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# PalArch's Journals of Archaeology of Egypt Egyptology

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# Cultural Qualities of Salafi Women in Post-Arab Spring in Jordan: A Pilot Study

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## ABSTRACT

*This study aims to identify the cultural qualities of Salafi women in Jordan, it also aims to identify the difficulties facing Salafi women. The study further aims to identify the prospects of the Salafi trend, by relying on the exploratory approach through the method of triangulation. The study tools are the content analysis of public publications for several Personal pages (Facebook) of Salafi women, and administering the interview for a discussion group consisting of (5) Salafi women, during the interview, the researcher used the observation method also to gain thorough data. The Finding of the study indicated to many results, the most important of which are: The process of Salafi education for women does not take place in one direction but through horizontal acculturation within the same level, which is the girlfriends, and vertical culture at several levels through internet sites and digital and traditional religious lessons. One of the most important cultural characteristics of the Salafi woman is her ability to adapt to the current data in terms of using technology and contemporary reality, openness to others, self-confidence and confidence in her abilities, as well as the multiplicity of tendencies and interests. The respondents have completed university education or are still pursuing university studies with different scientific disciplines and humanity. The results also showed that one of the most important difficulties that Salafi woman faces the insult and bad words being addressed to her; ignoring her right path, further associating her as (Alkawareg-) or related to Muslim brotherhood group. The results showed the possibility of prospects for the growth of the political work of Salafi women within the traditional Salafi trend if conditions and political stability and the prospect and maturity of the work of the team to which they belong to. This may indicate such changes like their thoughts as a result of new interactions and experience.*

**Keywords:** Salafism; Salafi Women; cultural qualities.

## 1. INTRODUCTION

Salafism is a component of the Arab Islamic community, as it is an integral part of the intellectual, cultural, political and social legacy in the Arab world. Although circumstances that the Arab and Islamic nation experienced Especially in the era of the Arab popular protests that grew and developed with the beginning of the year 2011 in what is known as the Arab Spring have formed a kind of instability. Salafi Movement, despite its diversity, became one of the most prominent Islamic actors in the Arab scene, politically, socially and culturally. It is vitally difficult to recognize the social mind of the Salafi movement without addressing the cultural qualities of Salafi movement through understanding and analyzing its leaders and affiliates, especially the young people, where Salafism provides them with such an identity and a driving force which might constitute a kind of satisfaction for their desires, feelings and beliefs. The attraction to Salafism might be motivated by a love of experiencing new thoughts, amazingly this assumptions sometimes derived from the Salafis themselves, and sometimes might be based on drawn conclusions about Inner worlds of Salafi, and their Behavior patterns being observed, (Svensson, 2012). This indicates that there is a state of diversity within the Salafi group, it also sheds light on different sub-groups within this group in which these subgroups' role, effectiveness, cultural characteristics and qualities are unknown, especially the role of Salafi women within this group. Salafi woman constitutes an important part of the nature of the Salafi group.

### 1.1.Statement of the problem and the question of the study

Cultural features determine the style of people and their behaviour in society and help to predict the behaviour of an individual belonging to a particular culture. So his/her culture determines the way they deal with daily events and the problems they face. Salafism throughout the world, especially in Jordan, has witnessed many and comprehensive transformations, especially after the so-called Arab Spring; it is very necessary to identify the most important cultural features of Salafism and the transformations that took place after the Arab Spring, especially for Salafi women, whose role has been influential in society through some fields and from The most important ones is the advocacy field. Therefore, the study's main question which main to find a suitable answer is as the following

What are the cultural qualities of Salafi women in Post-Arab Spring in Jordan?

#### **This main question is divided into the following sub-questions:**

- 1- What are the challenges facing Salafi women in post-Arab Spring in Jordan?
- 2- What are the future perceptions of the Salafist movement in Jordan after the Arab Spring?

### 1.2.Objectives of the study

This study aimed at the following:

- 1- Identify the cultural qualities of Salafi women in Post-Arab Spring in Jordan.
- 2- recognize the challenges facing Salafi women in post-Arab Spring in Jordan.
- 3- Identify the future perceptions of the Salafi trend in Jordan after the Arab Spring.

### 1.3.Significant of the Study

The importance of the study can be considered form the importance of the topic itself, as the research on Salafism keeps pace with developments in sociological religious phenomena in the Arab society, especially as it scrutinizes a gender domain, where Muslim women are an important and fertile topic for global studies in general and Arab and religious studies in particular. It is expected that this study will enrich through its results the Arab Library in general and the Jordanian Library in particular, by adding a scholarly addition on the topics of the study. This study is important, as it opens new horizons and entrances about the topics of study.

### 1.4.Definitions of basic terms

#### **The study deals with the following terms:**

Salafism is a religious intellectual movement that calls for the performing and conducting of religious practices as mentioned in the Salafif( Islamic predecessors).

It appeared in Jordan at the beginning of the eighties, the founder of this movement was Muhammad Nasser Al-Albani, and then expanded this study is concerned with the traditional Salafi trend.

**The traditional Salafi movement:** the Salafi trend that calls for implementation approach and doctrine of the predecessors in everyday practices, and not involving in any political action, it is called in some scientific studies as conservative or Albaniani.

It is also defined as A movement that is addressed of being conservative and scientific in the north of Africa, represented in the religious, advocacy, and ideological aspect, avoiding involving into politics,

establishing a party, or practising political opposition activities. And from the definitions of scientific Salafi as a peaceful movement and its activities are confined on preaching and its advocates focus on the jurisprudential and ideological side (Ibn Omar, 2013).

Salafi woman is one of the members of society affected by the Salafi movement development in Jordan. Salafi woman is distinguished by a Salafi appearance for wearing the Islamic dress and black Niqab(veil).

**The cultural quality:** the simple unit or social pattern that cannot be divided or reduced to smaller parts, and the cultural quality is the way that scholars refer to compare communities and cultures to each other or to balance them one with the other (Badawi, 1977). This study examines the cultural characteristics of Salafi women in terms of education and access to various information in different fields, and practical experience, use Social media, and social status.

## 2. LITERATURE REVIEW

In this part, the researcher deals with two sections: theoretical literature and previous studies related to the current study.

### 2.1. Salafism.

In the Arabic language (alsalaf)Ancestors linguistically is the plural of (Salef) - (Salaf) ancestors which have rhythm (Hares)-(Haras) guard and ( khadem)- (khadam) servants. Ancestor means the people who have made some thoughts to be followed, and ancestors are a group of people that are preceded, Al-Zubaidi(2018) mentions that the predecessors are the advanced scholars from the first source of the Companions, the Successors and their followers. Wiktorowicz (2000) defined it as establishing religious behavior and practices that demonstrate the purity of Islam, as understood by the predecessors (the early companions of the Prophet). Salafis believe that it is because the ancestors knew Islam directly from the Prophet or from his companions who had more understanding and cognition of Islamic religion. Therefore all decisions related to the life of must be based on evidence from the Qur'an and Sunnah, as recorded in real sayings (who had allies ) from the predecessors (Wiktorowicz, 2000).

Shehadeh (2018) indicated that scholars disagreed about the determining the exact time period of the predecessors, so Al-Ghazali identifies them with the companions and followers of prophet, and Abu Zahra indicated that they appeared in the fourth century AH, As well as a group of Hanbalis( followers of Ahmed Ibn Hanbal) claimed that a number of their opinions ended with Imam Ahmad bin Hanbal, who revived the doctrine of the predecessors, and then their re-emergence in the seventh century by Sheikh of Islam Ibn Taymiyyah, and after that they appeared in the twelfth century by Sheikh Muhammad Abd al-Wahhab in the Arabian Peninsula, and some confined the predecessors to be the Companions, the Taabi'een(next generation of Companions), and the followers of the Taabi'een, Prophet hadith stating that "The best people are the people of my century, then those who follow them, then those who follow them, then there will come people who have an oath before the testimony of one of them).

### 2.2. Salafism in Jordan

Several studies mention that the Jordanian society is distinguished of being initially Belonged to the Sufi Hanafi or Shafi'i culture. in The early seventies, Salafi movement began to spread in Jordan a due to that several a number of individuals had been in contact with Salafi thought while they were studying outside Jordan, especially in Syria. At the beginning of the 1980s, there was a major turning point when Sheikh

### **Muhammad Nasser**

Al-Albani settled in Jordan, the Salafist ideology began to spread and Sufism dissipated via the increase of his followers and students, and Salafi had strong presence in the Ministry of Endowments, and other Islamic movements, such as the Muslim Brotherhood, in which some leaders of Brotherhood emerged with clear Salafi leanings. During 1991 Gulf War with its global developments, a number of trends emerged within the Salafi movement in Jordan, as the case in many countries, like Egypt, Lebanon and Syria, the rise in Salafi activity coincided in this period with the end of the Afghan Mujahideen war against the Soviet occupation of Afghanistan and their return to the country which helped to the emergence of Salafi group named "the Afghans". which can be called The "second wave" is in Salafi movement in Jordan as that most of the young Salafis who joined at that time are now leaders and scholars in the movement. And at this point, the lessons of Salafism increased, as well as Religious preaching that related to Salafi thought, and sermons in Salafi mosques. some of these new groups succeeded to form an organization named the Quran and Sunnah Cultural Association- Non-governmental organization (NGO). this organization dedicated its work to boost Salafi thought via the Lectures, the publications the periodicals, and small scholastic groups. this group has developed the possibility of change through political participation in parliament and ministerial positions, This is what other Salafi groups consider it as a dangerous trend and gave a warning from involving in the field of political action and considers it a holocaust for the preachers and a waste of their efforts, (Ryan, 2008). Accordingly, it was popular, that several studies dealing with the Salafist topic, provided that Salafi groups in Jordan are divided into three schools. these schools are:

- 1) the traditional, conservative, or Albanian trend and they are those who refuse to involve in the political and partisan field and limit their activities to the scientific and advocacy aspect, and their principle is clear, which is clearance and education, i.e. revising religious sciences and educating people on them.
- 2) Salafi reformist trend is represented by the Organization of the Book and the Sunnah, which is a Salafi trend in its religious belief and its interpretation of religion, but it believes in organization and does not fight Islamists, and it is closer to the the political opposition movements to the government, But it does not believe in armed action.
- 3) radical upside trend which is the trend influenced by the ideas of Muhammad al- Maqdisi and al-Zarqawi and believes that the Arab political system is an infidel. The only way to be used is an armed confrontation (between jihadists and the regimes). This trend rejects peaceful and propaganda methods It considers the jihad as the only alternative. This trend does not have licensed institutions operating in its name. It does not recognize the legitimacy of the regime or its institutions (Shehadeh, 2013).

### **2.3.Previous studies:**

The researcher was unable to find direct studies that dealt with the relationship between the variables of the current study, which enhances the originality and novelty of the study.

Based on what has been found from the studies that are partially related to this study, they have been classified chronologically, they are presented as follows:

Shahada (2013) conducted a study dealt with the interactions of Jordan's Salafis with the Arab Spring and the prospects of the Salafists. This study indicated that the diversity of attitudes between all Salafi groups and sometimes between the same group itself. This study reveals the impact of the Arab Spring on the emergence of Salafi political parties, coalitions and groupings, and the nature of engaging in



voluntary and collective work from various Salafi groups. The result shows that there would be a new role for the Salafists in the future on several levels, but it needs more time, and this is a scenario linked to the evolution of the Salafi situation abroad, and its great effect on the Salafism in Jordan. This will help the emergence of new youth leaderships capable of providing insights, efforts and initiatives.

Abu Rumman (2014) conducted a study entitled: "I am a Salafi; a study of the real and imagined identity for Salafists ", This study explored the real identity of the Salafis in Jordan by presenting the Salafi experience of the Salafis themselves, by conducting interviews from the three traditional Salafi, reformist and jihadist groups through the intended sample. The results showed that the Salafi is influenced by the role of the mosque and some sheikhs as a way to identify Salafism. The traditional Salafi depends on seeking knowledge and on Hajj and Umrah trips, and his/her identity is characterized by simplicity and decisiveness. The conditions and fatwas give a higher rank and place the mind in a second order. The study showed that the Salafi identity or the identity of the beginnings suffers from a crisis, as it is generally a reaction and a means for self-defence in the face of globalization and external challenges.

The study of Abu Rumman (2014) entitled: "Salafists and democracy in the era of the Arab democratic revolutions". The study dealt with the period of the Arab revolutions that produced a different political climate and imposed a different reality from what the Salafists had previously dealt with. The regimes began to collapse with the first wave (Tunisia, Egypt), and the second (Yemen and Libya, with the continuing crisis in (Syria), and protests and calls for reform and change in royal countries (such as Jordan, Morocco, Kuwait and Bahrain), and the researcher talks about a future scenario for the political participation of Salafists and the limits of their role and its various dimensions, which can express themselves, their interests and ideas through openness to associations and volunteer work and civil without being reduced to the political conflict, as the civil space is available to all.

### **3. METHODOLOGY OF THE STUDY**

The study is based on the exploratory approach because of its basic function in shedding light on the features of the studied phenomenon. The study population included Salafi women in the city of Al-Salt, and the sample was formed by the Snowball method, and the triangulation method was used as a tool for data collection. A content analysis was used for the public publications of six Salafi women personal pages (Facebook), and a semistructured group interview was conducted with (5) Salafi women, and the interview was supported by observation, which is a complementary and necessary technique to verify and monitor the practices of the respondents. The researcher did that to have a clear vision about the conditions of the respondents. The study was conducted in August-2018.

#### **3.1. Study Procedures:**

- 1- The researcher is guided by previous studies in the subject of the study: the Salafi trend, the Salafism in Jordan.
- 2- Monitoring several Facebook profiles of a number of Salafi women in the city of Salt.
- 3- analyzing the content of public posts for a number of these pages and they are six participants.
- 4- Communicating with a number of Salafi women to conduct interviews, and to determine the appropriate date and place for the interview.
- 5- Conducting a semi-structured interview through a discussion group consists of five Salafi women.
- 6- Analyzing the content of the interview for the discussion group - cross interview analysis.
- 7- Support corresponding observation technology.
- 8- Drawing Conclusions.

#### 4. DATA ANALYSIS.

The study data were analyzed to answer the study questions as follows:

##### First: Content Analysis

A number of personal pages of Salafi women were monitored in the city of Al-Salt after making sure that they followed the Salafi approach in terms of the connotations of the terms contained in the name or personal identification (Bio) such as( Salafism on Aljada(right path), on the approach of the female companions, and Salafism). The public content of the posts on these pages were analyzed which is represented by the following table :

Statement	1	2	3	4	5	6
Age	20	20	21	-	50	51
Qualification	English Language	Computer engineering	Software engineering	Business Administration	-	Accounting
University	Jordanian	Jordanian	Balqa Governorate	Balqa Governorate	-	Jordanian
Marital Status	-	-	-	Married	Married	Married
Profile Photo	Black veil	Black veil	Black veil	Black veil	Black veil	Black veil
Contents (Pages sharing )	Sheikh Mustafa Al-Adawi, Ahmed Deedat's lectures in Arabic, Khawatir Dr. Muhammad Ratib Al-Nabulsi	Dr.. Muhammad Ismail Al-Muqaddam, Professor Numan Ali Khan, Abdul Rahman bin Saleh Al-Ashmawi	Quranic verse, Simplified in the Science, of Tagweed, Scientific Thinking	Quranic stories, the simple science of Tajweed	Jewels of d. Muhammad Rateb, Nabulsi, Durrar(pearls ) of Sheikh Muhammad Ratib al-Nabulsi, The lovers of Sheikh Dr. Muhammad Ratib al-Nabulsi, Saad bin Ateeq	Abu Bakr Al-Shahhal, Mansour Al-Salmi, Ibn Uthaymeen , Ibn Taymiyyah

Notes: After the bombing of Fuheis and the Salt Cell during the period 11-15 / 8/2018	Mourning for the martyrs' soul (photo)	May God protect Jordan	-	Picture.(No bloodshed)	Jordanian flag	-
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### The following content analysis showed:

Academic qualification, either for BA or for university studies, and the diversity of disciplines between scientific and humanities. The respondents were distributed to the University of Balqa and the University of Jordan; as they live near to the residential area - the city of Al-Salt, the place of study. The personal photo shows the appearance of the Salafi women in terms of a black Niqab. They are real pictures, not pictures that are online, where the wallpapers appear in natural places within the university, and with her husband, who also shows Salafi appearance.

The content of the public publications showed the participation of some pages of a number of sheikhs and scholars, and what the researcher noticed was the presence of a large number of pages for sheikhs who are not followers of the Salafi movement, such as Dr. Muhammad Ratib al-Nabulsi, which was included in the interview questions later for the focus group. After the events of Al-Fuhais and the Al-Salt terrorist cell: a national affiliation and great sympathy with security and the state appear in a situation that may be close to what is known as national Salafism, which calls for national belonging. Second: The interview for the focus group Through one of the Salafi women, a group of five Salafi women was identified and it was agreed to conduct an interview in a collective group (discussion group). A semistructured interview was conducted for a discussion group consisting of five Salafi women. This interview was then written in form of texts, and after that a cross-analysis was conducted by extracting the main ideas to cover the main themes of the interview, which was adopted after reviewing the previous studies related to the study variables. The axes came as follows:

### The results of the cross-sectional analysis of the interviews

#### Group personal data

**Age:** The ages ranged from 28-42 years.

**Education and work:** All of them have completed university education, Four of them work in the educational field, and one is a housewife. Activities: Advocacy work, charitable and cultural committees within the centres and houses of Quran Memorization, Al-Quds Committee to support and steadfastness of the family in Palestine, and support for the Palestinian issue, soap making at home, selling clothes and household items, charitable bazaars.

**Salafi extension in the family:** One reported the existence of a brother and sister from the Salafi thought, while there is no Salafi extension in the families of the four women in the group.

**How to identify Salafism:** Girlfriends, neighbours and religious lessons.

**Why Salafism? :** Love of knowledge and the acquisition of legal knowledge.

**Sources for receiving the Salafi thought:** The first answer was from the Qur'an and Sunnah, with more clarification of religious lessons in the designated centres, and religious lessons through electronic forums and special pages. Use of social networking sites: The whole group owns Facebook accounts and uses the WhatsApp application, and four have accounts on Twitter and Instagram.

**The main topics of the interview:**

**The first axis (difficulties Facing the Salafi woman):** The environment and atmosphere in which that Salafi woman live is Kind of alienation, especially at this time, in addition to the complexity to distinguish the approach of Salaf to the public, and some insult this approach with hurtful terms, because of their ignorance of the Salafi approach. Some links and relates Salafism with Alkawareg( a group of Shia) and, the Muslim Brotherhood, and relating it with political Islam.

**The second axis (the effect of spring Arab on Salafi women):** They call it Arab Autumn. The group believes that it is not permissible to disobey the Leader or the ruler. and the effect disobedience varies from country to county, in general, it has negatively affected Salafi women, especially adherent to her religion and dress. This poses some difficulties to her, which were mentioned previously. The Arab revolutions also negatively affected societies because of the conflicts and instability issues associated with these revolutions, A saying was cited from Sheikh Al-Uthaimin who said, " give me one country after the revolutions become better". The third axis (future The Salafi movement in Jordan): The group talked about that their good news from the Messenger Peace be upon him that the advocacy is still going on till the Day of Judgment, and history bears witness on this fact. Salafism from the days of Ibn Taymiyyah and continuing until today. the Fourth axes (as a result of analyzing the content of public publications of a number of pages of Salafi women, and their sharing of posts from non-Salafi sources): The group reported that these pages may belong to women Salafist appearance without the Salafi approach; The approach means searching for evidence, and it must bring the evidence to the source( from Quaran or Hadith).

**The fifth axis (political work):** The Salafi woman is a strong activist in the preaching field, which don't seek fame or top the scene. and in her viewpoint, the Political action is prohibited, as it does not see criticism of the ruler, because the Ummah is one nation that cannot be partisan or divided.

### **Third: Observation**

A simple direct observation was made on the group's interactions and reactions, and the following was concluded:

All respondents showed high confidence in Self-esteem and recognition of its capabilities, high social skills as well as they were characterized by being humorous and comfort during the interview, and a tendency to make a calm debate Salafi appears that all the respondents belong to the middle class, and of various origins and existence solidarity and cooperation relationship among the group. They are not isolated with the other party in religious lessons, religious events and meetings; This is because of Relationships of kinship, friendship and neighbourhood. They also have an intellectual and linguistic fluency that is largely dependent on the religious lexicon, and that most of the terms used are predominantly religious in nature, such as Allah reward you with goodness, my kind sister, ...etc.

## 5. DISCUSSION :

What are the cultural qualities of Salafi women in Post-Arab Spring in Jordan?

The results of the study show that Salafi woman can adapt to the current facts in terms of using technology and current life, and the Salafi education process for women is not done in one direction, but rather through horizontal education within the same level, which is girlfriends, and vertical culture at several levels through internet sites and digital and traditional religious lessons.

the finding of this study is not in consistence with the study of Abu Rumman (2014) entitled "I am my predecessor a research in the real and imagined identity of the Salafists" who said that the way to identify Salafism was through the sheikhs and the influence of the mosque's role.

Also, their attraction to the Salafi thought was through Internal motivation and he cognitive affinity and the love of learning and the acquisition of legal knowledge. This study is inconsistent with A number of studies that have indicated that the attraction to the Salafi thought is a consequence to a state of social exclusion; Such as Qarawi study(2018), or feeling alienated as a Qarawi study (2017). The results indicated a multiplicity of tendencies and interests for Salafi women, even though they have an income from work, but they want additional work, and their interests are different.

As she is a strong activist in the field of advocacy, charitable, and cultural action, but she avoids to be involved in political action.

The results indicated that the personal characteristics of Salafi women have multiple aspects such as religious and social aspects. This is a result of the interaction with the current community and the ties of kinship, friendship and neighbourhood, and it might be an attempt to attract many friends to convert them to the Salafi thought.

The results indicated that there is a group within the women's Salafi trend that adheres to appearance without the Salafi Approach, which might indicate the existence of a crisis of beginnings, which is what Abu Rumman (2014) stated in his study 'Salafists and democracy in the era of the Arab democratic revolutions" as it might be due to pressure from within the family, or it might have been through an emotional and psychological aspect of imitating girlfriends. This might be consistence with the study of Shehadeh (2013), where he explained that there is a diversity of attitudes among the followers of Salafism, even among the same group of the Salafi movement.

### 1- What are the challenges facing Salafi women in post-Arab Spring in Jordan?

The environment and atmosphere in which that Salafiwoman live created a Kind of alienation, especially at this time, in addition to the complexity to distinguish the approach of Salaf to the public, and there are those who insult this approach with hurtful terms, because of their ignorance of the Salafi approach. Some link and relate Salafism with Alkawareg( a group of Shia) and , the Muslim Brotherhood, and relating it with political Islam.

### 2- What are the future perceptions of the Salafist movement in Jordan after the Arab Spring?

The results indicated that there are forms of committees in which numbers of Salafi women participate, and this study considers that there are prospects for the growth of Salafi women's political work within the traditional Salafi trend if conditions and political stability are provided. The development and

maturity of the work of the committees to which you belong. Like the Al-Qudos Committee; this might indicate that the changes like their thoughts as a result of new interactions and experience, which is consistence with the studies of Abu Rumman (2017) and the Shehadeh study (2013).

## 6. RECOMMENDATIONS

- Adopting more open channels and hearing perspectives for those who are attracted to the Salafi trend.
- Conducting further studies on national Salafism in Jordan.
- Transforming in the Afghan Salafist Group.
- Salafi women and advocacy work.

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# The Role of Higher Education in Economic Development in Iraq

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## ABSTRACT

*The research aims mainly to analyze the impact of higher education on the economic development in Iraq during the period (1990-2015) by monitoring the reality of higher education in Iraq on one hand, and diagnosing the reality of economic development on the other hand. In an effort to identify the most important obstacles that limit the developmental role of higher education. And also identifying the challenges that hinder economic development, to reach to the paths in which higher education can contribute to achieving economic development in Iraq. And what the research has found at the analytical level is that higher education in Iraq suffers from weak school curricula, which are still outdated and suffer from weakness in keeping pace with progress and scientific and technological development. Its weak link with the needs of economic and social development and the requirements of the labor market. This confirms that higher education in Iraq needs further development and reform despite conferences and reforms that took place during the past three decades. In order to benefit from the developmental role of higher education in promoting access to economic development and achieving sustainable development.*

**Key Words:** economic development, higher education, spending, growth, gross domestic product.

## INTRODUCTION;

Education is one of the main pillars of achieving comprehensive development with its economic, social and political dimensions. It is a key to the progress and urbanization of any country due to its pioneering role in bringing about sustainable development. Economists - Adam Smith, Marx, Marshall and Malthus - have been alerting since the eighteenth century to the importance of investing in human capital through education and training. Except that it was Transient signs. Studies and research did not take the character of seriousness and application only since the fifties and sixties of the twentieth century.

## Study Problem

The process of economic development includes two basic aspects, the human element and the material component. The human element is considered the ruling factor in development because what is considered an economic resource depends on the capabilities that this element possesses. Education plays an effective role in empowering youth, by building and configuring their capacities to participate actively in cultural, social, political and economic activities. Education also plays an important role in social mobility, and in achieving equality, especially when its philosophy is based on equal opportunities while ensuring the availability of educational opportunities for all and their success in providing its beneficiaries with basic knowledge and skills. Thus, education constitutes one of the most important forms of investment in the human element in the process of economic development and increases as well from the effectiveness of the physical component to economic development Because of the importance of the economic effects of education in general and university education in particular, in achieving economic development as determined by economic theory and international experiences, the study seeks to analyze the impact of university education on economic development in Iraq, Therefore, the basic problem of this study is to answer the following main question;

What is the reflection of university education on the economic development in Iraq during the period 1990-2016?

### **OBJECTIVES OF THE STUDY**

The study aims mainly to analyze the impact of university education on the economic development in Iraq during the period (1980-2015), and reaching this goal requires achieving a number of sub-goals;

- 1-Determine the impact of university education and its role in achieving economic development.
- 2-Analyzing the relationship of university education and economic development in Iraq, by monitoring the reality of university education in Iraq, and diagnosing the reality of economic development in Iraq.
- 3-Formulating a proposed program, based on the developmental role of university education, in order to enhance the economic effects of university education in achieving economic development.

### **Study hypotheses**

The study seeks to test a basic hypothesis that there is a positive relationship between university education and economic development in Iraq. This hypothesis is divided into two sub-hypotheses, which are;

- 1-There is a positive relationship between public spending for university education and the real GDP in Iraq.
- 2-There is a positive relationship between the total number of students enrolled in university education and the real GDP in Iraq.

### **The importance of study**

The importance of this study at the theoretical level is represented in the fact that, "continuous economic development cannot be achieved without implementing social and human development." Education represents the most important variable of social development, as well as the main dimension of human development. Achieving economic development is a necessary requirement for all developed and developing countries, and education is one of the most important forms of investment in human capital, which explains the change in economic growth not attributable to physical capital, as the human development theory indicates. Therefore, this study is concerned with analyzing the impact of university education on economic development, and *PJAE*, 18 (4) (2021) showing the direct and indirect effects of university education through which university education can positively affect the achievement of economic development, to assist economic policy makers in formulating economic and social policies that contribute to raising economic growth rates and achieving economic development.

In addition, the importance of this study on the practical level is represented in studying the impact of university education on economic development in Iraq, in order to contribute to increasing the knowledge of those interested in developing macroeconomic policies that lead to achieving economic development. This importance is also evident on the practical level, in Explaining the opportunities and challenges that enhance or limit the developmental role of university education on economic development in Iraq, in order to propose the necessary economic policies to enhance the developmental role of education in achieving economic development in Iraq.

### **Study methodology and used data**

The study is based on the use of the analytical approach, and it aims to follow this approach, to study and analyze the relationship between the economic effects of education in general and university education



in particular and economic development, on the theoretical and practical levels - Iraq - in order to arrive at a diagnosis of the current situation of both the educational situation and the economic development. This is to identify the most important direct and indirect effects that contribute to achieving economic development, and to identify the most important obstacles that limit the developmental role of university education in achieving economic development.

### **The limits of the study**

The objective boundaries of the study are limited to study the impact of university education only without other educational stages on achieving economic development in Iraq. As for the time limits, the study is limited to the period from 1990 to 2015, and this can be justified by the beginning of the eighties and nineties, the deterioration in the university education system began, the wars and the disasters that accompany them have added many negative effects on the higher education system. *PJAEE*, 18 (4) (2021) A group of studies emphasized the importance of education in bringing about the accumulation of human capital and economic growth, the most important of which is: the study (Ali & Jabeen, 2015), which aimed to study the effects of education on economic growth in Pakistan during the period 1973-2013, and used a standard model that represents the gross domestic product (GDP) The dependent variable expresses the changes that occur in the economic environment, and included the independent variables, education indicators: enrollment rates in basic education, enrollment rates in secondary education, enrollment rates in university education, literacy rate, health level, and concluded that education affects positively, in increasing economic growth rates, and therefore its economic effects represent a basic factor in achieving economic development.

The study (, Razin,1977) also aimed to measure the relationship between the growth of real per capita gross national product for a group of developed countries (11 states), and each of the rate of gross capital formation, gross national product, enrollment rates in secondary education, and population growth, and it measured the causal relationship between education enrollment rates and rates of change (growth) in per capita income. He also measured the reciprocal relationship between education and economic growth using simultaneous equations, and concluded that there is a high positive and important statistic significant relationship between the growth of per capita GDP and education (enrollment rates in secondary education), and concluded that an increase in the enrollment rate in secondary education will lead to an increase in national income growth rates.

Likewise, the study (Mukit, 2012) aimed to measure the relationship between public spending on education and economic growth in Bangladesh during the period 1995-2009, using a standard model and using the joint integration test, and concluded that there is a long-term relationship between public spending on education and economic growth, the test of mutual integration is that an increase in public spending in education by 1% contributes to an increase in the GDP per capita in the long run by 0.34%, and this confirms that education is an important factor in achieving economic growth. *PJAEE*, 18 (4) (2021) Also, the study (Okubal, 2005) on Uganda and the study (Omojimite, 2010 on Nigeria) emphasize the importance of education in bringing about the accumulation of human capital and economic growth. The study (Al-Shorbaji, 2007) on Taiwan indicated the importance of both increasing investments in education, and adopting policies that lead to an increase in enrollment rates, in increasing both the volume of exports and the economic growth rates in the long term. This study differs from previous studies in the following;

1. Focusing on analyzing the impact of university education only, without studying the effects of education in all its stages on economic development.
2. The main difference of this study is the time series covered by the study and starting from 1980 to 2015, as well as choosing Iraq as a case study.

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## Research Structure

In order to understand the subject , the research was divided into two topics;

- **Topic One** : University education and economic development

- **Topic Two**: Analysis of the relationship between university education and economic development in Iraq.

**Topic One:** University Education and Economic Development

## INTRODUCTION

University education is the last stage of formal education, which aims to provide the individual with knowledge, skills and abilities that serve him and the community as a whole. Education that takes place within colleges or university institutes after obtaining a high school certificate , and the duration of study in these institutions varies from two to four years, is the last stage of formal education (1)

### University education components

University education is considered the top of the pyramid in the educational system in all over the world, and it is the basic pillar of sustainable human development, especially in the present era, as continuous education has become one of the most important items of the strategies of developed countries. In order for the university PJAE, 18 (4) (2021) institution to perform the functions for which it was established, it must have actors and interacting parties, represented in:

#### A) Teaching Staff (Professor)

The university institution needs to perform its function an element of great importance, represented by the faculty or the university professor, who is the cornerstone of the educational process and the university faculty members usually perform two roles simultaneously; the first role is to teach university students in the various stages of university education, and the second role is to carry out scientific research for the sake of advancing science and promoting it.

#### B) Student group (University Student)

The university student is considered one of the basic active elements in the educational process throughout the university formation, and it numerically represents the predominant group in the university institution and the university student who, after the end of his university studies, becomes a university graduate, tends to apply his acquired knowledge and skills in the labor market, in order to achieve more distinction and creativity (2).

#### C) Administrative and organizational structure

The administrative and organizational structure is one of the effective components of university education, and the administrative and organizational structure is represented by the integrated and coherent human components of the administrative and organizational activities according to the general and functional structural system (the administrative and organizational hierarchy) Which manages and runs the university institution and seeks through its outputs to achieve the goals for which it was established, which motivate its members to work to direct and exert their utmost effort towards productivity and to create appropriate conditions to achieve acceptable and high levels of performance (3).

**(D) Curricula (scientific subjects)**

The university curriculum is considered one of the basic components of university and university education, as it is the main tributary of in-depth knowledge in a specific field, and the academic curriculum is the means of education to achieve its goals PJAE, 18 (4) (2021) and plans and the actual and practical translation of education goals, plans and its directions.

**University Education Indicators (4)**

They are as follows;

**A) Indicators of spending on university education:**

Expenditure on higher education is the basic indicator and pillar that can be used to judge the direction of the policy pursued for education within state , and it provides us with the desired results because spending on higher education is one of the most important material inputs for the functioning of the higher education sector.

**Two sub-indicators of university education spending can be identified, namely;**

**1)The index of spending on university education as a percentage of total government spending;**

This indicator is considered one of the indicators measuring the adequacy of inputs to the higher education system, and public spending on education as a percentage of the total government spending items are total public spending on education (current and capital), expressed as a percentage of total government spending for all sectors in any fiscal year.

**2)Average student share of spending as a percentage of GDP per capita in university education;**

This indicator is considered one of the indicators for measuring the adequacy of inputs to the higher education system, which is the total public spending per student in higher education, as a percentage of per capita GDP. Public spending (current and capital) includes government spending on educational institutions (government and private), education administration, in addition to subsidies provided to private sector entities (students / households and other private sector entities).

**B) Total enrollment rate in university education**

This indicator is considered one of the most important indicators for measuring the efficiency of the university education system, and it indicates the ratio of all students enrolled in universities to the age group of higher education schools without regard to the PJAE, 18 (4) (2021) age., the population employed in higher education joins the five-year group following the age at which they leave secondary education. This indicator is divided by gender into the total enrollment rate in higher education schools for females and the total enrollment rate in university schools for males.

**C) Learners 'unemployment rate for university education;**

This indicator is considered one of the indicators that show the efficiency of external education, and it is outside the division of learners' unemployment or graduate unemployment to the total unemployment, as the external efficiency of education reflects the extent of the educational system's ability to meet the needs of the labor market in particular and the needs of development in general, and the unemployment of graduates is considered one of the types of unemployment, which concerns the inability of holders of university degrees to obtain sustainable work in their field of study that they received in universities and higher institutes.

### **Economic and non-economic impacts of university education;**

Numerous studies conducted in various countries of the world confirm that the positive effects of education on society and on development in general go far beyond just the economic aspects, to include also many social, cultural, environmental, political and other dimensions of development in its comprehensive human sense.

#### **-Economic effects of university education1**

The economist "Alfred Marshall" is considered one of the first economists to refer to the economic value of education. He believes that spending on education is a kind of national investment, as investment in people was considered the most valuable form of capital investment. And he considers the need for economists to pay attention to the role of education - especially university education - in economic development, and the need for the state's contribution to education expenditures, And in the middle of the twentieth century , economists 'interest in education moved from the stage of theoretical discussion of its economic role to the stage of trying to measure the economic effects of education through the work of" Schultz and Mencer "in 1961, and they concluded that education contributes to achieving economic growth, and they considered PJAEE, 18 (4) (2021)education an investment activity (5). Therefore, education in general and university education in particular affects many economic variables, including;

#### **A-The impact of university education on economic growth**

The direct impact of education on economic growth is achieved by improving the skills and productive capabilities of the workforce. University education represents the best form of education to acquire skills and abilities because it helps to specialize in a specific field, as well as, recognition that education, in addition to its specific economic effects, helps to promote progress towards achieving other goals such as improving health, extending life, personal advancement, participation in civil society and access to a wider range of opportunities .(6)

#### **B- The impact of university education on increasing national income**

The economic value of education appears in its relationship to individual income that many researchers studied, most notably Walsh, who conducted a study on investment in university education. Walsh relied on previous studies in terms of the sample members, from different educational levels and various specializations, and concluded that the income of a university graduate exceeds that of a high school graduate, because of the mental abilities and talents of the university graduate with an economic value that is evident in his gaining greater income, Likewise, the income of higher education graduates varies according to the type of specialization and the level of education, that is, from the level (bachelor's, master's or doctorate), and this is related to the type, quantity and costs of education (7)

#### **C- The impact of university education on unemployment**

University education is based on providing the skilled and specialized manpower required by national development plans. Thus, higher education institutions must seek to expand their inputs to achieve a continuous increase in the number of their graduates to occupy different positions in the sectors of production and government and private services 2-Non-economic effects of university education Higher education plays an important role in the fields of political and social development, through the multiple functions it performs. PJAEE, 18 (4) (2021)

Higher education places itself at the service of building the university personality of the graduate through (8) .

- 1) Spreading knowledge, promoting the concept of national identity, and developing intellectual and social trends, with what it provides for a common political culture for students.
- 2) Creating a broad, educated social base that guarantees a minimum level of education for all segments of society, as a minimum for knowledge and good citizenship.
- 3) Preparing manpower with technical skills of a high level in the various disciplines needed by society, and in the various locations of the labor market to start economic, social and political development.

## Topic Two

Analyzing the role of university education in achieving economic development in Iraq

### 2/3/1 Preface

Many thinkers and decision-makers point out that education and nothing else can lead to a comprehensive development renaissance for any country. Experience and events have indicated that countries that have made progress in various fields of life, thanks to the quality of their educational systems and the sophistication of their academic programs, therefore, education in general and higher education in particular in our country should be given the care and attention it deserves to secure its advancement and progress in a world where there is intense conflict to possess the forefront of science and technology. As a modest effort in this area, this topic can be devoted to study the relationship between university education - being the most prestigious level of education - and economic development in all its aspects in Iraq, as will be explained later.

### 2/3/2. A theoretical approach to identify the role of higher education in economic development.

There is a close relationship between education in general and higher education in particular on one hand and economic development on the other side, and this relationship can be visualized in its simplest form by considering that the educational system in general provides the increasing requirements of the qualified workforce for the economic development process on one hand, and makes scientific applied research is related to the dilemmas of development at the production level on the physical and service front on the other hand. In general, the relationship between economic development and human development planning can also be visualized through two basic approaches to planning them as follows (9)

**First approach:** It is based on determining the type of socio-economic development that the system will adopt, and then the educational policy and educational planning based on that pattern in order to provide the skills and specializations necessary for development capable of carrying out its mission. In this approach, which means subjecting human development to economic development or adopting educational planning on economic planning in its general form, human development becomes a function of economic development, which represents economic development as an independent variable, while human development represents the dependent variable.

**As for the second approach:** it differs from the first approach and aims to achieve full employment, is determined on the basis of which the estimation of the growth rates of the workforce within the main economic activities is determined and the investment rates required to employ the size of the work force in each activity and its impact on the generated national income, the development and growth of productive efficiency, in addition to studying the evolution of the proportional distribution of the employment structure according to the different economic sectors and activities, and then adaptation of

development accordingly. In this approach, economic development is a function of human development, and then human development becomes an independent variable while economic development becomes a dependent variable.

In addition, education affects economic development through many channels, including preparing the working human cadres necessary to accelerate the process of economic development by providing competencies and skills and reducing the shortage in them. Frederick Harpson believes that building these skills and competencies is the golden key to economic development in developing countries. The higher the educational levels of individuals, will increase their ability to adapt to new jobs, and to deal with labor market conditions and fluctuations. *PJAE*, 18 (4) (2021)

As well as developing individuals' talents and abilities for creativity and innovation, which leads to the development of science and used culture, increases the quantity and improving its quality, thus increasing foreign currency and accelerating the process of economic development (10)

With the increasing interest of contemporary global economic thought with human development after the human being became the intended target of development as a result of being subjected to suffering intentionally or inadvertently due to mistakes committed in adopting the best methods, this prompted many parties to work to restore the human being to the primacy he deserves, which led to the crystallization of concepts, measures and connotations related to the economic and social issue, and this, by its nature, requires a new and contemporary understanding for human development (11)

Economic development has taken at the present time to occupy an important position among the most basic issues that developing countries seek to achieve, and within the framework of this endeavor, the role of education emerges in carrying out development and benefiting from its results (12). That is, there is a reciprocal relationship between education and economic development.

In terms of application and in agreement with the objective of the research, which includes studying the role of university education in achieving economic development in Iraq, the second approach can be adopted to achieve this goal, considering human development as an independent factor in which education in general and higher education in particular is one of its components and influencing other components As well as considering economic development as a dependent factor, which is affected by the events and developments in the higher education sector.

### **: Higher Education and Economic Development in Iraq:2/3/3**

Based on the aforementioned theoretical approach, the relationship between higher education and economic development in Iraq can be analyzed by analyzing the following relationships;

#### **2/3/3/1:The relationship between higher education and the labor market in Iraq. *PJAE*, 18 (4) (2021)**

This relationship is clearly evident in the interdependence between educational institutions (schools, universities, scientific departments, the Scientific Research Center) with the sectors of the labor market (the private and public sector), as well as the outputs of education, the skills of graduates and the scientific and research outcomes that can contribute to societal development and support for the economy towards achieving economic development, and coordination between the educational structure, which represents the supply side for the number of students graduating from colleges and

universities, which is characterized by inflexibility, and the labor markets that represent the demand side, which is characterized by rigidity and lack of flexibility, as well as widespread phenomenon of unemployment among citizens (13)

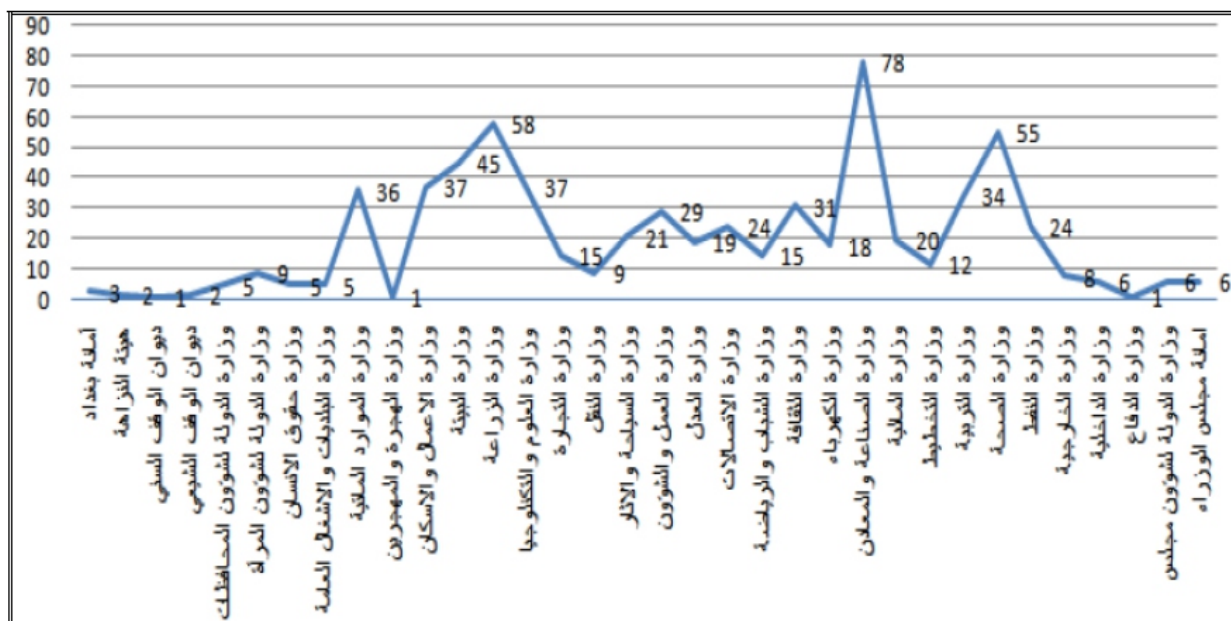
### The nature of the relationship between higher education and the sectors of the labor market in Iraq can be assessed through the following;

A- The results of the study on "Higher Education and Development in Iraq" showed the following indicators regarding the level of relationship between higher education outputs and labor market needs;

- 1) Employers' evaluation of the level of graduates' possession of information, skills and ability to achieve, each with an average grade, with indications that there is a general weakness in the ability of graduates to be creative and innovative in the tasks assigned to them during the work.
- 2) The limited existence of labor market initiatives in developing and supporting the scientific and applied capabilities of higher education institutions.
- 3) The lack of governmental practices to adopt clear procedures and mechanisms to activate between educational institutions and the labor market.

A) Figure (5) shows the number of scientific products (research, projects, and patents) that were marketed to the labor market sectors for the year 2013, where (671) scientific products were marketed for the benefit of (29 ministries and (5) Iraqi governmental bodies and institutions.

**Fig. (5): Statistics of scientific products marketed by beneficiaries by higher education institutions ,2013**



Source: Department of Information and Relations (2014), figures and facts, achievements of three years (Publications of the Ministry of Higher Education and Scientific Research, Iraq, p 67.

C) Entrepreneurial projects and research directed to the labor market: By examining the data of Tables No. (19-2) and (20-2), which appear in the appendix, it becomes clear that the pioneering research projects directed to the labor market sectors are as follows;

- 1) The number of pioneering research projects implemented in the labor market sectors (5) pioneering research projects in 2014, and (48) pioneering research projects for the year 2015, for the total output of teachers in Iraqi universities that are implemented in cooperation with the labor market sectors, which confirms the existence of a case of weakness in the relationship between higher education institutions and the labor market sectors, which was previously mentioned in the previous paragraph.
- 2) The main problem facing higher education institutions in Iraq in relation to the labor market is the absence of the private sector from interacting with these institutions, so contracts and the achievement of scientific products and pioneering research in universities are directed towards the ministries and government sectors.
- 3) The amount of financial support and allocations directed to the completion of entrepreneurial research during the years (2013-2015), amounted to (40.750) billion Iraqi dinars in 2013, then decreased to (13,667) billion Iraqi dinars in 2014, and (3.060) PJAE, 18 (4) (2021) billion Dinars in 2015, which is equivalent to (33, 11, 2.5) million US dollars, respectively, for the mentioned years.

Based on the above, it is clear that the Ministry of Higher Education in Iraq still relies on government financial support to enable researchers to complete their scientific results, develop their capabilities in the field of projects and pioneering research, and apply them in cooperation with the ministry and government institutions (the public sector), and this matter indicates the importance of work on reducing government support for higher education and allowing educational institutions to obtain self-financing through building a real partnership relationship based on the completion of scientific research and results and the introduction of graduates with skills required in the labor market, in exchange for obtaining support from labor market sectors (financially and informally) to empower researchers and universities professors, postgraduate and primary studies students can contribute to the development of society and contribute to achieving economic development.

### **2/3/3/1: The relationship between GDP at constant prices and the number of graduates of university education;**

University education positively affects many economic indicators that express economic development, the most important of which is the GDP, the relationship of university education graduates in Iraq - as one of the variables that express higher education and its spread within society - can be clarified with the gross domestic product, and by examining the data of Table No. (21-2) contained in the appendix, which clarifies the relationship between the gross domestic product and the number of graduates in Iraq during the period (1990-2011), the following is clear;

During the period (1990 - 2000), we find a positive relationship between the increase in the number of graduates of higher education and the gross domestic product, The number of graduates increased from (43685) students in 1990 to (50196)

students in 2000, with an increase of (6511) students and a total growth rate of 13.65%, this increase was reflected in the GDP, which increased from (47, 13) trillion dollars in 1990 to 63.27 trillion dollars in 2000, with an increase of 16.14 students and an overall growth rate of 34.25% during the period. PJAE, 18 (4) (2021) As for the period during (2001-2006), we also find a positive relationship between the increase in the number of graduates of higher education and the gross domestic product, as the number of graduates increased from (49,935) students in 2001 to (74,669) students in 2006, with an increase of



(24,734) students, and an average total growth (49.5%) during this period. This increase was significantly reflected in the development of the value of the gross domestic product, which rose from (64.77) trillion dollars in 2001 to (80.31) trillion dollars in 2006, with an increase of (15.54) trillion dollars, and with a total growth rate of (24%)

But during the period (2007-2011) this relationship changed between the numbers of graduates and the GDP in Iraq, it is noticed that the number of graduates in university education decreased from (75529) students in 2007 to (74082) students in 2011. In the same period, the value of the total GDP increased from (84.69) trillion dollars in 2007 to (95.06) trillion dollars in 2011.

These results have been confirmed by many studies, including the study (Moussaoui, 2015) (14), which was conducted in Algeria, where it indicated that the outputs of higher education contribute positively to the formation of the gross domestic product.

### **2/33/2 The relationship between GDP with constant prices and gross enrollment ratios in higher education;**

Higher education plays a pivotal role as it is entrusted with the formation of the highly qualified workforce and the leadership elites needed by countries, especially in this period when societies and economies have become dependent on knowledge as a major driver of economic growth. Accordingly, the progress of any country today depends on the educational levels of its residents as well as one of the mechanisms used to measure the progress of countries towards establishing a knowledge society (15). The enrollment ratios in higher education are among the important international indicators in the field of quality, as they express the extent of development in absorbing the human capabilities of countries and providing educational opportunities for their citizens. The total enrollment rates for higher education are reflected in the economic indicators of the society, including the GDP, and this can be illustrated through the data of Table No. (22-2) contained in the appendix, which indicates a positive relationship between the gross PJAEE, 18 (4) (2021) enrollment rates for higher education and the gross domestic product.

During the period (1990-2000), total enrollment rates for higher education increased from 12.6% in 1990 to 13.6% in 2000, and this increase was associated with an increase in the gross domestic product from (47.13) trillion dollars to (63.27) trillion dollars. The relationship between higher education gross enrollment rates and the GDP in Iraq continued during the period (2005-2015). the total enrollment rates for higher education increased from 15.4% in 2005 to 18.1% in 2015, and the increase in these rates was linked to the increase in the value of GDP, which rose from (76.23) trillion dollars in 2005 to (120) trillion dollars in year 2015. The National Strategy for education and higher education in Iraq aims to reach the enrollment rate in higher education by 20% for the academic year 2021-2022 (16)

These results were confirmed by several studies, including the study (Huange et al, 2009) (17) that was conducted in China, which showed the existence of a joint complementary relationship between those enrolled in university education and the gross domestic product during the period (1972-2007), and indicated the importance of expansion in higher education to ensure continued economic growth rates.

### **2/3/3/3 The relationship of universities number to population numbers in Iraq and some Arab countries;**

The relationship between the number of universities and population numbers represents the vital interaction between the university and society, as the university's role expanded and developed with the

passage of time, and the door of universities was opened to the vast majority of the community in order to benefit as much of the population as possible, When the population of each university is less, the educational opportunity available to the residents is better..

Table. (23-2) shows the development of the number of universities and the number of population during the years 1990 and 2000, and the table data indicated the development of the number of universities in Iraq, which increased from (11) universities in 1990 - where the population was (18,080) million people, and the share of the university became one the equivalent of (1.6) million people - to (13) universities in 2000 - where the population was (24,086) million people, and the share of one university became equivalent to (1,9) million people, and this PJAE, 18 (4) (2021) number of universities is relatively large in comparison. to the population of Iraq, and compared to most Arab countries such as Syria, Saudi Arabia, Egypt, where the number of inhabitants of each university in 1990 amounted to (3.29) million, (1,96) million an (3,43 ) million, respectively, compared to the year 2000 reached (4.08) million, (2.27) million, and (3.96) million, respectively.

The development of higher education availability in Iraq has continued to be better during the period (2010-2015), compared to most Arab countries. Table. (2-24) illustrates the development of university numbers and population numbers during 2010 - 2015, and the table data indicated the development of the number of universities in Iraq rose from (18) universities in 2010 - when the population was (23,490) million, and the share of university became equivalent to (1.3) million people - to (35) universities in 2015 - when the population was (36,936) million. and the share of university became equivalent to (1.05) million people, and this number of universities is relatively large in comparison to the population of Iraq, and compared to most Arab countries such as Syria, Saudi Arabia, Egypt, where the number of inhabitants of each university in 2010 reached the equivalent (3.45) million people, (1.106) million people, and (3.42) million people, respectively, compared to 2015, which amounted to (3.76) million, (1.05) million, and (3,068) million people. respectively.

### **2/3/4 The role of the University of Technology in the economic development in Iraq.**

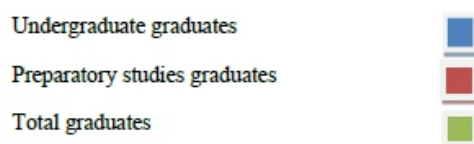
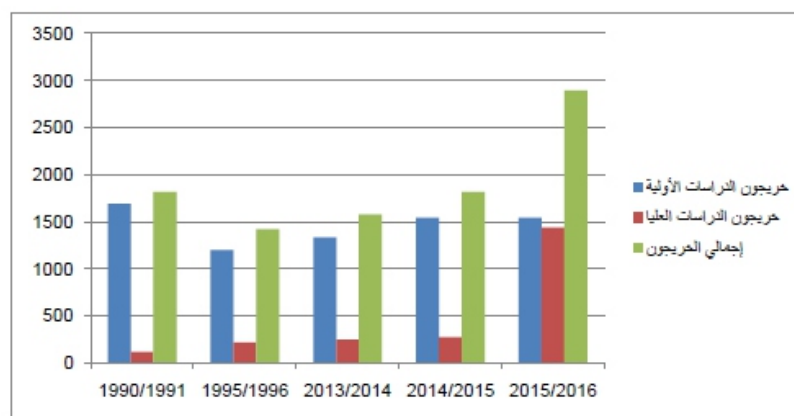
This part discusses the role of University of Technology in the Iraqi country in economic development as it is the first technological university established in the Arab world in 1975. As the university's functions are usually defined by three functions , preparing scientific staff, conducting research and community service, and the University of Technology since its establishment until now has graduated thousands of Engineers and technicians ,equipped with modern engineering knowledge and in a way that does not differ from their peers, graduates of engineering faculties in traditional universities, except that their numbers curricula are linked to practical training more that qualifies them to perform better in industrial institutions upon their graduation from university (18)

The University of Technology is also an important source for preparing the engineering and technological staff in Iraq, as PJAE, 18 (4) (2021) hundreds of engineers and technicians graduate from it annually with bachelor's, master's and doctoral degrees to supplement development plans. The universities have close working relations with many industrial institutions, including the exchange of scientific visits and the organization of training programs for students in its laboratories on the one hand, and for employees of institutions in laboratories and laboratories of the university on the other hand, as well as joint supervision of the theses of diploma, masters and doctoral students.

The University of Technology is currently the largest resource in Iraq responsible for preparing engineering and technology cadres, not only at the level of initial studies, but also for postgraduate studies, which include diploma, master's and doctoral studies, in addition to the university's excellence in unique qualitative studies at the level of the country's universities. Table (2-25) shows the number of engineers and technologists who graduated from the university during the period from 1995/1996 to 2015/2016.

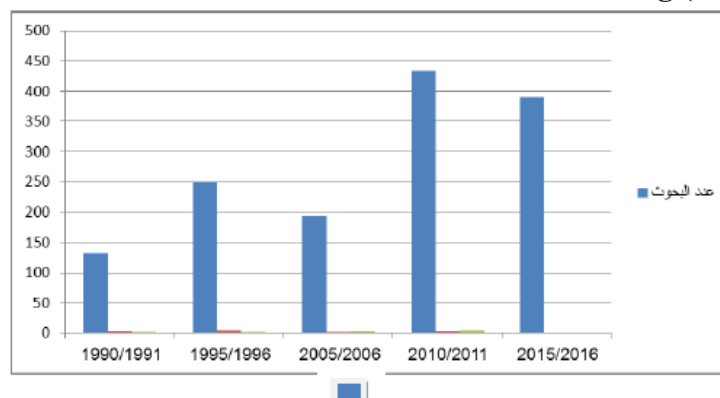
We find during (1995-2015) that the number of graduates at the postgraduate level has significantly improved, so the numbers of graduates at the University of Technology has increased from (1418) students for academic year 1995/1996 to (2892) students in the academic year 2015/2016, at the level of primary studies, the number of students increased from (1200) students to (1542) students, and with regard to postgraduate studies, it increased from (218) students to (1440) students during the same period, as is evident from Fig. (6) PJAEE, 18 (4) (2021)

**Fig. (6): shows the numbers of graduates of the elementary and postgraduate studies in Iraq during (1995-2015)**



Also during (1990-2015) the numbers of research carried out at the university of technology in Iraq developed from (132) research for the academic year 1990/1991 to (390) research for the academic year 2015/2016, as is evident from Fig.(7) and the table (2-26) mentioned in the appendix.

**Fig. (7): shows the volume of research carried out during (1990-2015)**



**Research number****2/3/5 proposals to enhance the role of higher education in achieving economic development in Iraq:**

In order to meet the internal and external challenges of higher education in Iraq, ensure that it keeps pace with contemporary scientific and technological developments, and upgrade its level of efficiency and effectiveness to achieve comprehensive development and community service, we recommend to take procedural steps to achieve the goals of this vital sector, which is the basis for the development and growth of all sectors of the national economy and the desired progress through the following (19)

1-Supporting the efforts of the Ministry of Higher Education and Scientific Research in preparing the requirements for implementing the strategic trends adopted by the National Committee of Education in "2012-2022" through the cooperation of the concerned authorities in the governmental and private sectors with them to secure the necessary financial resources and labor market expertise and relevant regional and international organizations, and various administrative and logistical matters that would facilitate PJAEE, 18 (4) (2021) the implementation of the strategic projects approved by the ministry.

2-Building a community partnership strategy that ensures in strengthening the link and partnership between higher education institutions and the economic and social sectors of society, and applying the principle of "productive university" in community service through the following measures;

-Supporting and developing directions for engaging the relevant labor market sectors in the boards of higher education institutions and actively contributing to planning and monitoring academic programs, and evaluating educational institutions in order to achieve a better match between higher education outputs and the requirements of the labor market.

-Enhancing knowledge and skills in curricula and training programs with field experiences, so that the theoretical stock of those knowledge and skills is not all that the graduate possesses, so that after his transition to practical life, he discovers that it is an inapplicable wealth.

-Cooperating with the Ministry of Planning and Development Cooperation, Ministry of Labor and Social Affairs, and the sectors of the labor market in the procedures of studies on the temporary and future needs of the labor market in terms of professions and skills, then arranging them according to priority and application potential, in order to direct programs and assignments towards the labor market, as well as directing the admission policy and distributing students to appropriations under it, based on the principle of supply and demand.

-The educational institutions transfer the modern trends in the field of work expected for the graduate and include them in the vocabulary of the study materials and training programs through the mechanisms of the teachers and trainers' practice of their specializations in the workplace, and investment of the expertise of specialists in the field of work in teaching and training, as well as adopting the principle of field training for students during the summer holidays As is the case in the Technical Education Board.

-Higher education institutions link their scientific research with the reality of society and its problems and work to solve them, support and escalate the directions of the Ministry of Higher Education and Scientific Research in adopting the principle of partnership with PJAEE, 18 (4) (2021) the labor market sectors in conducting research, and expand the areas of adopting the mechanism of research contracts between educational institutions at the level of the educational institution ,the professor, the scientific department, and postgraduate students (With the corresponding sectors in the labor market, as well as the services provided by consulting offices to the community.

-Activating the participation of all scientific centers affiliated with higher education institutions in providing advisory services and scientific research activities directed at community service and evaluating their performance based on the criteria for their association with the economic and social sectors of society related to their specializations, especially since their activities during the past three years were generally characterized by relative weakness (Quantity and type)

-Focusing on specializations for which the expected future need is growing in reconstruction and investment programs and projects, and keeping abreast of contemporary developments in the fields of science and technology, such as communication and information technology, automation, computer and various engineering disciplines And biotechnology, electronic industries, medical services information security, electric power generation, electronics, renewable energies, petrochemical industries, stock exchange business, financial affairs, insurance, administrative services, economics, tourism and hospitality, and other disciplines to which reconstruction and development needs escalate, while not neglecting other scientific and humanitarian disciplines.

#### Conclusions

- 1-Identifying the most important obstacles that limit the developmental role of higher education.
- 2-Identifying the challenges that hinder economic development, leading to the paths in which higher education contributes to achieving economic development in Iraq. .
- 3-Continuous economic development cannot be achieved without social and human development.
- 4-The research also derives importance from analyzing the role of higher education on economic development in Iraq. PJAE, 18 (4) (2021)

#### Recommendations;

- 1-The researcher concluded that the role of higher education in economic development suffers from weakness in the school curricula, and it must be updated as it is still outdated.
- 2-The framework for cooperation between developed countries should be opened by increasing the number of students on scholarship to the developed countries.
- 3-Active participation in the most recent international development conferences, courses and seminars.
- 4-Increasing the allocations to scientific research by increasing the budget of the Ministry of Higher Education and Research.

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# A Pragmatic Study of Deception in American Politician's Speech

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## ABSTRACT

*Deception is used to refer to a complex social behavior that involves a set of higher reasoning functions. So, the research aims to analyze deception in the utterance of both politicians Biden and Trump speeches within the framework of pragmatic analysis. Deception has been given little attention from previous researchers especially from pragmatic perspective, therefore, this paper attempts to fill this gap by answering the following questions: (1) what are the main types and sub-types of deception that are used by Biden and Trump throughout their trip to win the elections and the way they want to conceal the truth of each other? (2) Which speech acts are more frequently employed by both competitors in elections? (3) How are Grice's maxims are utilized by both politicians in their speeches about the elections?*

*So, this study adopts Searle (1969) as a model to analyze the concept of deception pragmatically. Therefore, it attempts to fulfill the following aims: (1) exploring the main types and sub-types of deception in Biden and Trump's political speech. (2) Identifying the more used speech acts in Biden and Trump's speech. (3) Clarifying how Biden and Trump cooperative with the maxims in their speeches. According to the aims mentioned above, it is hypothesized that: (1) different types and sub-types of deception are used through which deception in Biden and Trump's speeches. (2) Representative and expressive speech acts are more frequently used by both politicians. (3) Some Grice's maxims are deliberately violated by Trump and Biden such as Quality, quantity and manner.*

**Key Words:** Deception, speech act theory, maxims, political discourse.

## 1. INTRODUCTION

Deception expresses the meaning of lie, or deceptive communication. (Miller, 1983:91-116) & (Stiff, 1993) define the term deception as "the deliberate attempt, whether successful or not, to conceal, fabricate, and/or manipulate in any other way factual and/or emotional information, by verbal and/or nonverbal means, in order to create or maintain in another or others a belief that the communicator himself or herself considers false". Accordingly, the politician uses certain words of deception in order to conceal specific features of the other party for the purpose of winning or achieving something in his mind, for example in election period. It means a communicator's deliberate attempt to foster in others a belief or understanding which the communicator considers to be untrue (as cited in DePaulo, 1989: 1553), and a few mention the objective falsity of such information false belief in another." Chisholm and Feehan (1977) define deception, as the intended misrepresentations would count as deceptions.

According to Webster's Dictionary, deception means to lie in order to emphasize something known or believed by the speaker to be incorrect with intent to deceive. The Oxford Brief Dictionary defines lie as "an intentionally false statement," deception as "the act or an instance of deceiving", and deceiving as to "make (a person) believe what is false, mislead deliberately. Deception is used to introduce a false belief in another (Hall & Pritchard, 1996: xvii).

Deception is an act or statement, which misinforms, hides the truth. Deception is a major relational transgression that often leads to feelings of disloyalty and disbelief between relational partners. Deception violates relational rules and it is a negative violation of expectations (ibid). Kramer (2014:2)

defines deception, as a singling act in the broadest sense can be exchange between two individuals. This exchange is about social issues or about elections.

Hu et al.(2012:88) revealed that the instruction to selectively speed up deceptive answers sideways with a short training considerably changed the pattern of response times such that straightforward and deceptive responses became indistinguishable.

Moreover, several of the studies reported enhanced classification correctness when combining different indices of concealed information (Jang et al., 2013).

## 1.2 Verbal deception

Snyder and Higgins (1988: 237-252) clarify that deception can be perceived as the intentional attempt, whether successful or not, to conceal, fabricate and/or manipulate in any other way factual and/or emotional information by verbal. In order to make or keep up in another or in others a conviction that the communicator oneself thinks about false. The propositional communication can happen through words, so the politician uses specific words of deception and this does the opportunity to mislead the reality of other party (Fornaciari et al., 2015:2).

## 2. METHODOLOGY

### 2.1 Types of Deception

There are three types and sub-types of deception that are mentioned by Wittgenstein (1953) in order to show how the politician uses the term deception for the purpose of concealing or fabricating about other politician.

PalArch's Journals of Archaeology of Egypt Egyptology (Volume - 21, Issue - 01, January - April 2024)

Wittgenstein (1953:77) mentions three types of deception dissimulation, simulation and confronting. Confronting means two or more person face each other in challenge. Dissimulation means covert, hiding what is real and simulation means overt, showing the false. Both dissimulation and simulation have two types: Dissimulation has two types as masking, and dazzling where simulation has mimicking, and decoying. In decreasing order of effectiveness, these components of deception can be listed as masking, dazzling, mimicking, and decoying. Whaley (1973:109) claims that these types exhaustively classify all deceptions (ibid). These types are:

**1- Dissimulation :** It is a type of deception, which is used by the politician in order to hide the features of others or other party. Also it is used to mean hiding or withholding information (ibid). It has two types as masking and dazzling.

**2- Simulation (putting out wrong or misleading information).** Deception can be accomplished by omission as well as by commission. Interestingly, folk theories of deception are more likely to attach moral significance to deceptions accomplished by commission than to those accomplished by omission (ibid). Simulation also has two types such as mimicking and decoying.

**3- Confronting:** Confronting is another type of deception which meant to meet face-to-face especially in challenge. This means that the focus is on two individuals in face-to-face communication, it is important to remember that most important informational exchanges occur within a more complicated organizational setting in which structural and factors interact and help to determine the consequences of the exchanges (web source 1).



## 2.2 Political discourse

Political speech has a main role in community speech as a significant speech, attracting great attention from home and abroad. Because of the individuality of political discourse, many scholars tend to analyze political discourse from the pragmatic perspective in order to reveal the concealed control and power resultant from the numerous ideologies and cultures (Swanson et al, 1990:131).

## 2.3 Pragmatics

Pragmatics is "the study of linguistic acts and the contexts in which they are performed" (Stalnaker, 1972: 383). Within the pragmatic area and speech act theory, the researcher finds that the person who utilizes the concept of deception makes a sense of exploring speech acts in order to reveal what he wants to deliver rather than carrying information. He uses language in order to perform an action. In other words, the politician uses language to perform certain speech acts such as threatening, stating, criticizing, and warning.

Leech (1983: 5) clarifies the idea of meaning which is derived from the way that how utterances are used and how associated with the context in which they are expressed, but not from the formal features of words and structures. So, the politicians use certain speech acts in order to express what they want to deliver rather than just saying words. Accordingly, he claims that pragmatics is a theory of appropriateness (Ibid).

### 2.3.1 Speech Acts Theory

Searle (1969:24) presents different decomposition of speech act (henceforth SA) forms that is suggested by Austin. Searle (1969:65) distinguishes five major classes of speech acts; each speech act constitutes a number of other categories which can be distinguished from each other by their felicity conditions (Ibid).

The success of a speech act focuses on the speaker's ability to perform a speech act that should be understandable and successful. Searle (1979:12) mentions five categorizations of speech act theory but the present study limits to the following speech acts, representatives, commissives, expressives and directives. The politician does not use declarative speech act because he is not behind to declare something about his competitor but to conceal or fabricate some features in order to achieve his purpose. The association between speech acts and deception is considered as a central concept to which the politicians used various kinds of speech acts with different types of deception to achieve their goals. Searle's classifications of speech acts (1969) are of direct relevance to deception acts and specifically to the data of political speech, which are chosen, in the current study. These acts are of four kinds, which are classified by Searle as in the following: Representatives (state), Expressive (criticizing), Directives (warning), Commissives (threatening). Speech acts can be effectively achieved under certain conditions "felicity conditions" which in this case of deception, may contain conditions such as, dissimulation, simulation, and confronting. In order to elucidate the types of deception by which politicians interpret "conversational implicate," in 'Logic and conversation' Grice presents four conversational maxims and the Cooperative Principles (henceforth CP). CP is initiated by the philosopher Paul Grice (1975) in which he describes the interaction among people or how they cooperate with each other and he proposes that participants in a conversation follow a common CP (Grice, 1975). The CP runs as follows:

"Make your contribution such as it is required, at the stage at which it occurs, by the accepted purpose or direction of talk exchange in which you are engaged." This cooperation is explained in four maxims, which are called Gricean Maxims. According to this view, there are four maxims are used by the deceptor in order to perform his act. So the present study deals with the following four maxims:

**A-Quantity**

This maxim denotes the quantity of information set in the course of a speech. The speaker should give as much information as it is required, but he should avoid making it too informative (ibid:20).

- a. Make your contribution as informative as is required.
- b. Don't make your contribution more informative than is required.

**B-Quality**

The speaker should be truthful in his contribution. Furthermore, he is predictable to give information for which he has evidence (Thomas, 1995:63).

- a. Don't say what you believe to be false.
- b. Don't say that for which you lack adequate evidence.

**C-Relevance**

The contribution must be relevant to what is said via other participants. Moreover, any effort of irrelevance needs to be pointed out.

The maxim of relation is considered as a solitary maxim, specifically, be relevant. This maxim is in some way or another raises a problem. Despite the fact that it is brief, it brings up some unanswerable issues about the diverse sorts and focal points of relevance, and the movements and changes that really happen in discussion, etc. (Thomas, 1995:63).

- Be relevant.

**D-Manner**

The speaker should be clear, brief, and orderly in his speech at any degree. In addition, vagueness of expression and obscurity should be avoided (Ibid: 64).

- a. Avoid obscurity of expression.
- b. Avoid ambiguity.
- c. Be brief.
- d. Be orderly

**3. MODEL OF ANALYSIS**

The term deception will be analyzed pragmatically according to the model developed by the current study which is represented by Searle (1969) and Grice (1975).

The following diagram represents the pragmatic analysis of deception

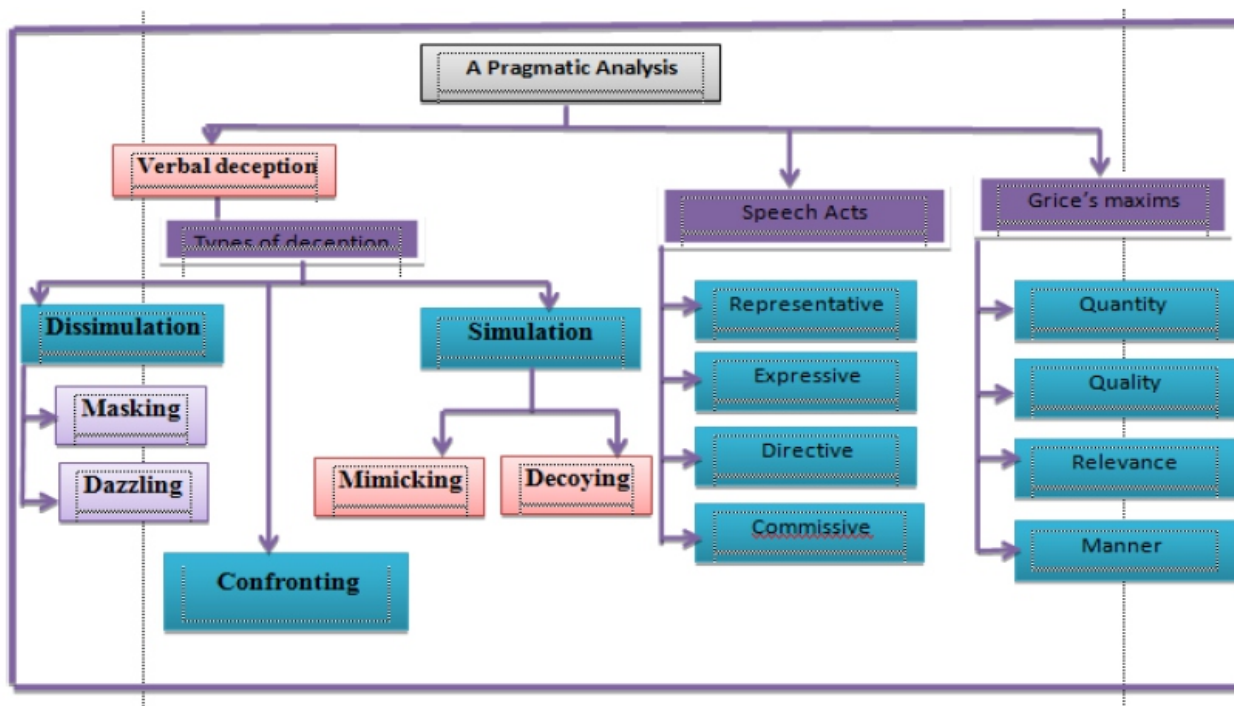


Figure (1)

#### 4. DATA ANALYSIS

The data of this study are represented by six texts from different politicians' speeches for both the previous president of United States of America Trump and The new president Joe Biden. The first three texts are for Biden and the last three texts are for Trump's speeches.

##### Text (1) Biden's speech

"The expectation is we'll have another 200,000 Americans dead between now and the end of the year. If we just wore these masks, the president's own advisors have told him, we can save 100,000 lives. And we're in a circumstance where the president thus far and still has no plan, no comprehensive plan".

##### Types of deception

**1- Dissimulation** In this text, Biden uses Dissimulation type in order to conceal Trump's role in American government, by saying that he has not any plan to control over the country. Dazzling as a type of dissimulation is utilized by Biden in saying in dazzling way and in front the world.

**2- Simulation** in this type, Biden wants to spread some deceptions information about Trump that he has not any comprehensive plan to save his country from Covid-19. Biden uses decoying as a type of simulation in order clarify that he will the best president in American to make the people elect him rather than Trump.

**3- Confronting:** Biden and Trump face to face in front of others to show their abilities to manage in leading American people.

**Representative speech act: Stating**

Biden states that Trump has not any plan to save America from Covid- 19 but he (Biden) will manage in leading America to safety. So, Biden wants to deceptive Trump's features whether it is true or false.

**Expressives speech act: Criticizing**

Biden expresses his criticism to Trump that he makes America for worst because his bad administration in his government.

**Grice's Maxims**

**A. Quantity :** Biden's contribution is informative as it is required. He speaks about Trump's government that is not managed to make a comprehensive plan to save the American people from Covid-19.

**B-Quality:** Biden's speech lacks some adequate evidence because he is the competitor to Trump. So, he violates this maxim by saying what he believes to be false.

**C-Relevance:** Biden's contribution is relevant to his main idea.

**D-Manner:** He is clear and orderly in his speech about his competitor.

**Text (2) Biden's speech**

"Make sure it's totally transparent. Have the scientists of the world see it, know it, look at it, go through all the processes. And by the way, this is the same fellow who told you, "This is going to end by Easter" last time. This is the same fellow who told you that, "Don't worry, we're going to end this by the summer."

We're about to go into a dark winter, a dark winter and he has no clear plan. And there's no prospect that there's going to be a vaccine available for the majority of the American people before the middle of next year".

**Types of deception**

**1- Dissimulation** In this text, Biden uses Dissimulationtype in order to fabricate his speech and making deception about Trump's characteristics even if it is true or false. Dazzling as a type of dissimulation is utilized by Biding , he is speaking in dazzling way and in front the world. Masking another type of dissimulation is used by Biden in order to prevent clear perception or realization about Trump in front of people.

**2- Simulation** in this type, Biden wants to spread some deception information about Trump that "there's no prospect that there's going to be a vaccine available for the majority of the American people before the middle of next year "to save them from Covid-19. Biden uses decoyingas a type of simulation in order clarify that he will the best president in American to make the people elect him rather than Trump. Mimickingis another type used by Biden in order to make sarcasm from Trump.

**3- Confronting:** Biden and Trump face to face in front of others to show their abilities to manage in leading American people.

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## Speech Acts

### Representative speech act: Stating

Biden states that Trump fails to find vaccine to save America from Covid-19 but he (Biden) will be able to get it and save the American people. So, Biden wants to mislead Trump's features in his administration of America whether it is true or false.

### Expressives speech act: Criticizing

Biden expresses his criticism to Trump that he makes America for worst because of the bad administration in his government as in "We're about to go into a dark winter, a dark winter and he has no clear plan".

### Directive speech act: warning

Biden uses speech act of warning Trump that the American people will die and he does not find any suitable vaccine for them.

### Commissive speech act: Threatening

Biden's speech is as threatening to Trump's entity.

## Grice's Maxims

**Quantity:** Biden's contribution is not informative as it is required. He speaks too much about the vaccine. So, he violates this maxim as in "We're about to go into a dark winter, a dark winter and he has no clear plan. And there's no prospect that there's going to be a vaccine available for the majority of the American people before the middle of next year"

**B-Quality:** Biden's speech lacks some adequate evidence because he is the competitor to Trump. So, he violates this maxim by saying what he believes to be false.

**C-Relevance:** Biden's contribution is not relevant to his main idea at the beginning he talks about Easter and then about vaccine. Thus, he violates this maxim.

**D-Manner:** Biden violates manner maxim because he is not brief and orderly in his speech about his competitor.

### Biden's speech Text (3)

"What I would say is, I'm going to shut down the virus, not the country. It's his ineptitude that caused the country to have to shut down in large part, why businesses have gone under, why schools are closed, why so many people have lost their living, and why they're concerned. Those other concerns are real. That's why he should have been, instead of in a sand trap at his golf course, he should have been negotiating with Nancy Pelosi and the rest of the Democrats and Republicans about what to do about the acts they were passing for billions of dollars to make sure people had the capacity".

## Types of deception

**1- Dissimulation** In this text, Biden uses Dissimulation type in order to fabricate his speech and making deception about Trump's features even if they are true or false. Dazzling as a type of dissimulation is

utilized by Biden , he is speaking in dazzling way and in front the world. Masking another type of dissimulation is used by Biden in order to prevent clear perception or realization about Trump in front of people.

**2- Simulation** in this type, Biden wants to deliver a message to the American people that he can stop the virus by saying "What I would say is, I'm going to shut down the virus, not the country." Biden uses decoying as a type of simulation in order clarify that he will be the best president in American to make the people elect him rather than Trump "What I would say is, I'm going to shut down the virus, not the country. It's his ineptitude that caused the country to have to shut down in large part."

Mimicking is another type used by Biden in order to make sarcasm from Trump that he cannot find available way to stop this Virus.

**3- Confronting:** Biden and Trump face each other for the purpose of winning in American election.

### Speech Acts

#### **Representative speech act: Stating**

Biden states that Trump fails to stop the Virus but Biden will stop it and makes America better than in Trump's government.

#### **Expressives speech act: Criticizing**

Biden expresses his criticism to Trump that he makes America for worst because the bad administration in his government as in "why businesses have gone under, why schools are closed, why so many people have lost their living, and why they're concerne".

#### **Directive speech act: warning**

Biden uses speech act of warning Trump that the American people will die and he does not stop the Virus.

#### **Commissive speech act: Threatening**

Biden's speech is as threatening to Trump's entity in saying, "It's his ineptitude that caused the country to have to shut down in large part."

### Grice's Maxims

**Quantity :** Biden's contribution is not informative as it is required. He speaks too much about the Virus.

So, he violates this maxim.

**B-Quality:** Biden's speech lacks some adequate evidence because he is the competitor to Trump. So, he violates this maxim by saying what he believes to be false.

**C-Relevance:** Biden's contribution is not relevant to his main idea at the beginning he talks about his role as a new president will stop the Virus and then shifts to talk about people's business.

**D-Manner:** He violates manner maxim because he is not brief and orderly in his speech about his competitor (Trump).

#### **Text (4) Trump's speech**

"I don't know. I mean, I don't know what to say. I got criminal justice reform done and prison reform and Opportunity Zones"-

#### **Types of deception**

**1- Dissimulation** In this text, Trump uses Dissimulation type in order to fabricate his speech and making deception about Biden's speech even if it is true or false. Dazzling as a type of dissimulation is utilized by Trump, he is speaking in dazzling way and in front the world in order to make deception about Biden's speech. Masking is another type of dissimulation used by Trump in order to prevent clear awareness or realization about Biden in front of people.

**2- Simulation** in this type, Trump wants to deliver a message to the American people that he can reform the prison and reform the criminal justice. Trump uses decoying as a type of simulation in order clarify that he is the best president in all American's presidents to make the people elect him rather than Biden.

Mimicking is another type used by Trump in order to make sarcasm from Biden that he cannot do what Trump does in America.

**3- Confronting :** Trump and Biden face each other for the purpose of winning in American election.

#### **Speech Acts**

##### **Representative speech act: Stating**

Trump states that Biden will fail to reform everything in American because he does something no one can do as he does.

##### **Grice's Maxims**

**Quantity :** Trump's contribution is informative as it is required. He speaks in brief way about his role as a leader of America.

**B-Quality:** Trump's speech lacks some adequate evidence because he is the competitor to Trump. So, he violates this maxim by saying what he believes to be false.

**C-Relevance:** Trump's contribution is relevant to his main idea.

**D-Manner:** He is brief in his speech because he wants to make deception idea about Biden's future work as president of America.

#### **Text (5) Trump's speech**

... "one question, why didn't you do it in the eight years, a short time ago? Why didn't you do it? You just said, "I'm going to do that, I'm going to do this." You put tens of thousands of mostly Black young men in

prison, now you're saying you're going to get... You're going to undo that, why didn't you get it done? You had eight years with Obama. You know why, Joe? Because you're all talk and no action"

### Types of deception

**1- Dissimulation** In this text, Trump uses Dissimulation type in order to make deception about Biden's speech even if it is true or false when he works with the previous president of America Obama. Masking is a type of dissimulation used by Trump in order to prevent clear awareness or realization about Biden.

**2- Simulation** in this type, Trump wants to deliver a message to the American people that Biden in the period of the president Obama; he puts many of the black people in the prisons. Trump uses decoying as a type of simulation in order clarify that he is the best president in all American's presidents to make the people elect him rather than Biden.

Mimicking is another type used by Trump in order to make sarcasm from Biden's work in the government of Obama.

**3- Confronting:** Trump and Biden face each other for the purpose of winning in American election.

### Speech Acts

#### Representative speech act: Stating

Trump states that Biden is the man who suspect that makes all the black people suffer from his bad treatment.

#### Expressives speech act: Criticizing

Trump expresses his criticism to Biden by saying, "You put tens of thousands of mostly Black young men in prison."

#### Directive speech act: warning

Trump uses speech act of warning to Biden directly to remain him that he is the reason behind the suffering of the black people.

### Grice's Maxims

**Quantity:** Trump's contribution is not informative as it is required. He speaks too much about Biden, so he violates this maxim.

**B-Quality:** Trump's speech lacks some adequate evidence because he is the competitor to Trump. So, he violates this maxim by saying what he believes to be false.

**C-Relevance:** Trump's contribution is relevant to his main idea.

**D-Manner:** He is not brief in his speech because he wants to make deception idea about Biden's future work as president of America.



**Text (6)**

"It's all a pipe dream, but you know what we'll do? We're going to have the greatest economy in the world, but if you want to kill the economy, get rid of your oil industry you want. And what about fracking"?

**Types of deception**

**1- Dissimulation** In this text, Trump uses Dissimulation type in order to make deception by asking him what to do in the future with America and you will kill the economy of America. Masking is a type of dissimulation used by Trump in order to prevent clear awareness or realization about Biden.

**2- Simulation** in this type, Trump wants to deliver a message to the American people that Biden will destroy the economy of America if he will become the president. Trump uses decoying as a type of simulation in order clarify that he is the best president in all American's presidents to make the people elect him rather than Biden.

**3- Confronting:** Trump and Biden face each other as a challenge for the purpose of winning in American election.

**Speech Acts****Representative speech act: Stating**

Trump states that Biden is the man who will destroy the economy of America.

**Expressives speech act: Criticizing**

Trump expresses his criticism to Biden by saying, "you know what we'll do." This means that Biden does not know to if he will be the president of America.

**Grice's Maxims**

**Quantity:** Trump's contribution is informative as it is required. He speaks about Biden's future work.

**B-Quality:** Trump's speech lacks some adequate evidence because he is the competitor to Trump. So, he violates this maxim by saying what he believes to be false.

**C-Relevance:** Trump's contribution is relevant to his main idea.

**D-Manner:** He is brief in his speech because he wants to make deception idea about Biden's future work as president of America.

**5. RESULTS OF ANALYSIS**

The following table represents the frequencies of types of deception, speech acts and Grice's Maxims

Table (1)

No.	Types of deception	Fr.	Per.	Speech Acts	Fr.	Per.	Grice's Maxims	Fr.	Per.
1	Dissimulation	6	%20	Representative	5	%33	Quantity	3	%21
2	Masking	5	%16	Expressive	5	%33	Quality	6	%42
3	Dazzling	4	%13	Commissive	2	%13	Relevance	2	%13
4	Simulation	6	%20	Directive	3	%20	Manner	3	%21
5	Mimicking	4	%13						
6	Decoying	5	%16						
<b>Total</b>		<b>30</b>	<b>%99</b>		<b>15</b>	<b>%99</b>		<b>14</b>	<b>%100</b>

Key: Fr. = Frequency , Pr. = Percentage , No = number

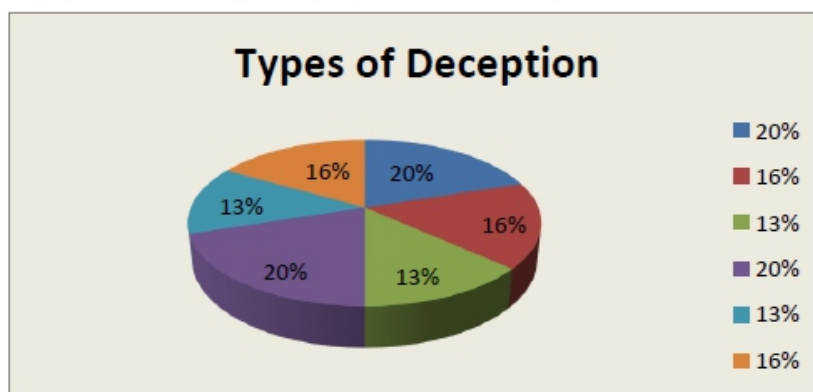


Figure (1) Types of deception

As it is shown by the results above in table (1) and figure (1), the type of deception dissimulation, and its sub-types are more used by both politicians in order to make deception about each other for the purpose of winning the election. They are amounted (dissimulation (%20) and sub-types (%16) for masking and (%13) for dazzling percentages).

The results show that the type of deception simulation and its sub- types are more used by both the politicians in order to make deception about each other for the purpose of winning the election, they are amounted (simulation (%20) and sub-types (%13) for mimicking and (%16) for decoying percentages).

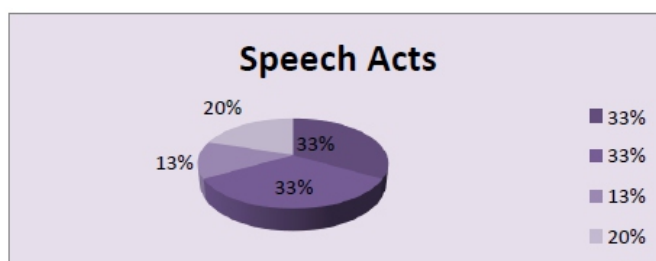
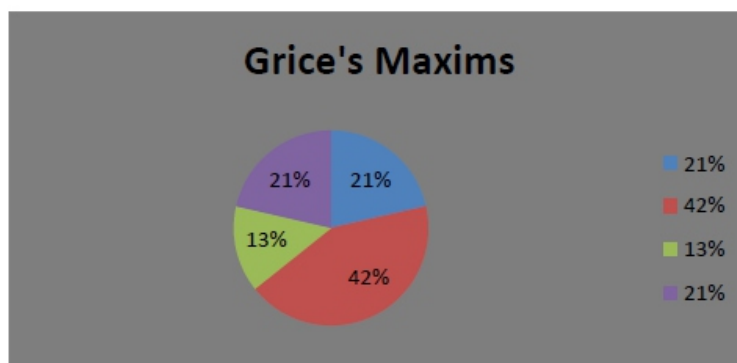


Figure (2) Speech Acts

The results also show that representative and expressive speech acts are more frequently used by both Trump and Biden to state and criticize each other and deceptive each other to achieve their goals in

winning the election of America, they are amounted the same percentage (%33 for each other). While directive receives (%20 percentage) and commissive receives the least percentage, it receives (%13).



**Figure (3) Grice's Maxims**

Also, the results show that Grice's maxims, Quality is the more frequently violated by both Biden and Trump because each one of them speaks in a way of deception to another by saying something without adequate evidence about each other. Therefore, this maxim is more highly violated by them; it receives (%42 percentage). While other maxims as quantity and manner receive the second highest percentage, they are amounted (%21). Relevance is the least maxim violated by the politicians; it makes (%13 percentage).

## 16. CONCLUSION

### It concludes that:

1. The politicians Biden and Trump use some types and sub-types of deception in order to make deception about each other; they utilized some of these types such as dissimulation and simulation.
- 2-Both Biden and Trump employ certain speech acts such as representative, expressive, directive and commissive.
- 4-Grice's maxims are violated by them for the purpose of achieving their main goal which is the winning in American elections.

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# Measuring the Level of Body Qualification by Indicating Some Muscle Fatigue Variables as Well as Functional Indicators Variations

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## ABSTRACT

*Relationship of some variables of muscle fatigue with physical efficiency and some functional indicators .It includes four Chapters, including the first section on the introduction and the importance of research as the state of fatigue is the lack of energy stored in the muscle and increasing in the accumulation of brownic acid, so the problem of the research which impedes the work of muscle contraction by the relationship between some variables of muscle fatigue physical efficiency and some functional indicators for students in the first year on college, The most important results obtained in the study were that there is a correlation between the fatigue index and physical efficiency as well as between the fatigue index and the maximum consumption of oxygen. The Relation between muscles fatigue parameter & Physical Working Capacity & VO2max. The aim of the research is study The Relation between muscles fatigue parameter & Physical Working Capacity & VO2max to the first stage student of the collage we are choose (11) players who play at local competition of the collage & the most texts are PWC 170 & Carlson & VO2max. The most results of this research are there are good relationship between muscles fatigue (Carlson) & Physical Working Capacity & Carlson & Vo2max.*

**Keywords :** *body qualifications , muscle fatigue , functional indicators*

## 1.1 INTRODUCTION AND IMPORTANCE OF THE RESEARCH

The condition of muscle fatigue is considered as one of the most important physiologic cases of sports science as it works directly in reducing the level of the athletes performance which results in direct decreasing in the level of athletes achievement or impacting feeling of unwillingness to exert effort for training and even unwillingness to continue in competitions and in all of its forms and knowledge's, Mr.Rasan defines fatigue as " A temporarily decline in the amount of continuous working , and it can be measured and I identified by its external appearance [manifestations] by supervising the lack of mechanical work performed(1), It is known that the state of fatigue is the lack of energy stored in the muscle and the increased accumulation of lactic acid which hinders the work of muscle contraction. And it is known That trainers and the players try to reduce the fatigue or make the body continue to work for as long as possible and to do so by increase tiredness state during training times and the intensity of training and this is done throughout a structured curriculum where it includes several units during the week within a planned work program thoughtful and regulated . Muscle fatigue is considered one of the priorities of sports work within the field of physical education, whether for beginners or advanced athletes because it is considered the cornerstone in the performance of sports skills and the development of sports performance. Therefore, the exercise of sports requires high physical efficiency and functional indicators adapted to work for the required performance. The importance of research is to indicate fatigue mark and its relationship to the work and efficiency of the circulatory breathing system through the tests of functional devices, which gives us the ability and level of work of the respiratory system.

## 1.2 The research problem;

The state of fatigue may occur as a result of a combination of factors and whether these factors combined or separate, they affect the functioning of the organs of the body. And through the multiplicity of these

reasons, for example, complete discomfort and some cases of nutrition problems , some psychological factors , stress situations and physiological factors and physiological factors aswell as some other minor issues ,through the study of fatigue, the researchers noted that the sports staff need to diagnose the nearest state of tiredness through fatigue tests and then link them to the level of fitness through Tests of the work of functional devices.

The researchers saw connection state between fatigue and the level of physical fitness in the students of the first year, and this study opens to us wide areas of future studies to know the causes and causatives [affecters] PJAE, 18 (4) (2021) of tiredness and knowledge of fatigue and its association to The evolution of fitness levels and degrees of knowledge at this link between them which gives us a comprehensive idea of these two variables which are fatigue and level of physical fitness. The two tests are one virtual test and the other a physiological test related to the efficiency of functional devices work. And this research supports sports training work and those who are digging at the training science even if this research considered through its results as a step that serves the training science and participates with the previous steps .

### **1.3 The research objectives;**

1. Identifying fatigue variables as research samples
2. Knowing some functional parameters for research samples.
3. Knowing relationship between muscular fatigue from physical efficiency and some functional indicators for research sample.

### **1.4 research Hypotheses;**

1. Presence of a relationship contains numerical function between muscular fatigue and physical efficiency.
2. Presence of a relationship contains numerical function between muscular fatigue and some functional indicators.

### **1.5 research domain;**

- 1. Human domain:** A research sample from first stage students from sports Education college, Mustansiriya Division with count of (11) students.
- 2. Time related Domain:** 8-24 / 2 / 2020
- 3. Spacial Domain :** Halls of sports Education college-Hall of fitness/ Mustansiriya University Division.

### **Terminology:**

#### **1.2.1 Fatigue concept:**

Fatigue is considered as the result of changes occur in different organs and systems of the whole body, including organs and systems during the period of performance of physical work which ultimately lead at the end to the impossibility of continuity.

and the state of fatigue is described as the low state of performance that appears in the sense of tiredness, in case of fatigue isn't able to Maintain the level of intensity required or performance tactic or be forced to refuse PJAEE, 18 (4) (2021) to continue the initial activity, which reduces the level of continuity during athlete work, Muscular fatigue is the "inability to retain or repeat muscle contractions with the same muscle strength.

### **1.2.2 Types of fatigue:**

Fatigue is a physiological phenomenon that is strongly related to tolerance, Tolerance can be described as the ability of the individual to resist fatigue for the longest time possible, and the faster the level of the individual's physical fitness decreases , the faster the fatigue is and vice versa, the better the person is specialized with high endurance the better efficiency he has to work out at longer time and accompanied by Fatigue tolerance.

And tolerance is usually described as the time when the individual is able to perform the exercises with the required intensity.

### **Fatigue is classified into four main types**

**Mental fatigue:** as in chess.-

**Sensory fatigue:** as in the shooting game.-

**Psychological fatigue:** occurs in social life or marital or workplace.-

- **Physical fatigue:** As in physical exercises this type is what we will be describing in this research.

**\*Fatigue is divided into three types according to the number of Muscles involved:**

**1. Local fatigue:** The number of muscles working on makes one third of the body mass.

**2. Semi fatigue:** The number of working muscles forms one third to two thirds of body's muscle mass.

**3. General fatigue:** The number of working muscles is more than two thirds of the body mass.

## **Chapter three**

### **"Research methodology and field procedures"**

#### **3-1. Research methodology and field procedures**

The method chosen by the researcher should be appropriate to solve a certain problem and the way is the method followed by the researcher himself to determine the steps of his research, which can lead to solving the problem of research.(4) PJAEE, 18 (4) (2021)

So research uses the Descriptive method which associates studies to find the relationship between two variables of correlative studies "by which we know the extent of two variables linked with each other and it is important in the analysis of causes and impact and can give an explanation of the relationship analysis by introducing apparent digital logic.(5)

**3.2 research sample;**

One of the fundamental matters which a researcher should take care of is obtaining a sample represents the fundamental society as a original representation. (6)

And based upon that the fundamental society for the research was First stage students in Sports Training College (Al mustansiriya division)

For the studying year 2008-2009 and it was done by choosing all the students from athletes who have been exercising sports for more than Five years in Clubs or Local areas Teams and they were participated in football

4- WajihMahjoob , scientific research and its approach, Baghdad ,House of books for copying and publishing , 2002 page 81

5-Wajih Mahjoob , scientific research methods and it approach,Mousil , Mousil university printing , 1958 ,page 23.

championship which was done in sports teaching college and the number of participants as whole was in the beginning 24 students and then after 11 students were chosen from the whole sum of players so as to have them have the conditions of the test.

**3.2 Methods, Tools and Devices used in research;**

- Arabic and foreign sources and References.
- Experts opinion survey Form.

**Tools and Devices:**

- A Bench of 40 CM height.
- Stop watch, amount 2.
- Measuring strip.

**3.4.1 Physical fitness tests;PWC170**

Physical fitness test PWC170 is considered one of the important functional tests and it is done by giving two efforts each effort lasts for (3) minutes PJAEE, 18 (4) (2021) thus the overall Effort will be (6)minutes and the average rate of beats is measured at the last 10 seconds for each time and then the result is multiplied by 6 to extract the heart rate per minute , and by using this Formula the physical fitness is given :

$$PWC\ 170 = N1 + (N2 - N1) \times (170 - F1 / F2 - F1)$$

N1 = First Effort

N2 = second effort

F1 = First Beat

F2 = Second Beat (7)

6- jabiribnAbd Al Hamid , Ahmad KhairiKazim : research approach of Education and Psychology , Cairo ; Dar Al talif publisher 1973 page230.

(7) karpman V.L: (op.cit) ,1987 ,p132-134.



And to avoid the effect of this test on the functional evaluation do to the difference in weight between an athlete and another it is found out that it is Relatively connected to the weight of the body and by calculating PWC 170, and it is done by dividing the result on the athlete Body weight to conclude the amount of R- pwc 170 for every (KG) of the body weight (8)

### 3.4.2 TEST of Maximum limit of consuming Oxygen for maximum oxygen Vo2Max(9) :

#### Which is Watson Test (1968 Watsons) (R-Vo2Max)

The maximum oxygen consumption is extracted by the PWC170 value and then inserted into the cabman equation as for athletes.

$$\text{Vo2Max} = 2.2 \times \text{PWC170} + 1070$$

### 3.4.3 Carlson's Fatigue Test:

This Test is done by the following procedures:

1. Measuring the Average of Heart beats during the relief time before the Fatigue
2. Running in the place at full speed and for a period of (10) seconds.
3. Then stop for ten seconds PJAE, 18 (4) (2021)
4. And the running is frequently repeated for another 10 seconds and for 10 times so Number of repeats is 10 and for 10 seconds each, times between runs is 9.
5. The number of right Leg touching the ground is calculated of during each time of the performance in ten seconds.

(8) karpman V.L: (op.cit) ,1987 , p132-134.

(9) Watsons H.W: "Physical and athletic performance " London. U.K, 1986, P.193-200.

6. Calculate the pulse after the completion of the last performance of the ten performances and then calculate the pulse after ten seconds passing on the last performance and for ten seconds and then Multiplied by 6.
7. The heart beats rate is calculated after 2 minutes, then 4 minutes, then 6 minutes passed.
8. The number of times the right-Leg touches the ground is added in each of the ten tests, which is recorded every ten second.
9. Then the Number of the five heart measurements is added with each other.
10. After that the Test score is processed for touching the ground and for the heart beats measurements and using the Table from {Methods of Measurement of Physical Effort in Sports} and it will lead us to the athlete level, from this we can conclude the level of the tested Athlete(10).

### 3.6. Exploration Experience;

The experiment was conducted on 5 students without a research sample in order to identify the strengths and weaknesses as well as for the team to know how to perform the tests and the test time for each laboratory as well as to identify the mechanism of \*\*\*\* and sequence of exploration experience.

And the tests for the Main experience were done in 16/2/2016 in Laboratory of body Fitness, college of sports education AlMustansoriya division.

(10) Muhammad Nasir Aldine Ways of Measuring Physical Fitness in sports, Cairo , Alkitab Center for publishing , 1998 , page 103-107

### 3.7 exploration experience;

The main experiment was conducted on 22-24 / 2/2010 at the same place mentioned above: it included testing the physical efficiency and maximum oxygen consumption and fatigue test for Carlson.

### 3.8 counting Means;

Arithmetic Mean

Standard deviation

Pearson correlation lab(11)

## Chapter Four \

Showing the results, analyzing it and discussing it

### 4.1 Presentation and analysis of the test results related to functional efficiency and maximum consumption of Oxygen and Carlson.

**TABLE NO.1 Shows the values of arithmetic Means, standard deviations of physical fitness test and maximum oxygen consumption and Carlson**

Tests	Measuring Units	Arithmetic mean	Deviation $\bar{\pm}$
Carlson	Mole / Gram	61.9	8.01
PWC170	MM / KG	11.5	1.33
Vo2Max	Milliliter / KG	48.83	2.13

11. WadiiYassiin Al tikriti and Hassan Muhammad Abd : Arithmetical Applications and using computer in sports Education Research , Mousil , Dar Alkutub for publishing , 1999 , page 123-155

Table 1 shows the values of the arithmetic and standard deviations of the Carlson tests and the physical efficiency ofPWC170 and the maximum oxygen consumption ofVo2Max. The mean of the indicators was respectively (61.9), (11.5) and (48.83). The standard deviation was for the same indicators respectively (8.01)(1.33), (2.13)(12)

**Table NO.2 :Shows correlation coefficient values between the research indicators**

Variables	Calculated	Calculated R	Tabled R	Indicator
Carlson- PWC170			0.946	Moral
Carlson-Vo2Max		0.52	0.588	Moral

$$\text{Table value} = N - 2 = 11 - 2 = 9 = (0.52)(12)$$

Table (2) shows correlation coefficient values between the Carlson test and the physical efficiency test and the calculated value between them (0.946), which is higher than the scale value of (0.52) below the level of 5% and the freedom degree of  $-2 = (9)$  and this leads to a meaningful connection relationship between Carlson test and physical efficiency.

**12- AAbidKariim** : Introduction to Arithmetic and its applications. AlNajaf , Aldihaa house for publishing ,2009, The values of the correlation index between the Carlson-Vo2max test and the calculated value between them (0,588), which is higher than the R scale value of (0.52) below the level of leading 5%, and the free degree of  $N-2 = 11-2 = 9$  and this leads to the existence of a significant correlation between the Carlson test. Vo2max.

#### 4.2 discussing the results;

Table 2 shows that there are significant correlations between the Carlson index, physical fitness, and Carlson, and the maximum oxygen consumption. The higher the fatigue rate, the greater the physical efficiency, despite the continuous exercise in the lectures as well as the participation of students in more sports, in their friendly games.

Israel noted that the heart rate of the player decreases after minutes after the effort at a rate of 40-60 B / M (beat per minute) and also shows that the body's oxygen input during the potential is completely different from what PJAEE, 18 (4) (2021) absorbed after the effort, although the number of heart beats are equal in both cases(13).

The fatigue as a physiological phenomenon is strongly related to tolerance. Tolerance can be described as the ability of the individual to resist fatigue, and the lower the level of the individual's efficiency, the faster the fatigue and vice versa. The higher the individual is characterized by the higher the load, the longer he can maintain the work efficiency. Endurance is usually at a time when the individual is able to perform the exercises with the required intensity.(14)

Research on oxygen consumption suggests that the effect of functional cooperation on body systems can be reduced in conditions of fatigue. And that various fatigue phenomena depend on the nature of muscle activity and athletic skill.

**13. Ibrahim Albasri:** sports medicine, Baghdad, University of Baghdad printing, 1983, page 37-40.

14. Rasan Khribat And Ali toorkey, A reference mentioned before , Chapter Five ^

### 5. CONCLUSIONS AND RECOMMENDATIONS;

#### 5.1 Conclusions;

1. Fatigue can be observed through the level of physical fitness and vice versa .
2. The level of physical efficiency and maximum oxygen limit can be considered an indicator of high fitness, i.e., less fatigue or longer ability to resist fatigue.
3. As we conclude that the existence of high efficiency means bearing the fatigue for longest period.
4. There is a relationship between fatigue and physical fitness index
5. There is a relationship between the fatigue index and the maximum consumption of oxygen.

6. Since fatigue cases are many and multiple and in this research we dealt with physical fatigue, so in order to overcome the cases of physical fatigue we should increase the efficiency of different functional devices.

## 5.2 Recommendations;

1. Attention to functional indicators in order to know the state of fatigue earl.
2. Attention to the physical and functional status of students in the first stage in order to stand on the strengths and weaknesses
3. Conducting other research for other functional indicators on the students of the second and third stage.
4. Attention to the respiratory index as one of the important indicators that reflect the state of fatigue.
5. In order To know the state of fatigue, you should study the causes of fatigue and knowledge of the causes of the fatigue for trainers for noting that fatigue for several reasons.
6. Standards and indicators should be set for each student in the first stage in the faculties of physical education and compared to the level of the last stage (IV) at present. The Faculty of Physical Education formerly called (factory for heroes).

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# The Effect of using the Mantle of the Expert Strategy on Achievement and Decision-Making for First Grade Intermediate Students in Mathematics

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## ABSTRACT

*This study aims at measuring the effect of using the expert's mantle strategy on achievement and decision-making for first-grade intermediate students in mathematics. The researchers have followed the semi-experimental approach with a post-test. The study sample consisted of (42) students divided into an experimental group of (21) students, who studied using the strategy and an expert group and a control group, which consisted of (21) students. This sample studied in the usual way, and the two groups were matched in the extraneous variables.*

*The researcher prepared an achievement test consisting of (30) test items to measure students' achievement after completing the teaching. And is a list of decision-making skills that included (42) skills, and verified its validity and consistency, and applied the two tests to the students of the experimental and control group at the end of the experiment that lasted (10) weeks, and after analyzing the data using the statistical program of SPSS for two independent samples, the researcher reached:*

- 1. There is a statistically significant difference between the average achievement of the students of the research group at a level of significance (0.05) for the benefit of the experimental group that studied mathematics according to the use of the expert's mantle strategy in the achievement test.*
- 2. The existence of statistically significant differences at the level of (0.05) in favor of the experimental group in the decision-making scale.*

**Keywords:** expert mantle strategy, decision making.

## 1. INTRODUCTION.

### Research Problem

The research problem stems from the reality of current education in Iraq, which is considered a traditional education that depends on the use of ordinary methods based on cognitive theory in teaching and its focus on the material stipulated in textbooks and work to end it regardless of what the student acquires in terms of knowledge or experience and neglects the development of expertise and skills. It is necessary to form an individual capable of dealing with the amazing and accelerating scientific development. Therefore, it is necessary to search for special strategies that work to introduce an element of suspense in teaching mathematics and help students develop their imaginations and motivate them to think that helps them solve the problems they face in the future. Therefore, it is imperative to use modern teaching strategies that participate in improvement and development through which the student acquires continuous learning that is applicable, design and employment in other situations. Hence the research problem is to study "the effect of using the strategy of the expert's mantle in achievement and decision-making for middle-grade students in mathematics." More about this source text

### Research Importance:

In view of the information and technological revolution that the world is witnessing today that included all aspects of life and formed this information revolution, a challenge to the educational system and the need to reform it by absorbing the huge amount by preparing scientific cadres that take their active role. In

all its dimensions (Al-Kubaisi, 2008: p. 5), effective education in light of the knowledge explosion has become concerned with teaching students an appropriate amount of functional knowledge, and this in turn represents a basis for more fruitful learning and the provision of various means to help learners acquire new knowledge, strategies, theories and ideas. With some experiences and training on them, they can face their future life in the light of the rapid and successive changes (El-Sherbiny and El-Tantawi, 2011: p. 187).

Also, the students' weakness in mathematics is not hidden from any mathematics teacher, in addition to the spread of unfamiliar methods in recent years, represented by the students' lack of seriousness in studying and the increase in the percentage of private lessons, which led to a decrease in achievement in school subjects, including mathematics, which does not need only to study, but it needs reflection and focus, in addition to the complaints of parents, teachers and students themselves, as the teacher accuses students of their weakness in understanding and mastering the basics of mathematics in the previous stages. More about this source text Because mathematics is an accumulative subject in which subsequent information depends on previous information, so when the student has not mastered the previous learning, he will face difficulties in new learning, as well as being a scientific intellectual material that helps in developing various methods of thinking, the ability to organize, and accuracy of expression. Without mathematics, we cannot solve many problems in daily life as it helps us in solving the problems that face us (Abu Asaad, 2010). From the above, there is no doubt that this may increase the concerns of the teacher and serious educational institutions, so they will look for ways to help the student. The student is the focus of the educational process in the modern educational system, and among the methods supporting the teacher are multiple strategies, among which is the strategy of the expert cloak, as this strategy works on the interconnection of topics and their overlapping in their side relationships and is mostly based on several elements from different life domains and knowledge fields that unite together. In a specific context, to adopt a project through dramatic employment that takes into account mathematics, history, geography, culture and society (Al-Kurdi, 2010: p.5).

Therefore, the importance can be summarized in the following points:

- 1- Informing mathematics teachers on modern strategies and how to apply them, and knowing the role of each teacher and student in them to develop their teaching methods.
- 2- This study may benefit the supervisors, by working to establish workshops for teachers and training them to employ the strategy of the expert cloak in teaching..
- 3- The experience of using new teaching strategies in the educational process to increase achievement in mathematics.
- 4- It may be useful for curriculum designers to include modern strategies in different subjects.

#### **The current research aims to measure**

- 1- The effect of using the expert's mantle strategy on achievement for first grade intermediate students in mathematics.
- 2- The effect of using the strategy of the expert's mantle in decision-making for first grade intermediate students in mathematics.

#### **The research assumes:**

- 1- There are no statistically significant differences at the level of (0.05) between the average grades of female students in mathematics between the experimental group that is taught using the expert's cloak strategy and between the control group that is taught in the usual way in the achievement test.

- 2- There are no statistically significant differences at the level of (0.05) between the average grades of female students who study mathematics using the expert cloak strategy and the average scores of female students who study mathematics using the usual method of decision-making.

### The research study:

#### The current research has been limited to the following: -

- 1-Spatial and Human Boundaries:** First-grade intermediate students in Dhi Qar Governorate / Iraq.
- 2-Temporal boundaries:** This research is in the academic year 2019/2020, the first semester of it.
- 3 - Objective boundaries:** The first and second chapters of the mathematics book scheduled for the first intermediate grade (Jassim and others, 3rd edition, 2018) that includes mathematical topics (integers, relative numbers, polynomials, open sentences).
- 4- Determine terms.

#### First: The Strategy: Everyone knows it

**1- Al-Kubaisi(2008):** Any move or action that the teacher takes in the classroom, and these moves are regular and sequential, and for the teacher's movements to be effective, he demands teaching skills: activity and vitality. (Al-Kubaisi, 2008,118)

**2-Attia (2008)** "A set of practices and procedures that the teacher performs in order to achieve the outputs that reflect the goals he set, and thus it includes activities, methods, means, and evaluation methods that help to achieve the goals" (Attia, 2008, p. 341) .

**3- Procedural definition:** Coordinating and employing all educational learning activities for the purpose of reaching the achievement of goals, which is a set of methods, methods and capabilities.

#### Second: Mantle of the expert:

**1- Defined it (Heathcote, 2004)** as "an approach with resulting learning outcomes related to cognitive and social development, in addition to its relationship to the acquisition of life skills (Heathcote, 2004,15).

**2- Procedural definition:** a dramatic educational situation, in which the learner is exposed to many stages of exploration and investigation of a specific topic, where the subject is deepened through a dramatic situation and contributes to changing the roles that students take to be experts in the subject.

**Third: Academic achievement was defined by:**

**1- Alderman (2007) that:** the ability to accomplish what has been gained from educational experiences that were put for him (Alderman, 2007, p. 101)

**2- Procedural definition:** All that is achieved by female students of the first intermediate grade in mathematics measured by the final grade that they will obtain upon taking the achievement test prepared by the researcher.

**Fourth: Decision making known by:**

**1- (Al-Najdi and others, 2005)** "as an ordered intellectual process aimed at choosing the best alternatives and solutions available to the learner in a particular situation depending on what he has of certain criteria and values related to his choice" Al-Najdi and others: 2005, 226).

**3- Procedural definition:** a complex process that takes place through sound thinking to analyze alternatives and solutions, arrange them according to their preferences, and then choose the best solution.

**2.The theoretical Framework and Previous Studies****First: The Theoretical Framework:**

**Social constructivism:** It is a theory that descends from the constructivist theory and it is a theory that emphasizes the role of the other in building knowledge in the individual as well as it emphasizes the struggle in individual and social growth. This theory emphasizes the occurrence of fruitful exchanges between individuals, and this interaction helps the growth of the individual's knowledge structure and its continuous development, Vygotsky, who is one of the greatest advocates of social constructivism, believes that intellectual growth is a social and not biological nature, as Piaget sees it, and believes that learning can be a factor in intellectual growth, just as knowledge has a social formula, and the intellectual activity of the individual cannot be separated from intellectual activity. To the group he belongs to (Abd al-Salam, 2001).

**Mantle Expert Strategy**

There are many teaching models based on social constructivism theory, including this strategy, which is an approach with resulting learning outcomes that have a relationship to social and cognitive growth, in addition to its relationship to the acquisition of life skills, and It is a strategy based on interesting drama in the teaching and learning process, and includes its basic idea that students learn the curriculum as if they were an imagined group of experts discovering and learning by taking on special responsibilities (Heathcote, 2004).

**Elements of the Expert's Mantle:**

Heathcote and Bolton state that this strategy must be comprised of essential core elements and include:

**1- Project:** Students (learners) take responsibility for a project and gradually build in an imaginary world.



**2- The customer:** The students (learners) are interested in collecting the activities necessary to achieve the goals.

**3- Experts:** Students (learners) interact with themselves and imagine that they are acting as if they are experts working for the success of a project or task entrusted to them.

**4- Tasks:** Students engage all the time in order to complete the project (curriculum requirements) from within the imagined world.

**5- Location:** The position of the teacher is a participant and supportive of the students as a colleague, and he checks the students' sites in the project in order to build their point of view on the role in which they are playing.

**6. Reflection:** Students reflect on their work in order to produce knowledge, where the teacher gives students sufficient time to think and develop an appropriate plan before starting work and train them to examine possible alternatives and choose the most appropriate. (Heathcote & Bolton, 1995: 14).

Advantages of Mantle Expert Strategy in the Education process

The teacher's role within this strategy is an organizer of behavior, presenting information and being outside this strategy as an assistant. He no longer uses the voice of the expert, for today he is the assistant colleague, the teacher frequently engages in deftly jumping and sliding lightly and turning suddenly, a time that takes a few seconds where he keeps his turn, and quickly what is waived, then resumed, and it is possible to communicate with a word or even raise an eyebrow in a manner of ambiguity adopted between the two. This is something that is paradoxical. Use in a role generates a healthy relationship between teacher and student while actions, as well as speaking outside the role, already foreshadow the adventure of drama and its strength, both of which are essential (Heathcote, 2012: 35).

As for the students' role within this strategy, they represent and express their feelings so that they work to develop self-monitoring because they create a world in which they control and feel. In addition to that, each student represents the role of maturity and bears the responsibilities of adults so that their integration in the tasks assigned to them is based on their level of social integration, imagination and information. . Their involvement in the tasks gives them the pleasure of challenging the teacher with confidence, and provides them with the freedom to express responsibility, make decisions, and lead the group (Morgan and Sachston, 2012: 9)

### **Decision making**

A rational, rational process that crystallizes in sub-processes, namely research, comparison, or differentiation, and selection is the judgment process by favoring one side over the other or finding solutions to reach the approval or stability of something (Khater and others, 2001, p. 256).

### **Stages of Decision Making**

Decision making is a complex process with multiple stages

**1- Defining the problem:** accurately diagnosing the problem and developing appropriate solutions to that problem.

**2- Defining goals:** to guide the decision to the correct destination that is being achieved.

3- It is necessary to obtain the largest possible number of facts about the decision within the time limits imposed to obtain facts and information.

4- Searching for suitable alternatives to the problem, and this search process is not easy.

**5- Alternatives:** An evaluation and screening of those available alternatives is performed in order for management to choose the appropriate alternative.

**6 - Choosing the best alternative:** the decision-making stage. This stage is one of the most dangerous and difficult stages, since at this stage the appropriate alternative is chosen.

**7-Implementation and follow-up:** The most important items are the implementation and evaluation of the decision (Zaghoul and Zaghoul, 2009, pp. 324-p. 327)

### Previous studies

#### 1- Taylor study (2009)

The study conducted by Taylor aimed at knowing the extent of awareness of both students and teachers from the point of view of these participants between the approach of the expert cloak and the traditional education found in schools, as well as studying the effects resulting from this strategy that appear on the participants in this experiment and on teachers and schools, and the study came through Conducting focused interviews for teachers whose experience ranges from ten to twenty years and who have tested the mantle expert approach in the education process for a period of one to three years. As for the interviews with students, they were conducted with students between the ages of five to seven years, and upon analyzing the results showed agreement Both students and teachers believe that the Cloak expert's strategy approach is one characterized by encouragement, motivation and enjoyment, increasing their desire to learn and their ability to deal with educational learning situations.

#### 2- Hadi study (2013)

This study conducted by Hadi aimed to identify the effectiveness of the RISK program in acquiring concepts and decision-making to solve physical problems among fourth-grade students of science. The researcher followed the experimental approach. The test and scale was applied to 36 students of the control group and 35 students of the experimental group. For the benefit of the experimental group in the concept acquisition test and the decision-making scale for solving physical problems.

### 3.METHODOLOGY

#### First: Research Methodology:

The researcher relied on the quasi-experimental approach in the current research, in order to suit this type of educational and psychological approaches to the requirements of the current research and its procedures.

**Second: Experimental Design:**

In order to achieve the objectives of the research, the researcher adopted the experimental design with partial control (Daoud, 1990, p. 250). , a shown in the following figure:

**Figure No. (1) experimental design for the research**

The group	The two groups are equivalent	Independent variable	Dependent variable
Experimental		Mantle expert strategy	Post-test achievement
Control		traditional way	Make decision

This type of design requires the preparation and preparation of two equal groups in some of the variables that can affect the dependent variable, and the researchers were keen on the possibility of controlling these variables through the equivalence of the two research groups in (the chronological age of students in months, the students' previous achievement in mathematics, intelligence).

**Third: Research Society:**

The current research community includes all morning middle and high schools in Dhi Qar Governorate Center for the 2020-2019 academic year.

**Fourth: Research Sample:**

The researcher chose Dar Al-Salam Academy high school from among several secondary schools an intentional choice in order to know the researchers about the capabilities of this secondary and its advanced educational means in addition to its proximity to their place of residence, and this in turn is an essential element that helps the application of such modern strategies.

The school consisted of (42) female students in the first intermediate grade divided into two divisions, comprising Division (A) 21 female students, and Division (B) comprising 21 female students. Division (A) was selected as an experimental group that taught using the expert's mantle and Division (B) as a control group taught in the usual way.

All the students were taken to the class.

**Fifth: Equivalence of the two research groups:**

Although all the students are from the same governorate, at the same school, and from the same sex, the experimental and control groups were equal before starting the experiment, as the researcher extracted the arithmetic averages, standard deviations, and the calculated and tabular T value for the three variables.

**Table No. (1) Equivalence of the two research groups**

Statistical significance	T-value		Control		Experimental		group Variables
	Computation	Tabular	standard deviation	Arithmetic mean	standard deviation	Arithmetic mean	
Not a function <sup>a</sup>	0.034	5.506	36,609	169,598	46,445	168,36	age of the students
Not a function	5.12		9.337	74.43	9.035	76,33	Previous academic achievement
Not a function <sup>a</sup>	0.23		8.43	48.26	8.10	47.95	Intelligence

Table No. (1) shows that the two research groups are statistically equivalent, as there are no statistically significant differences, as the calculated T values are less than the tabular value of 5.506.

## **Sixth: The study requirements**

### **1- Scientific material:**

The researcher determined the scientific subject that she will teach and relied on the mathematics book scheduled for first intermediate grade students for the 2019-2020 academic year. Which included the fifth and sixth semesters covering topics (geometry, measurement, areas and volumes).

### **2- Formulating behavioral goals:**

After the researcher analyzed the content of the subject and specified in the fifth and sixth chapters of the mathematics book, she formulated (64) behavioral objectives, as she relied on the general objectives and levels of Bloom's classification, which are among the most common classifications. Teaching, and in light of the observations made, the researcher reformulated the goals and omitted them, until their final form became (60) a behavioral goal.

### **3- Preparing teaching plans:**

The researcher prepared the teaching plans for the two research groups according to the strategies used, as it prepared teaching plans for the experimental group using the strategy of the expert's cloak, and plans for the control group using the traditional method. The researcher presented these plans to a group of experienced and specialized arbitrators in light of the observations and proposals they submitted. The researcher made all the required adjustments, and then became ready for implementation.

## **Sixth: Research:**

**First: Achievement test:** The researcher prepared an achievement test in The light of the behavioral goals that she previously prepared and the content of the scientific material represented in the fifth and sixth chapters for the purpose of measuring the impact of the expert's mantle strategy compared to the usual method.

### **1- Test map:**

The researcher followed several steps to prepare the table of specifications, such as finding the relative weight of the subjects in which the student's achievement will be measured, knowing the number of pages for each topic of the test material in relation to other topics and the behavioral goals of the levels of the cognitive domain from Bloom's classification, as well as calculating the weights for the levels of goals depending on the number of behavioral goals in each A level according to the goals for each topic to the total number of goals. The researcher identified the number of test items with (50) items and distributed them on the cells of the specification table.

### **2- Test items and instructions:**

The researcher relied on one of the types of objective tests, which is multiple choice, and she informed the students of the need to carefully study the questions, read them correctly, not rush, and not leave any paragraph without an answer because it will be considered wrong.

**Test validation:**

The researcher used two types of validity for the purpose of verifying the validity of the test, namely, the outward validity and the validity of the content.

**a. Apparent validity:** The researcher verified the apparent validity of the test by presenting it to a group of specialists and experts in the field of teaching mathematics in its initial form consisting of (50) paragraphs, and she asked them to express their opinions on the test paragraphs, and in light of their observations, some of the paragraphs were amended, and the paragraphs obtained were accepted. Acceptance rate (80%) of the experts, and in light of the aforementioned, all the items are considered acceptable and valid for testing.

**B. Validity of the content:** This type of validity was achieved because the researcher had used the specifications table in developing the test items.

**3- Exploratory Experience:**

The researcher applied the test to an exploratory sample consisting of (40) female students of the first intermediate grade from the Hittin intermediate school from the research community that had not been appointed, and the goal of this application was to know the time spent by the students in answering the test as well as to ensure the clarity of the test, its paragraphs and instructions, and time The necessary answer was determined as (50) minutes as an average of time depending on the time spent in the answer to the fastest student, and the time it took for the slowest student, and the researcher benefited from this sample and the results of her test in determining the discriminatory strength and finding the coefficient of stability, difficulty and ease.

**5- Statistical analysis of the test:**

The researcher applied the test to (40) female students of the first intermediate grade, and for the purpose of analyzing the test vocabulary, The researcher corrected the answers and then arranged them in descending order, and the sample was divided into two upper groups of (20) students and a minimum group of (20) students in the class tests (tests) which are built to be applied to one of the school classes or the tests that are built to be applied to small groups whose number of students does not exceed the number of students of any class in the school (in this case, and because the sample is small, the same grades are divided 50% upper and 50% lower) Al-Kubaisi 2007. , P. 171).

The difficulty factor was calculated and was between (0.36-0.76), which is an acceptable ratio, as the percentages are acceptable if they range between (20-80)%. (Bloom, 1970, p, 66) The strength of paragraph discrimination ranged between (0.25-0.47), which is an acceptable percentage as well.

**6- Effectiveness of wrong alternatives:**

After the researcher completed the statistical operations and analyzed the responses of the pilot sample, it became clear that all the wrong alternatives for the achievement test items are where effective and of the attractive type.

**7- Stability test:**

The researcher reported from the exploratory sample to calculate the coefficient of stability, and repeated the test on the same sample after two weeks .

**8- Application of the test:**

After completing all the statistical procedures related to the test items, the post test was applied under the supervision of the teacher in charge of the experiment and with the help of other teachers as his assistants during supervision.

**9- Correcting the test:**

The researcher corrected the students' answers after taking the achievement test, so she gave one score for the correct answer, and zero for the wrong or abandoned answer, or the answer that gave more than one indication, and on this basis, the test's upper score was (50) marks, and the minimum score was zero.

**Second: Building a decision-making scale:**

The researcher took several steps to build a decision-making scale, including defining the goal of the scale, which is determining the ability of middle-class students to make decisions.

**The numbers of the decision-making scale formula in its initial form, included:**

- 1- Prepare five decision-making skills.
- 2- The scale consists of (53) paragraphs in its initial form, and many things have been taken into account during preparing the scale, including the paragraph should be simple, easy and expressive of experience or a specific position and direct in measuring the skill.

**Scale instructions**

The researcher determined the number of the scale paragraphs in its final form (42) paragraphs, and clarified the instructions for answering the scale paragraphs, in a simple and easy way that suits the first intermediate grade students.

**Scale correction**

The researcher selected a triple Likert scale consisting of three alternatives for each paragraph, which are (large, medium, few) and for the purpose of correcting the answers to the paragraphs of the decision-making scale, weights were given for the purpose of converting these three alternatives into a quantitative number for the purpose of making statistical operations easy, which are (3,2,1) Thus, the highest score for this scale is (150).

**Validate the scale****The researcher used two types of honesty****1- Apparent honesty:**

The researcher presented the scale to a group of referees, experts and educators, and amended the paragraphs that need to be modified. Thus, the scale in its final form consisted of (42) paragraphs.

**2- Validation of construction:**

The researcher took the following steps to verify the authenticity of the building:

- 1- Extracting the correlation coefficient, not the scale dimensions, with the total score of the scale, and they were all significant at the level of significance (0.5).
- 2- Extract the correlation coefficient between each paragraph of the scale and the dimension to which it belongs.

### 3. Apply the scale:

The researcher applied the scale on a sample of (50) female students from the research community in order to ensure the validity and clarity of the paragraphs and the time they took to answer, as the average answer for the scale paragraphs was (45) minutes and after making the correction for the students' answers and arranging them in descending order, the researcher By taking the highest (25%) of the grades to represent the higher group and the lowest (25%) of the grades to represent the lower group for the purpose of conducting statistical analysis and extracting the discriminatory power of the scale paragraphs. After that, the calculated value for the two groups was calculated, and it was found to be between (2.23-7.34). All these values are greater than the tabular value of (t), whose value is equal to (2.006). This value is considered acceptable and therefore all the scale paragraphs are distinct.

### Stability of scale:

The researcher used the Alpha Crownbach method to calculate the reliability coefficient for the decision-making scale, where it was found that its reliability coefficient is equal to (0.82), and accordingly, the scale reliability coefficient is good.

### Statistical means:

The researcher used several methods consistent with the research objectives, and also used the statistical program (spss) in processing the data.

## 4. FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Presentation and interpretation of findings, conclusions, proposals and recommendations

### First: Presentation of Results:

#### The first hypothesis:

- 1- There are no statistically significant differences at the level of (0.05) between the average degrees of achievement in mathematics between the experimental group that is taught using the expert's cloak strategy and between the control group that is taught in the usual way.

In order to verify this null hypothesis, and to know the significance of the difference between the achievement test scores, the arithmetic mean and the standard deviation of the post-test scores of the experimental and control groups were calculated in the field of achievement, and the spss statistical program was applied to test the statistical significance of the difference between two arithmetic averages of the scores of the students of the two groups in the post-achievement test. The arithmetic means of the experimental group was (20.86) and the arithmetic mean of the control group was (17.81) and the computed value of t reached (2.334), while the p-value reached (0.025) at the level of significance (0.05). And since the calculated t value is greater than the p-value values, the hypothesis is rejected The null hypothesis and the alternative hypothesis, i.e. there is a statistically significant difference between the two research groups in favor of the experimental group that studied using the expert cloak strategy, and the superiority of the experimental group students may be attributed to the fact that using this strategy in teaching increases the achievement of the students, as shown in the following table:

set	Sample volume	Arithmetic mean.	standard deviation	The computed t	p-value	The significance level is at 0.05
Statistical function	21	20.86	3.941	2.334	0.025	Experimental
	21	17.81	4.501			Control

**The second hypothesis:**

1- To verify the second null hypothesis, which states (there are no statistically significant differences at the level of (0.05) between the average scores of students who study mathematics using the expert's mantle strategy and the average scores of students who study mathematics using the usual method of decision-making).

To verify this hypothesis, and to know the significance of the difference between the students' scores in decision-making, the researcher used the SPSS statistical program for two independent samples, where the arithmetic mean of the experimental group was (120.71), and the arithmetic mean of the control group was (109.01), where the value of  $t$  was (4.149) while the value of  $p$ -value reached (0.000) at the level of  $p$ -value, this means rejecting the second null hypothesis, i.e. there is a statistically significant difference between the two research groups in favor of the experimental group that studied using the strategy in their decision-making As shown in the following table:

**Table No. (3) Test results the two independent samples to test the decision-making scale**

set	Sample volume	Arithmetic mean.	standard deviation	The computed t	p-value	The significance level is at 0.05
Statistical function	21	120.71	9.946	4.149	0.000	Experimental
	21	109.01	<b>7.892</b>			Control

**Second: Interpretation of the Results:**

The results of the research revealed the superiority of the experimental group students over the control group students in the post test that was applied after the end of the experiment. The researcher attributes this superiority to that Teaching using the expert's mantle strategy works to attract and attract the students' attention and gives the students opportunities for reflection, thinking, self-expression, discussion, interaction and negotiation with the group, not in order to achieve a common goal, In addition to that this strategy is based on realistic problems that are directly related to the student's life, making it more integrated. There so involvement in the problem, and the students generate a desire to solve it and take a correct decision for the problem.

**Third: Conclusions:**

In light of the researcher's findings, the following can be concluded:

- 1- The strategy of the expert's gown had a positive effect on increasing the achievement of the first intermediate grade students in mathematics more than the usual method.
- 2- The teacher's use of the strategy of the mantle of the expert in the process of teaching mathematics needs more time and effort than it is in the regular method..
- 4- Going to what the literature has confirmed, that the strategy of the expert's gown helps clarify and communicate information to the student in an interesting and effective manner.

**Fourth: Recommendations:**

In light of the research results, the researcher recommends the following:

- 1- The necessity of the interest of mathematics teachers and female teachers in using the strategy of the expert cloak.
- 2- The necessity of organizing training programs for supervisors and teachers of various subjects and training them in the use and numbers of the expert's mantle.



- 3- Interest in introducing and activating classroom and extra-curricular activities in schools and for all academic subjects.

#### **Fifth: Proposals:**

- 1- Conducting studies to identify the effect of the expert's mantle strategy on other subjects and other academic stages.
- 2- Conducting other studies to compare the strategy of the expert's cloak with other strategies emanating from the constructivist theory.
- 3- Study the effect of employing the mantle of the expert on developing other patterns such as problem-solving, comprehension, and scientific thinking.

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