study sample responses by presenting iterations, percentages, arithmetic media and standard deviations to verify the validity of the hypothetical model of the study. Therefore, this chapter was divided into the following sections:

Description of the study population and sample and the individuals interviewed.

Description of the study variables of the University of Dohuk.

3.1. Describe the Study Population and Sample

Description of the study sample and the rationale for its selection. In order to achieve the objectives of the study and prove its hypotheses, the university corps (University of Duhok) was chosen, as the respondents represented the professors in the university who hold scientific titles and the choice of the university education sector and University of Duhok was for the following reasons:

The University of Duhok is one of the fast-growing organizations in Duhok Governorate, located on the international road between Iraq and Turkey. The University has a vital role in the development of society by stimulating social, economic, cultural, scientific and educational progress in Iraq. Duhok University graduates are actively involved in the community by applying their knowledge and expertise to participate in the progress and development of the region. The University of Duhok was established on 31/10/1992 according to the decision of the Parliament to meet the growing demand for graduate studies in the region. The university initially included only two faculties: the Faculty of Medicine and the College of Agriculture. The colleges started with 48 students for medicine and 166 students for agriculture. During the first two years of the establishment of the university, the two embargoes imposed on Kurdistan by the (UN) in Iraq and the Iraqi central government contributed to the poor economic conditions in Kurdistan and the slow growth of the university. After these difficulties, the university found itself oriented towards progress and development. Therefore, the University of Duhok has developed today to include (18) faculties containing (78) departments, (21265) students, (1435) academic staff and (2353) administrative staff. Duhok University is a

member of the International Association of Universities (IAU), the European Commission for International Education (EAIE), and the Arab Universities Authority (AARU). Duhok University is looking forward to leadership and commitment to research and education. Personal and professional.

The University of Duhok provides students and staff with all the necessary facilities such as library, laboratories, computer services, sports facilities, internal departments and many methodological activities to strengthen and encourage ambition and quality during a learning environment. As a comprehensive plan to improve English language skills, the University's Development and Rehabilitation Centre offers intensive courses and new advanced courses in teaching and research methods that are taught by native speakers.

So the reason can be summarized for the following points

- The education sector occupies a privileged position in the process of construction and development that we are witnessing at present.
- The great responsibility of universities is to prepare qualified human cadres to work in various fields of knowledge and fields of work, and then their great role in determining the fate, future and hopes of the people. Assistant teacher) as a sample of study.
- The intellectual output and outputs of the educational process in the most influential universities for creativity in the organizations because of the high proportion of creative work in university.

The research sample was selected according to the stratified random method, the questionnaire was distributed in its final form, among the faculty members of the university and included scientific titles (professor, assistant professor, teacher, assistant teacher), where (6) colleges were selected The university takes into account the symmetry in each of the faculties, as shown in Table (3). In accordance with the directions of the study, the researcher distributed the questionnaire to the respondents.

The number of forms distributed by (170) forms to the University of Dohuk were returned (150) forms valid for analysis as indicated in table (4).

Table 3. Description of the study sample colleges of Duhok University

s	Colleges (Duhok)	Year Founded	Number of sections
1.	Engineering	1994	4
2.	Literature	1994	8
3.	Administration and Economics	1996	6
4.	Sciences	1997	5
5.	Law and Politics	1999	3
6.	Education	2002	10

The table prepared by the researcher using the graduation guide for the academic year 2018-2019.

Table 4. Distribution of questionnaire forms to respondents in the colleges of the University of Dohuk

s	Colleges	Number of forms			Percentage of total valid forms
		Distributed	Received	Good	
1	Engineering	28	27	26	17.3
2	Literature	30	28	28	18.6
3	Administration and Economics	25	25	25	16.6
4	Sciences	27	26	25	16.6
5	Law and Politics	30	27	24	16
6	Education	30	26	22	14.6
	Total	170	159	150	100%

In order to describe the population of the study, the data obtained by the researcher from the identifying part of the questionnaire form were dumped as shown in table (5).

Table 5. Frequency and Percentages of Characteristics of Individuals in the University

Gender									
Male				Female				Dohuk	
%		s		%		s			
32		48		68		102			
Age									
51-morh		14-50		31-40		Dohuk			
%		s		%				s	
14		21		25.3				38	
60.6		91							
Social status									
Absolute		Unmarried		Married		Dohuk			
%		s		%				s	
--		--		32.3				49	
67.3		101							
Qualification									
M.A.		Ph.D.		Dohuk					
%		s				%		s	
60.6		91				39.3		59	
The scientific title									
assistant teacher		Teacher		Assistant Professor		professor		Dohuk	
%		s		%		s			
39.3		59		44.6		67			
13.3		20		2.6		4			
Length of service									
22- mor		16-21		5-15		Dohuk			
%		s		%				s	
13.3		20		26.6				40	
60		90							

Table (5) indicates the frequency and percentages of the characteristics of the study sample individuals as follows:

1. Gender: The proportion of males (68%) of the individuals surveyed at the university level and (32%) of females, and this indicates that the majority of teaching staff are males.

2. Age: The most visible age group is the age group (31-40) years, followed by the confined category (41-50) years.

3. Marital Status: It was found that the majority of the sample of the study was married (71.6%), while the percentage of unmarried (32%) and the proportion of married (67%) and this is a sign of social communication.

4. Educational Qualification: It is clear that the majority of the respondents are holders of a master's degree (60%), while the proportion of holders of a doctorate degree (39%) This confirms that the university provides opportunities for young teaching staff.

5. Scientific title: It is evident from the data of table (3) that (44.6%) of the respondents are holders of scientific title (teacher), while the lowest percentage of holders of the title (professor) by (4%), while the percentage of The percentage of holders of the scientific title (assistant teacher) amounted to (39.3%), which confirms the keenness of the university administration on the issues of scientific development and promotion of teachers in the fields of specialization.

6. Years of service: It is clear that (60%) of the respondents have a total service ranging between (5-15) years, which indicates the accumulation of knowledge they have.

3.2. Description of study variables and diagnosis of Duhok University

This research includes the description of the study variables and diagnosis through the analysis of data related to it, which uses the frequency distributions, percentages, arithmetic and standard deviations, and each of the variables of the study, and to achieve this has been divided into three sections according to the study variables, as follows:

3.3. Describe and diagnose human resource requirements variables

This section describes the organizational determinants of (retention of human resources, selection, polarization, timing) at the overall level of the study sample and the level of each of the faculties studied as indicated in Table (6).

Table 6. Frequency Distributions and Percentages of Human Resource Requirements

Variables	The main factors	Symbol	Response scale										mean	standard deviation	
			Strongly agreed		Agreed		Neutral		I do not agree		I do not agree strongly				
			S	%	S	%	S	%	S	%	s	%			
	Retention of human resources	X1	-	-	59	39.3	67	44.7	24	16	/	/	3.233	0.708	
		X2	12	8	68	45.3	34	22.7	36	24	/	/	3.373	0.937	
		X3	5	3.3	49	32.7	27	18	64	64	/	/	2.933	0.960	
		X4	/	/	57	38	/	/	62	42.6	/	/	2.760	0.974	
		X5	11	7.3	55	36.7	35	23.3	44	29.3	5	3.3	3.153	1.034	
		Average		5.6		57.6		32.6		46		1		3.0904	0.9226
		Total		63.2				32.6		47				3.0904	0.9226
	choice	X6	51	34	47	27.3	12	8	28	18.7	18	12	3.526	1.426	
		X7	38	25.3	30	20	34	22.7	41	27.3	7	4.7	3.340	1.252	
		X8	25	16.7	11	7.3	25	16.7	82	54.7	7	4.7	2.766	1.195	
		X9	33	22	13	8.7	41	27.3	56	37.3	7	4.7	3.060	1.238	
		X10	42	28	24	16	12	8	59	39.3	13	8.7	3.153	1.417	
		Average		37.8		25		24.8		53.2		10.4		3.169	1.3056
		Total		62.8				24.8		63.6				3.169	1.3056
	polarization	X11	41	27.3	74	49.3	13	8.7	22	14.7	/	/	3.893	0.970	
		X12	27	18	19	12.7	20	13.3	78	52	6	4	2.886	1.234	
		X13	50	33.3	30	20	23	15.3	47	31.3	/	/	3.553	1.245	
		X14	45	30	11	7.3	5	3.3	81	54	8	5.3	3.026	1.428	
		X15	25	16.7	10	6.7	56	37.3	59	39.3	/	/	3.006	1.064	
		X16	33	22	42	28	21	14	41	27.3	13	8.7	3.273	1.310	
		Average	36.83		31		23		54.66		4.5		3.2728	1.208	
	Total	67.8				23		59.1				3.2728	1.208		
	Timing	X17	15	10	35	23.3	53	35.3	39	26	8	5.3	3.66	1.053	
		X18	23	15.3	51	34	35	23.3	41	27.3	/	/	3.373	1.040	
		X19	/	/	18	12	65	43.3	67	44.7	/	/	2.673	0.680	
		X20	25	16.7	43	28.7	30	20	52	34.7	/	/	3.273	1.110	
		X21	21	14	64	42.7	39	26	26	17.3	/	/	3.533	0.938	
	Average	16.8		42.2		44.4		45		1.6		3.3024	0.9642		
	Total	59.3				44.4		46.6				3.3024	0.9642		

1. Retention of human resources: The results indicate that the responses of the respondents and at all faculties of the study sample about this determinant through its

indicators (X1-X5) tend towards agreement and by 63% of those answers with a mean of 3.09 and a standard deviation of 0.922. However, disagreement on the indicators of this dimension (47%), which indicates the availability of many indicators towards the retention of human cadre.

2. Selection: The data of the frequency distribution, arithmetic media and the standard deviations of the study sample responses towards the selection paragraphs (X6-X10) indicate that (62%) of the respondents agree on these terms compared to (63%) disagree with the statements of this dimension. And (24.8%) are neutral, and this was an arithmetic mean of (3.196) and a standard deviation (1.305), and through follow-up we find that the sample of the study headed the agreement equally about this dimension.

3. Polarization: The results indicated that the respondents' responses and the total index of the polarization dimension through the indicators (X11-X16) tend towards the agreement by (67%) with a mean (3.272) and standard deviation (1.208), while the rate of disagreement (59). This indicates the dependence of the administrative leaders in the university on the centralized decisions, making the rate of disagreement high.

4. Timing: The data indicated that there is an agreement between the majority of the study sample (59%) on the timing in the work mechanisms and that they are available to them, whether according to the nature of work or not, and that (44%) of the respondents does not mean time to them something important. This was done through the statements (X17-X21) with an arithmetic mean of (3.302) and a standard deviation of (0.964), while the proportion of neutrality amounted to (44%) of the sample of the study.

3.4. Describe and diagnose functional research innovation variables

This section describes the research innovation indicators indicated by the theoretical and approved aspects of the study model. Table (7) shows the frequency distributions, percentages and standard deviations at the total level of the faculties of the study sample.

Table 7. Frequency Distributions and Percentages Research& Innovation

Variables	The main factors	Symbol	Response scale										mean	standard deviation
			Strongly agreed		Agreed		Neutral		I do not agree		I do not agree strongly			
			S	%	S	%	S	%	S	%	s	%		
Research Innovation	Improved quality	X1	12	2.4	62	12.4	47	9.4	29	5.8	/		3.380	0.887
		X2	/		19	3.8	86	17.2	40	8	5	1	2.793	0.698
		X3	7	1.4	70	14	24	4.8	49	9.8	/		3.233	0.965
		X4	10	2	47	9.4	52	10.4	41	8.2	/		3.173	0.910
		X5	26	5.2	49	9.8	54	10.8	21	4.2	/		3.533	0.938
	Average		11		49.4		52.6		36		1		3.2224	0.8796
	Total		60.4				52.6		37				3.2224	0.8796
	Increase scientific	X6	50	10	7	1.4	17	3.4	29	5.8	30	6	3.273	1.241
		X7	52	10.4	15	3	39	7.8	12	2.4	20	4	2.826	1.121
		X8	66	13.2	7	1.4	29	5.8	17	3.4	22	4.4	2.900	1.133
		X9	78	15.6	17	3.4	24	4.8	16	3.2	15	3	2.566	1.142
		X10	78	15.6	17	3.4	30	6	10	2	10	2	2.486	1.041
	Average													
	Total		64.8		12.6		27.8		16.8		19.4		2.8102	1.1356
	Total		77.4				27.8		36.6				2.8102	1.1356
	solving problems	X11	61	12.2	61	12.2	38	7.6	25	5	26	5.2	3.100	1.115
		X12	69	13.8	50	10	29	5.8	17	3.4	35	7	3.00	1.074
		X13	64	12.8	55	11	28	5.6	26	5.2	27	5.4	3.033	1.2007
		X14	61	12.2	42	8.4	38	7.6	46	9.2	/		3.140	1.326
		X15	94	18.8	12	2.4	15	3	34	6.8	/		2.733	1.288
		X16	87	17.4	33	6.6	18	3.6	18	3.6	15	3	2.600	1.152
	Average		72.66		42.16		27.66		27.6		17.166		2.9343	1.192
	Total		114				27		44				2.9343	1.192
	Cut costs	X17	57	11.4	52	10.4	20	4	16	3.2	5	1	3.933	1.115
		X18	37	7.4	36	7.2	10	2	62	12.4	5	1	3.253	1.311
		X19	37	7.4	39	7.8	32	6.4	31	6.2	11	2.2	3.400	1.263
		X20	25	5	26	5.2	47	9.4	27	5.4	/		2.760	0.856
X21		29	5.8	33	6.6	6	1.2	21	4.2	12	2.4	2.500	1.028	
X22		30	6	37	7.4	14	2.8	25	5	11	2.2	3.113	1.313	
Average		35.83		37.16		21.5		30.33		7.33		3.159	1.147	
Total		52.83				21.5		37.33				3.159	1.147	
Community Development	X23	33		6.6	55	11	55	11	18	3.6	6	1.2	3.313	0.949
	X24	95		19	40	8	25	5	24	4.8	12	2.4	2.726	1.116
	X25	70		14	25	5	28	5.6	30	6	15	3	2.880	1.268
	X26	96		19.2	35	7	10	2	15	3	15	3	2.713	1.2003
	X27	96		19.2	40	8	7	1.4	13	2.6	21	4.2	2.886	1.261
Average		78		39		25		20		13.8		2.9036	1.158	
Total		117				25		33.8				2.9036	1.158	

1. Quality improvement: The results indicate that the responses of the respondents at the faculties of the study sample about this dimension through its indicators (X1-X5) were inclined towards agreement by (60%) with an arithmetic mean of (3.222) and standard deviation of (0.8796), in When the rate of disagreement within this indicator (37%), this indicates that there is a kind of improvement in the impact on the course of teaching or life by teachers.
2. Increased scientific research: The data indicate that a large percentage of the study sample (77%) were in agreement with this dimension, while the rate of disagreement (36%) and of which (27%) were neutral for the indicators of that

dimension (X11). This was an arithmetic mean (2.810) and a standard deviation of (1.1356) and this is a reference to more than half of the sample of the study tends to pay attention to scientific research.

3. Problem-solving: The results of the respondents' answers and the overall level of the problem-solving dimension indicators (X11-X16) were towards the agreement with an average of (114%) with a mean (2.934) and a standard deviation (1.192), while the rate of disagreement (44%). This was a high indication of the sample's agreement that they were able to solve their problems within business contexts or standards set by the leadership or university.
4. Cost reduction: The data indicate that the frequency allocations, percentages, arithmetic circles and standard deviations of the answers to the statements (X17-X22) related to the cost experienced by the teaching staff at the university, where the approval rate of this dimension (52%) and this ratio is equal The rate of disagreement was in the mean of (3.135) and standard deviation (1.147), while (21%) of the sample of the study tended to be neutral on reducing costs.
5. Development of the community: Table (4) indicates that the percentage of agreement of the study sample about the community with its indicators (X23-X27) was (117%) with an arithmetic mean of (2.903) and a standard deviation of (1.158) for the study sample, while the percentage of Not giving them any importance (33%), they do not feel social communication.

3.5. Test hypotheses

This chapter aims to test the hypotheses of the study to identify the correlations and impact between the main and sub-variables. The validity of the assumptions will be verified by using a number of statistical methods and tools chosen to perform the analysis on the study variables. This chapter is divided on the following topics:

Complementing the descriptions and diagnostics based on the descriptive analysis data, the correlation relationships between the study variables were determined, in particular about the existence of a significant correlation between the human resource needs and the research innovation, using the spearman and the significance level ($P \leq 0.05$). following:

1. Analyse the correlations between needs identification and research innovation

This theme focuses on testing the correlation hypothesis, which stipulated that there is a significant correlation between the identification of needs and research innovation in colleges. Sample study at the University of Duhok at the macro level, and each dimension of needs, and then analyze this relationship at the level of each college. The sample of the study as follows:

a. The relationship between needs identification and research innovation at the micro level of the study sample faculties

Table (8) shows that there is a positive statistically significant correlation between the variable (human needs) and the variable (research innovation), where the correlation coefficient of the total index (0.905), a significant value at the level of significance (0.01), and thus Accept the hypothesis at the overall level of the University of Dohuk.

B. The relationship between needs and each dimension of research innovation at the micro level of the study sample faculties

Table (8) shows that there is a significant correlation between needs and each dimension of research innovation. The strongest correlation was between needs and research innovation, where the value of correlation coefficient (0.98) represented by the development of society, while the weakest significant correlation between needs and lower costs, the degree of correlation (0.879), and thus the correlation hypothesis was achieved on At the overall index level and sub-dimension level

Table 8. Relationships between needs and R&I at the macro and micro levels

Needs Innovation	Retention	the choice	polarization	Timing	Total
Improved quality	0.280**	0.987	0.233	0.087	0.916**
Research	0.270**	0.581**	0.530**	0.210	0.837**
solving problems	0.710*	0.155	0.198*	0.158	0.890**
Reduce your Cost	0.122	0.450	0.213	0.812*	0.879
Community Development	0.298**	0.266**	0.376**	0.140	0.980**
Total	0.296**	0.294**	0.98**	0.090	0.905**

Table prepared by the researcher in the light of the results of the electronic calculator

** ≤ 0.01 . P * ≤ 0.05 . N = 150

On the level of the relationship between needs and research innovation at the level of each faculty of the study sample, Table (9) shows that the strongest moral relationships were in the faculties of education, arts and engineering, where the correlation coefficients were (0.880), (0.939) and (0.905). The most significant correlation was in the (Law) and (Science) faculties where the values of correlation coefficients were (0.871) and (0.841) respectively.

Table 9. Correlations between research needs and innovation at the level of each faculty sample

Independent dependent			Human needs				Total
			Retention	the choice	polarization	Timing	
Research Innovation	Administration	25	0.811*	0.801	0.870	0.880	0.877
	Law	24	0.339	0.934*	0.931*	0.940*	0.871
	Literature	28	0.978	0.227	0.856	0.970**	0.939
	Education	22	0.816	0.194 ^{N.S.}	0.968*	0.854**	0.880
	Science	25	0.760*	0.894*	0.928*	0.100 ^{N.S.}	0.842
	Engineering	26	0.986	0.262	0.841	0.060 ^{N.S.}	0.905

P* $\leq$ 0.05. N.S.:Not Significant. N= 150

7.7. Analysis of impact relationships

Analysis of Impact Relationships between Study Variables (University of Duhok)

In order to know the existence of a significant influence of the variables of the study, the study model requires determining the levels of influence in the faculties of the study sample in whole and in part.

1. Analyse the impact of needs on research innovation

This axis includes testing the hypothesis that there is a significant impact of human resource needs in research innovation in colleges study sample at the University of Dohuk, and test sub-hypotheses that provide for a significant impact of needs in each dimension of research innovation, as follows:

A. The impact of needs on research innovation on the overall level of the faculties of the study sample

Table (10) shows that there is a significant impact of needs on research innovation, supported by the calculated value of (F) of (12.770) which is greater than the value of the

tabular value of (3.84) at a significant level (0.05) and a degree of freedom (1, 148), which indicates that the regression curve is good in explaining the relationship between needs and research innovation and at the macro level, the determination coefficient of R^2 was (0.82), which indicates the power of the independent variable. On the interpretation of the impact on research innovation by about (82%), and this reinforces the value of the regression coefficient (β_1) by (0.905). This indicates the achievement of the hypothesis.

Table 10. The impact of human needs on R&I at the level of each study sample

Independent Certified	Human needs		R^2	F(Values)	
	β_0	β_1		Calculated	Tabulated
research innovation	0.497	0.905 (10.556)*	0.82	12.770	3.84

Table prepared by the researcher in the light of the results of the electronic calculator

$P \geq 0.05$, $N = 150$

B. The impact of human needs in each dimension of research innovation on the overall level of the faculties of the study sample

Table (11) shows that there is a significant impact of needs in each dimension of research innovation, and this either confirms the realization of the sub-hypotheses emanating from the main hypothesis, as the table shows that the strongest moral influence relationships were for human needs in the development of society in terms of the value of the coefficient of determination (R^2). The value of (β_1) was (0.8381) which is a significant value in terms of the calculated value of t (14.994) and the value of (F) calculated (14.35) which is greater than its tabular value of (3.84). Whereas the least significant correlation was to the needs in the problem-solving dimension, the determination coefficient (R^2) was (69%).

Table 11. The impact needs in each dimension of research & innovation dimension

research innovation	Human needs		R^2	(F)	
	β_0	β_1		Calculated	
Improved quality	0.5154	0.916 (4.021)*	0.84	14.396	3.84
Research	0.861	0.936 (10.643)*	0.70	17.721	
solving problems	0.518	0.832 (15.021)	0.69	0.716	
Reduce your cost	0.6166	0.889 (5.643)	0.773	24.536	
Community Development	0.360	0.8801 (14.994)	0.88	34656	

$P^* \leq 0.05$. D F (1, 148). $N = 150$

As for the level of impact between needs and research innovation at the level of each of the faculties of the study sample, Table (12) indicates that the strongest influence relationship to the needs was in the research innovation in the Faculty of Arts with a determining factor (92%) and the lowest effect in the Faculty of Science with a determination factor (71%).

Table 12. The impact of human needs on research & innovation for each faculty

Independent dependent			Human needs		R ²	(F)	
			BO	B1		Calculated	Tabular
Research Innovation	Administration	25	0.442	0.827	0.77	4.094	3.84
	Law	24	0.415	0.885	0.76	9.696	3.84
	Literature	28	1.041	0.936	0.92	14.762	3.84
	Education	22	0.648	0.867	0.74	5.164	3.84
	Science	25	1.140	0.845	0.71	4.889	3.84
	Engineering	26	1.052	0.905	0.82	18.922	3.84

P*≤0.05. D F (1. 148). N= 150

3.6. Analysis of variance

This theme is concerned with the selection of the hypothesis of variance in order to identify the extent of variation between the faculties of the study sample in the extent of human needs and research innovation.

Analysis of variance in the study sample colleges of the University of Duhok

1. Colleges of study sample at the University of Duhok vary according to human resource needs

The content of the hypothesis refers to the differences in the sample of the faculties of the study sample at the University of Duhok in the human resource needs, as shown in Table (13) that there is a clear variation in the faculties of the study sample according to the needs and this is seen through the morale of the model represented by the value of (F) calculated at (24.876) This is a significant value at the level (0.05) and this was an indication that the study sample colleges vary in the results of the needs of human resources that suffer from it.

Table 13. The different faculties of the study sample according to human needs

S. O. V.	S. S.	D. F.	M. S.	F	Sig.
B. G	26.493	5	5.2986	24.876	0.000
W. G.	30.686	144	0.213		
Total	57.179	149			

P ≤ 0.05

N = 150

Consequently, a (Duncan) test was conducted to determine the degree of inequality between the colleges of the study sample. Table (11) indicates that there is a variation among the colleges according to their arithmetic circles. (3.9690).

Thus, the Faculty of Engineering, where the mean of the average (3.0250) and this is an indication that both colleges suffer from needs and almost the same proportion Table (14) Figure (5), but we find that the least human needs lie in the sample of the study was in the faculties (Science Therefore, we find that the largest variation or needs was the difference between the Faculty of Science, which suffers less than (0.8104) from the Faculty of Arts, which reached its arithmetic mean (3.9690).

Table 14. Colleges of the study sample are included in their variance to human resource

College	N	1	2
Sciences	25	0.810	
Education	22	1.795	
Law	24	2.976	
Administration	25	2.997	
Engineering	26		3.0250
Literature	28		3.9690

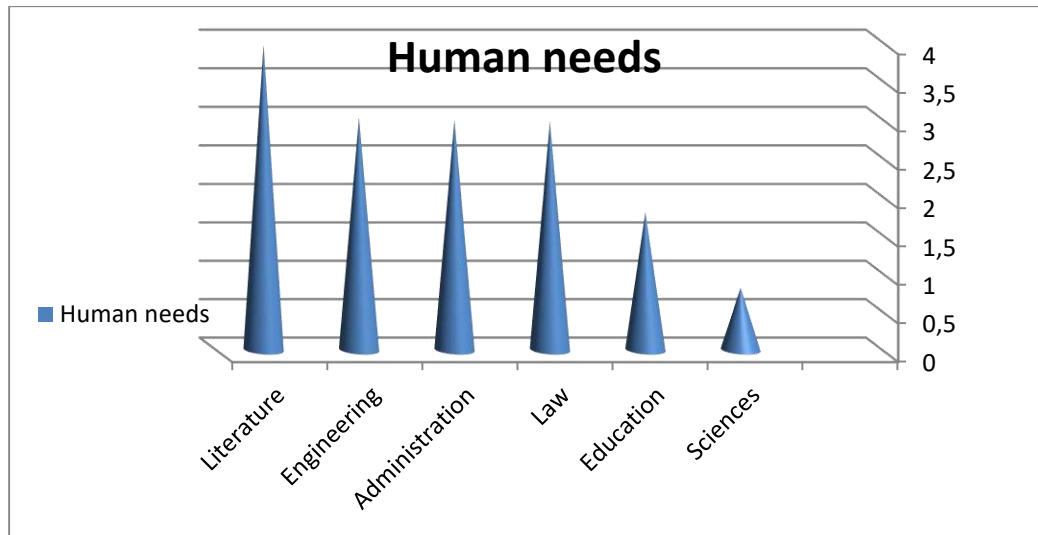


Figure 5. Human needs in the colleges of the University of Duhok

2. The sample of faculties of study at the University of Duhok varied according to research innovation

In accordance with the variance hypothesis to find the variance in the study sample colleges of the University of Duhok according to the research innovation, the researcher adopted the use of (One Way ANOVA) analysis, as indicated in Table (15).

Table 15. The study sample varies according to research innovation

S. O. V.	S. S.	D. F.	M. S.	F	Sig.
B. G	32.039	5	6.4078	48.215	0.000
W. G.	19.139	144	0.1329		
Total	57.179	149			

$P \leq 0.05$

$N = 150$

The above table shows that there is a clear variation in the faculties of the study sample according to the research innovation. Colleges of the study sample differ in their research in terms of innovation according to their compatibility in human resource requirements, and to determine the disparity between the faculties in research innovation, a (Duncan) test was carried out to prove the degree of that disparity between the faculties of the study sample. These schools differed according to their arithmetic circles The highest proportion of research for innovation among colleges sample study in the College

(Management and Economics), and was a mean of (4.0639), and then came the College (Education) mean power (3.9699).

We also find that the least research innovation was from the share of the Faculty of Arts and Engineering as they suffer from the largest proportion of research needs, so its creative innovation in research averaged (0.8650) and (1.7063), respectively, and research innovation in the faculties of law and science Referred to in Table (16) Figure (6).

Table 16. Colleges of the study sample

College	N	1	2
Literature	28	0.865	
Engineering	26	1.706	
Sciences	25	1.563	
Law	24	2.923	
Education	22		3.969
Administration	25		4.0639

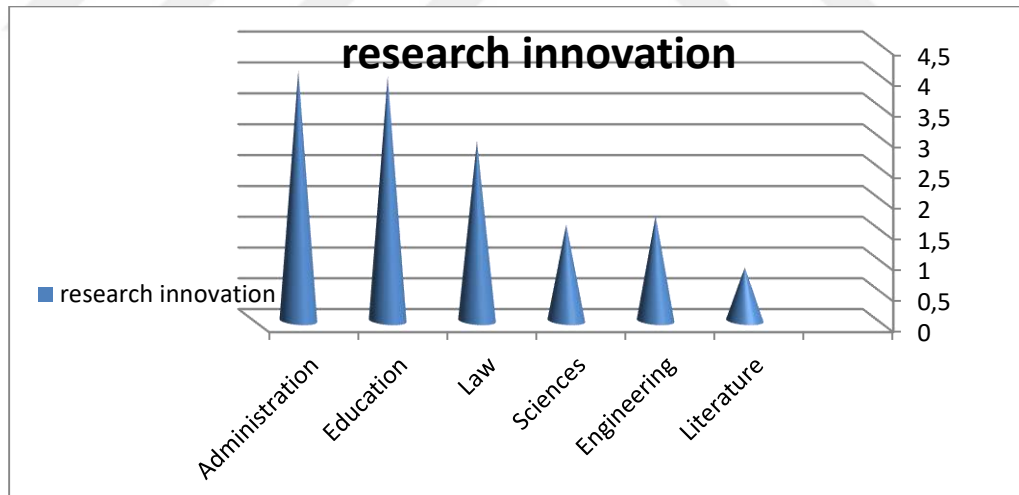


Figure 6. Research Innovation in the colleges of the University of Duhok

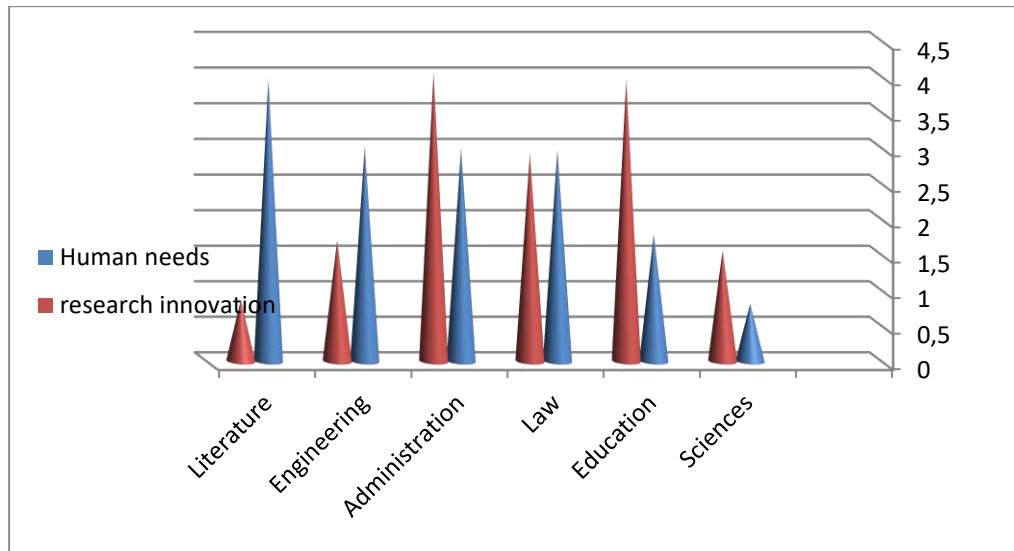


Figure 7. Refers to research needs and innovation for sample study

Note from the figure above that the sample study was divided into two parts The department suffers from scarcity in research innovation but nevertheless we find that those faculties were distinguished from their human needs as in holistic (literature, engineering, law).

The other section was research innovation has a high note that there is a scarcity of human resource requirements can be a contradiction, but we find that the fact is true because research innovation or research innovation is a prerequisite in universities.

CONCLUSIONS AND PROPOSALS

This chapter is a summary of the findings of the researcher based on theoretical and field results, as the conclusions constitute the main pillar for the development and formulation of proposals. The researcher proposed model to develop the relationship between human needs and research & innovation. On the results of the theoretical and field side of the study, and then the proposals and future visions presented to the management of the faculties of the study sample, as well as to provide suggestions to researchers on some future studies complementing the topic the following for about.

Results

Human resource needs formed by (human resource retention, selection, polarization, timing) at the overall level of the study sample and the level of each of the colleges studied as shown in Table 6, which indicated that the sample was uneven in its perception of the study.

The study population is mixed in terms of inclination towards indicators of research innovation that the theoretical, missionary, and approved aspects of the study model have indicated. Table (7) shows the distributions, repetitions, percentages, and standard deviations at the total level of colleges for the study sample.

Table (8) shows that there is a positive statistically significant correlation between the variable (human needs) and the variable (research innovation), where the correlation coefficient of the total index (0.905), a significant value at the level of significance (0.01), and thus Accept the hypothesis at the overall level of Dohuk University.

Table (8) shows that there is a significant correlation between needs and each dimension of research innovation. The strongest correlation was between needs and research innovation, where the value of correlation coefficient (0.98) represented by the development of society, while the weakest significant correlation between needs and lower costs, the degree of correlation (0.879), and thus the correlation hypothesis was achieved on At the overall index level and sub-dimension level.

Table (10) shows that there is a significant impact of needs on research innovation, supported by the calculated value of (F) of (12.770) which is greater than the value of the tabular value of (3.84) at a significant level (0.05) and a degree of freedom (1, 148), which indicates that the regression curve is good in explaining the relationship between

needs and research innovation and at the macro level, the determination coefficient of R^2 was (0.82), which indicates the power of the independent variable. On the interpretation of the impact on research innovation by about (82%), and this reinforces the value of the regression coefficient (β_1) by (0.905). This indicates the achievement of the hypothesis.

Table (11) shows that there is a significant impact of needs in each dimension of research innovation, and this either confirms the realization of the sub-hypotheses emanating from the main hypothesis, as the table shows that the strongest moral influence relationships were for human needs in the development of society in terms of the value of the coefficient of determination (R^2). The value of (β_1) was (0.8381) which is a significant value in terms of the calculated value of t (14.994) and the value of (F) calculated (14.35) which is greater than its tabular value of (3.84). Whereas the least significant correlation was to the needs in the problem-solving dimension, the determination coefficient (R^2) was (69%).

The content of the hypothesis refers to the differences in the sample of the faculties of the study sample at the University of Duhok in the human resource needs, as shown in Table (13) that there is a clear variation in the faculties of the study sample according to the needs and this is seen through the morale of the model represented by the value of (F) calculated at (24.876). This is a significant value at the level (0.05) and this was an indication that the study sample colleges vary in the results of the needs of human resources that suffer from it.

Colleges of the study sample differ in their research in terms of innovation according to their compatibility in human resource requirements, and to determine the disparity between the faculties in research innovation, a (Duncan) test was carried out to prove the degree of that disparity between the faculties of the study sample. These schools differed according to their arithmetic circles. The highest proportion of research for innovation among colleges sample study in the College (Management and Economics), and was a mean of (4.0639), and then came the College (Education) mean power (3.9699).

Conclusions

The study reached a number of conclusions that can be presented according to each variable separately, as follows:

1. The results of the analysis for the link between human needs and research & innovation, strong correlation between both dimensions of needs and research

innovation were determined. The results indicated that the strong link was between needs and after (community development), which indicates that the higher needs for innovation within scientific research, attention must be paid to the social aspect, as well as the dimension (problem-solving) has also played a role in increasing the percentage of feelings of innovation within scientific research.

2. The results showed that there is a strong and direct impact between the needs of human resources and research & innovation at the macro and micro levels of the university, as it was found at the University of Dohuk that the higher the proportion of needs, the greater the creativity within the research innovation of the teachers and thus the good feelings they have. However, at the same time, the determinants have had a minor effect in the lack of research innovation for teachers, considering that the teaching profession is a human profession that cannot be affected by any pressures.

3. It was found that there are divergent differences in the degree of human resource needs within the same university and between the faculties. The results indicated that the faculties (literature, engineering, administration) were at the forefront of the colleges that suffered from the needs within the human resources. The University of Duhok, because of the differences between the colleges due to different personal characteristics of the teachers, as well as the nature of the tasks and duties required to perform in each college, as well as age differences.

4. The results indicated that there are divergent differences in the degree of research innovation in the colleges of the study sample.

5. The descriptive analysis of data that there is a big difference between the perception of all faculties of the concepts of human resource needs or from teaching within the time specified for the basic tasks within the university

6. Also the results of statistical analysis indicated that the study sample of the teachers vary through their perception of innovation within the scientific research side Innovation issue depends on the research situation of the teaching and the extent of his understanding of research concepts

Thus, the environment of both colleges and the emergence of teachers in them and the extent of their perception and thinking of the working conditions, rules and procedures within one university differ from the other in many aspects in terms of the nature of the relationship between the teaching and the university, and in terms of duties and rights, as studies have confirmed that a sense of inertia leads to the level of commitment to him or

poor behaviour towards the university, his work and his colleagues within the environment in which he works

Hence, the researcher, especially through the field work within the vicinity of a university and field visits conducted in others find that the main reasons for the availability of high cases of needs, as well as research creativity in the context of the determinants within the university work is the urgent need for the job or stay in it. Regardless of what surrounds it, even if it is not the job or the right place for him to fulfill his ambitions and creativity, he is forced to survive as a guaranteed material income that he feels safe for himself and his family, as well as fulfilling the requirements and obligations of his family, on the other hand Wael available in front of both internal and external environments, and this is shown by the study among the surveyed universities in general in all faculties of the university.

Recommendations

Complementing the methodological requirements and based on the findings of the study and its conclusions, it is possible to summarize the most important proposals that will contribute to the benefit of the University of the Study Sample, in particular its research faculties, in addition to giving some future studies proposed research projects, the proposals took two aspects:

1. Increased interest by the departments of colleges and universities researched to open the field for teachers to participate and give them the opportunity to express their own views and ideas in vital decisions, as well as encourage the effort, as it gives an opportunity for departments and universities to reduce the suffering from the apparent aversion to University needs are minimized, because routines are the ones that raise the level of escape and reduce the creativity of teachers.

2. The higher administrations within the scientific departments and the university presidency should take into account the integration of teachers intellectually and professionally with the job first and with their colleagues second and the university itself third, because this in turn to adapt to these needs and thus push towards improving research innovation and follow or increase research and work within Principle (putting the right person in the right place).

3. University adopt real policies through which they try to integrate the teachers in their jobs through support and motivation and follow the policy of open door within

the university work, which helps them to increase the interaction between the teaching staff and administrative units and reduces the ambiguity that may affect the educational process.

4. The presidency of the university adopts new strategies in development and growth through moral and emotional commitment, and this is by reducing the supervisory and supervisory levels that are critical to the performance of the teachers for their tasks, but on the contrary they should activate the concept of self-control, which leads to give teachers confidence first Senior Management Second, moreover, senior management should increase the sense of job belonging by encouraging team concepts as the primary source of creative behaviour by teachers.

5. Developing the creative abilities of the teachers by directing them to self-reliance, taking risks, expressing opinions and solving problems without referring to senior management, as well as giving them the actual opportunity to acquire the environmental opportunities surrounding them without any external influences and this helps to encourage creativity and the ability to change on the one hand. On the other hand, encourage commitment and move away from social isolation through the development of social relations between teachers, which will help create cooperation between them.

6. Attention to the means of development for teachers, especially those related to training programs and qualification of teachers (teaching methods), through attention to the units of training and qualification for the transfer and update of knowledge and development to create an employee in his job.

7. Prepare and implement a modern system of job descriptions and categorization in order to ensure the assignment of duties and responsibilities and the relationship of each job and teaching and responsibilities required to fill the posts and considered the basis in the teaching of the functions of his job so that these tasks are consistent with his qualifications and capabilities.

8. Relying on the principle of functional enrichment in the work to ensure the renewal of the activities carried out by the teacher and its diversity in order to get rid of routine activities that would make the teacher constrained in the performance of his tasks and specifically following the creative behaviour.

9. Reducing the administrative methods that reduce the movement of teachers within the university or college in order to create a good social climate on the one hand, and eliminate the sense of meaninglessness and inability to do business on the other hand.

10. Work to involve all teachers in making vital decisions in the work to benefit from their views on how to address the obstacles facing them as a direct contact with them, as well as give this participation a positive sense of positive work and eliminate the sense of social isolation and marginal, but their sense of impact Work, which will lead to the adoption of creative behaviour in their creative research.

11. Raising awareness among the university's administrative leaders, represented by their presidents, that they should not escape the confrontation regarding the lack of standards, either by not feeling the importance of the tasks performed by the teachers, but by helping them on how to face changes and career integration and encourage emotional attachment to the university.

12. The researcher recommends increasing the interest of the administrative leaders in the colleges of the study sample to participate in conferences and seminars, both inside and outside the country, in order to gain knowledge, skills and perceptions.

Research & innovation efficiency of the universities requires the importance of assessing human resource needs and the understanding of importance outputs of the research innovations. There is significant correlation between human resource requirements and research & innovation efficiency at the macro level of universities. Also, there is significant correlation between each dimension of human resource needs and research & innovation. There is a correlation relationship of research significance between each dimension of the identification of research needs and research & innovation. Research & innovation varies according to its human resource needs.

Need assessment of Research & Innovation is covering the following;

- University structure which defines its name, form, competence, field of work, administrative division, the specializations of its employees, the nature of the functional relations between employees, supervisors and subordinates, and between the various departments and departments, and their administrative association.
- University culture that including a set of information, beliefs, art, law, ethics, customs, and any other abilities.
- University Concept that education, research & innovation, and extension.
- Strategic diagnosis that helps in identifying the organization's mission and objectives.

Strategic human resource management for research & innovation is necessary as essential part of organizational achievement. Relations of human resources with external

environment for research & innovation is essential for capacity development. Quality development of research & innovation requires university system to be established as research & innovation focused university.



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APPENDIX

App 1. Originality Report



SOSYAL BİLİMLER ENSTİTÜSÜ

YÜKSEK LİSANS TEZ ÇALIŞMASI ORJİNALLIK RAPORU

ÖĞRENCİ BİLGİLERİ	
Adı-Soyadı	ARAZ SULAIMAN AHMED
Öğrenci Numarası	MBA
Enstitü Anabilim Dalı	İşletme
Programı	Business Administration
Danışmanın Unvanı, Adı-Soyadı	Prof. Dr. Kenan PEKER
Tez Başlığı (Türkçe)	Üniversitelerin Araştırma ve İnovasyon Etkinliğinin Stratejik Yönetimi

SOSYAL BİLİMLER ENSTİTÜSÜ MÜDÜRLÜĞÜ'NE

Yukarıda başlığı belirtilen tez çalışmamın a) Kapak sayfası, b) Giriş, c) Ana bölümler ve d) Sonuç kısımlarından oluşan toplam ...96... sayfalık kısmına ilişkin, 15.11.2019 tarihinde şahsım/tez danışmanım tarafından Turnitin adlı intihal tespit programından aşağıda belirtilen filtrelemeler uygulanarak alınmış olan orijinallik raporuna göre, tezimin benzerlik oranı %27.73'tür.

Uygulanan filtrelemeler:

- 1- Kabul/Onay ve Bildirim sayfaları hariç,
- 2- Kaynakça hariç
- 3- Alıntılar hariç/dâhil
- 4- 5 kelimeden daha az örtüşme içeren metin kısımları hariç

Yukarıda bilgileri verilen öğrencinin doktora tezi Sosyal Bilimler Enstitüsü Yönetim Kurulu tarafından belirlenen azami benzerlik oranlarını aşmadığını ve tez çalışmamın herhangi bir intihal içermediğini; aksinin tespit edileceği muhtemel durumda doğabilecek her türlü hukuki sorumluluğu kabul ettiğimi ve yukarıda vermiş olduğum bilgilerin doğru olduğunu beyan ederim.

Gereğini saygılarımla arz ederim.

Prof. Dr. Kenan PEKER
Danışmanın Adı-Soyadı
(İmza)

Prof. Dr. Zahir KIZILAR
Anabilim Dalı Başkanı
(İmza)

Lisansüstü tezler, savunma öncesinde intihal program raporu ile birlikte enstitüye teslim edilir.

İntihal raporu ile ilgili olarak etik kurallar dâhilindeki benzerlik oranları ilgili Enstitü Yönetim Kurulu tarafından belirlenir. (Enstitü Yönetim Kurulu tarafından tezin, intihal kapsamı dışında değerlendirilmesi için TURNITIN'den alınan raporda "benzerlik oranı"nın, "alıntılar hariç" en fazla %10, "alıntılar dâhil" % 30'u geçmemesi şeklinde kabul edilmiştir).

App 2. Questionnaire

University of Duhok, Business Administration Department

Graduate Studies, Questionnaire form

Professor / Professor good greeting

We put in your hands a questionnaire tagged study (*Need Assessment of Human Resources For Research and Innovation Profession in Social Science; Case Study of Duhok University*) "a research tool for his Master of Business Administration - College of Management and Economics. This study is based on innovative value, so the researcher would like your valuable contributions to the success of this study. That you think they explain the variable as the researcher would like

1. No need to mention the name
2. The success of this study depends on the correctness and accuracy of the answer, so please be patient and objective in determining an opinion for the purpose of achieving the objectives desired by the university.

3. Please do not leave any paragraph.

4. The researcher is ready to answer any questions or problems you face.

with all gratitude and appreciation

Requester

Identification information

The University:

1. Faculty:

2. Scientific Section:

3. Gender: () Male () Female

4. Age () years

5. Marital status: () Married () Single

6. Qualification: () PhD () Master

7. Scientific title: () Professor () Assistant Professor () Teacher ()

Assistant teacher

8. Years of service: ()

9. Duration of service outside the university: ()

10. Current Position: ()

No.	Question	Agree	Strongly agreed	neutral	I do not agree	It is not strongly agreed
1.	Retention of human resources The University Administration seeks to retain human resources for as long as possible					
2.	The management of the university refers within its strategies to the indispensability of human resources					
3.	The university administration is working to grant rewards to teachers for encouraging them to work					
4.	Assist the university administration staff in everything related to research and development					
5.	The rate of wage or salary received by the teacher is sufficient and satisfies all his needs					
Choice						
6.	The university administration works on the selection of qualified teachers					
7.	The university administration establishes the conditions that enable it to select the best teachers					
8.	The administration pursues several strategies that enable it to select competent people within its resources					
9.	The university administration allocates all the financial facilities necessary for the tests to determine the competent					
10.	The strategy of choice is the best way to maintain the level of university performance					
Polarization						
11.	The university has a specialized management with great abilities and skills for the planning and polarization process					
12.	The university has instructions and laws that regulate and coordinate the mechanisms of polarization through it					
13.	The university pays money to embrace the individuals who are polarizing					
14.	The university administration works to follow all available methods to attract human cadres by traditional and modern methods					
15.	Effective polarization is a characteristic of good organizations					
16.	The university tries to attract individuals who are creative within the research aspect					

Timing						
17.	The University Administration is working to determine the appropriate time to determine its human resource needs					
18.	The university administration determines the timing through which its future needs are determined					
19.	The administration of the university is committed to the dates agreed upon with the individuals and teachers					
20.	Adopts the university administration to determine its logo to get the individuals within the specified time					
21.	The time factor serves as the basis for the administration that operates through it to meet its human resource needs					
Research Innovation						
No.	Improve the quality	Agree	Strongly agreed	neutral	I do not agree	It is not strongly agreed
22.	The departments of the university work to follow up teaching through the development of faculty members					
23.	To consider the university administration to implement training programs periodically to ensure the quality of work.					
24.	To consider the university administration to obtain qualified human cadres in order to maintain its educational quality.					
25.	Breeding is based on the quality of PHP education to make it the basics of university education.					
26.	The university administration takes into consideration the issue of focusing on quality within its mission and vision for the society in which it operates.					
Increase scientific research						
27.	Consider the university administration to urge staff to improve research performance					
28.	The administration of the university works to bear part of the research costs as a desire to develop the university.					
29.	Consider the university administration to follow up the faculty members through quality programs with regard to scientific research.					
30.	The work of the university administration to link the performance of teaching with the performance of research performance.					
31.	The university administration works on rewards and compensation for the outstanding research of the faculty members.					

Solving problems						
32.	The administration of the university is strictly addressed in solving problems and does not allow any external interventions					
33.	I have a department where I work closely to see work problems.					
34.	I have the ability to anticipate the problems of the department before they occur and take appropriate action to solve them					
35.	I have a clear view of the problems of the section.					
36.	Consider the university administration and the practical department to reduce the size of the problem and not allow it to develop.					
37.	Consider the university administration to allow faculty members to deal with their problems without external interference.					
Cut costs						
38.	Consider the costs of administrative research of the university you spend.					
39.	The university administration takes into account the principle of cost leadership within its activities.					
40.	The university administration does not link cost and creativity within the target research activity.					
41.	The University sets within its strategic plans a cost ceiling that should not be exceeded.					
42.	Follow-up quality control in research performance as one of the methods used to reduce costs.					
43.	The administration of the University takes into consideration the introduction of Blue Ocean concepts as one of the ways to reduce costs.					
Community Development						
44.	The University considers the community as an external environment in relation to innovation and research innovation.					
45.	Consider the university administration community in terms of research and development.					
46.	The university administration takes into consideration the wishes and needs of the community in terms of research innovation.					
47.	The University works to develop the community through research and training activities.					
48.	The University works to develop the community through the development of research and innovation.					

Dimensions	Recourse
Strategic Management	
SWOT analysis	• Muhammad Jamal Al-Din Al-Morsi et al., Strategic Thinking and Strategic Management, An Applied Approach, University House, Alexandria, 2002, • Ahmed Maher, Director's Step-by-Step Guide to Strategic Management, University House, Alexandria, 2002,
Increase scientific research	• Wheelen, Thomas L. & J. David Hunger (2002). Strategic Management and Business Policy, Eighth Edition, Prentice Hall, New Jersey
Reduce costs	• Zekr Al-Douri, (2009), Analysis of the content of the blue ocean strategy within the green marketing philosophy, Al-Isra University, Al-Zaytuna.
Community Development	• Flo Frank and Anne Smith, 1999, THE COMMUNITY DEVELOPMENT HANDBOOK A TOOL TO BUILD COMMUNITY CAPACITY , Minister of Public Works and Government Services Canada

CIRRICULUM VITAE

I was born in (27, March, 1991) in the district of the Governorate of Duhok Amedi. I completed my primary and secondary education in Amedi. I began his university studies in 2010 at the Duhok University and I am graduate studies at the Faculty of Economics Administration in 2013 in Duhok.

I have been employee at college of basic education since 2018. I began studying Master's in Firat University, Department of Business Administration. I am single. The foreign language is Arabic and English. Personal Information: Nationality: Iraqi, Gender: Male, Email Address: arasamed991@gmail.com

