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**Verbal Intelligence Among Secondary Stage Students  
and its Relationship to their Cognitive Motivation  
towards English Language in Jenin District**

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and its Relationship to their Cognitive Motivation  
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**Prepared by:**

**Ro'a Abdullah Khader Abu-Gharah**

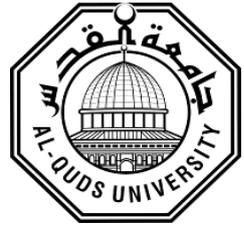
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### **Thesis Approval**

#### **Verbal Intelligence Among Secondary Stage Students and its Relationship to their Cognitive Motivation towards English Language in Jenin District**

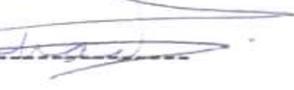
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## ***Dedication***

***From my deep heart, this work is dedicated***

*To the candle of my life, who burns every morning to light up my way, the one whose spirit always inspired me towards success, my beloved mother.*

*To my model in life, who works hard to provide me with everything , the one who always encourage, support and take care of me, my dear father.*

*To my first friend, the one who were impatiently waiting for me to fulfill this work but unfortunately he was arrested before seeing it, my brother Ahmad.*

*To whom I like to gather the happiness of the world and put it in front of them, my caring sisters, Marah, Wafa' and Farah.*

*To my lover, For his continuous encouragement, endless love and guidance , my fiancé Mu'men.*

*To my close cousin, who supports me morally despite of the distance, Ebtihaj.*

*Finally, To whom I bring the most sincere feelings, without you, I wouldn't be the person I am today, my faithful teachers.*

**Declaration**

I certify that this thesis submitted for the Master Degree is the result of my own work in design and research, except were otherwise acknowledged, and that this study or any part of the same has not been submitted for a higher degree to any other university or institution.

Signed .....

Name: Ro'a Abdullah Khader Abu-Gharah.

Date: 5 - 5 - 2019

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The researcher

## **Abstract:**

This study aimed at identifying the degree of verbal intelligence among secondary stage students and its relationship to their cognitive motivation towards English language in the light of gender, educational stream and Directorate of Education variables. The researcher adopted the descriptive correlation method due to its suitability to conduct such study. The study population consisted of (4605) males and females students in the 11<sup>th</sup> grade in Jenin District for the academic year 2018/2019, while a stratified cluster sample was chosen and composed of (119) males and (158) females constituting (6%) of Study population.

In order to achieve the objectives of the study, the researcher developed two questionnaires. one of them is to measure the degree of verbal intelligence consisting of 22 items, and the other to measure the degree of cognitive motivation towards English language and consisting of 20 items. The validity and reliability of the questionnaires were verified before implementing the study.

The results of the study revealed that the degree of the verbal intelligence among 11<sup>th</sup> grade students in Jenin District was medium with an arithmetic mean (3.24). The results also showed that there were statistically significant differences at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of verbal intelligence among secondary stage students in Jenin District due to gender variable in favor of females. Moreover, the results showed that there were no statistically significant differences at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of verbal intelligence among secondary stage students in Jenin District due to educational stream and the Directorate of Education variables.

As for cognitive motivation towards English language, the results of the study revealed that the degree of cognitive motivation towards English language among 11<sup>th</sup> grade students in Jenin District was medium with an arithmetic mean (3.22). There were statistically significant differences at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of cognitive motivation towards English Language among secondary stage students in Jenin District due to gender variable in favor of females. Moreover, there were no statistically significant differences at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of cognitive motivation towards English Language among secondary stage students in Jenin District due to educational stream and the Directorate of Education variables.

The results showed a positive correlation between the degree of verbal intelligence and the degree of cognitive motivation towards English language among 11<sup>th</sup> grade students in Jenin District. That means the higher the verbal intelligence, the greater the cognitive motivation towards English and vice versa.

In the light of the results of the study, the researcher recommended the need to develop strategies and educational methods that raise the degree of verbal intelligence among students and increase their cognitive motivation towards the English language. The researcher also recommended educators and supervisors to direct the attention of teachers to the importance of verbal intelligence and cognitive motivation towards English

language. Further, Conducting other researches on the relationship between verbal intelligence and cognitive motivation among students on different samples and using new variables.

الذكاء اللغوي لدى طلبة المرحلة الثانوية وعلاقته بدافعيتهم المعرفية نحو اللغة الانجليزية في محافظة جنين.

اعداد: رؤى عبد الله خضر ابو غرة

إشراف: د. جمال نافع

### الملخص

هدفت هذه الدراسة إلى معرفة درجة الذكاء اللغوي لدى طلبة المرحلة الثانوية وعلاقته بدافعيتهم المعرفية نحو اللغة الإنجليزية في ضوء متغيرات الجنس والفرع ومديرية التربية والتعليم. اعتمدت الباحثة المنهج الوصفي الارتباطي؛ لمناسبته لمثل هذه الدراسة. وتكون مجتمع الدراسة من (4605) طالباً وطالبة من طلبة الصف الحادي عشر في محافظة جنين للعام الدراسي 2018/2019، في حين تم اختيار عينة طبقية عنقودية تكونت من (119) طالب و(158) طالبة، أي ما نسبته (6%) من مجتمع الدراسة.

ولتحقيق أهداف الدراسة، قامت الباحثة بتطوير أداتين وهما عبارة عن استباننتين : إحداهما لقياس درجة الذكاء اللغوي مكونة من 22 فقرة، والأخرى لقياس درجة الدافعية المعرفية نحو اللغة الإنجليزية ومكونة من 20 فقرة ، حيث تم التحقق من صدقهما وثباتهما قبل تطبيق الدراسة.

وكشفت نتائج الدراسة أن درجة الذكاء اللغوي لدى طلبة الصف الحادي عشر في محافظة جنين كانت متوسطة حيث بلغ المتوسط الحسابي (3.24) ، كما أظهرت النتائج وجود فروق ذات دلالة إحصائية عند مستوى الدلالة ( $0.05 \geq \alpha$ ) في متوسطات درجة الذكاء اللغوي لدى طلبة الصف الحادي عشر في محافظة جنين تعزى لمتغير الجنس ولصالح الإناث، وكذلك بينت النتائج عدم وجود فروق ذات

دلالة إحصائية عند مستوى الدلالة ( $0.05 \geq \alpha$ ) في متوسطات درجة الذكاء اللغوي لدى طلبة الصف الحادي عشر في محافظة جنين تعزى لمتغير الفرع ولمتغير مديرية التربية والتعليم.

أما فيما يتعلق بالدافعية المعرفية نحو اللغة الإنجليزية، كشفت نتائج الدراسة أن درجة الدافعية المعرفية نحو اللغة الانجليزية لدى طلبة الصف الحادي عشر في محافظة جنين كانت متوسطة، حيث بلغ المتوسط الحسابي (3.22) ، كما أظهرت النتائج وجود فروق ذات دلالة إحصائية عند مستوى الدلالة ( $0.05 \geq \alpha$ ) في متوسطات درجة الدافعية المعرفية نحو اللغة الانجليزية لدى طلبة الصف الحادي عشر في محافظة جنين تعزى لمتغير الجنس ولصالح الإناث. كما أظهرت النتائج عدم وجود فروق ذات دلالة إحصائية عند مستوى الدلالة ( $0.05 \geq \alpha$ ) في متوسطات درجة الدافعية المعرفية نحو اللغة الإنجليزية لدى طلبة الصف الحادي عشر في محافظة جنين تعزى لمتغير الفرع و متغير مديرية التربية والتعليم .

وأظهرت النتائج وجود علاقة ارتباطية طردية بين درجة الذكاء اللغوي و درجة الدافعية المعرفية نحو اللغة الإنجليزية لدى طلبة الصف الحادي عشر في محافظة جنين ، أي كلما زاد الذكاء اللغوي زادت الدافعية المعرفية نحو اللغة الإنجليزية والعكس صحيح.

وفي ضوء نتائج الدراسة، أوصت الباحثة بضرورة تطوير استراتيجيات وأساليب تربوية ترفع من درجة الذكاء اللغوي لدى الطلبة وتزيد من دافعتهم المعرفية نحو اللغة الإنجليزية، كما أوصت الباحثة التربويين والمشرفين بضرورة توجيه أنظار المعلمين للاهتمام بالذكاء اللغوي والدافعية المعرفية نحو اللغة الإنجليزية، وكذلك أوصت الباحثة بضرورة إجراء المزيد من الأبحاث حول العلاقة بين الذكاء اللغوي والدافعية المعرفية لدى الطلبة على عينات تختلف عن عينة الدراسة الحالية وباستخدام متغيرات جديدة.

## **Chapter one**

### **Background of the Study**

- 1.1 Introduction**
- 1.2 Statement of the Problem**
- 1.3 Objectives of the Study**
- 1.4 Questions of the Study**
- 1.5 Hypotheses of the Study**
- 1.6 Significance of the Study**
- 1.7 Limitations of the Study**
- 1.8 Definition of Terms**

## **Chapter One**

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### **1. Background of the study**

#### **1.1 Introduction**

The world is facing a massive information revolution, as well as a rapid development of science and technology. This huge revolution has contributed many changes in various aspects of life. Undoubtedly, it affects students' lives and their educational institutions.

In order to overcome these complex changes that encounter students who are the most important element of the progress of our future, there is a need to develop their verbal capabilities due to its direct contact with the mean of communication which is the language. Moreover, students should be directed to benefit from this vast amount of information and employ it properly.

Al Hawamdeh (2016) stated that Language is considered one of Gods greatest blessing which man was gifted. It is also the primary need for every creature in this world.

Zedan et.al (2013) also stated that language plays a significant role in many aspects of our daily lives. Its role is not only restricted to communication, rather it expands into the branches of knowledge and human sciences.

Therefore, developing students' verbal intelligence is not in vain. This type of intelligence is considered one of the most frequently used in daily activities. Besides, it is the intelligence related with the ability to use language and express thoughts and opinions. Subsequently, we cannot expect to be able to interact or convey thoughts easily without the use of words (Halil, 2017).

As for motivation, it is a process that starts with a lack whether psychological or a drive aimed to satisfy a goal. Therefore, motivation is made up of needs (lacks) which bring up drives (stimuli) that then help in achieving the goals (Ritho, 2015).

Motivation is the key factor for success. In addition, it assists students to overcome any unfavorable learning conditions they face in learning process (Shousha,2018). Grajcevcic and Shala (2017) agreed with Shousha and they added that motivation is the most important factor in education.

Cognitive motivation is considered one of the motivations that affect individuals' mental process. It is also the power that pushes students to perform actions in order to fulfill goals. This type of motivation assumes that behavior results from continuous processing and analysis of information Bshoty ( 2015، بشوتي).

Since the spread of English language and being the dominant international language in different fields like trade, research, technology and tourism, it is taught as the only foreign language in Governmental Schools of Palestine. As a result, Palestinian students in general are poorly motivated to study English (Chen, 2005).

Motivation is perceived as ignored parts of English Language teaching, and teachers forget that it is an elementary part of learners' English Language activities (Takaloo and Ahmadi ,2017).

This study aims to identify the degree of verbal intelligence among secondary stage students and its relationship to their cognitive motivation towards English Language in Jenin District.

## **1.2 Statement of the Problem**

The sense of the problem stems from the work of the researcher as a teacher of the English Language when the researcher attended one of the meetings between the librarian and the students. It was noted that the librarian complained from the students' weakness to attend the school library, the decrease of students who participated in the reading challenge project which was approved by the directorate of education, and the scarcity of borrowing books related to English.

The researcher also noticed students' resentments of the language materials in general and especially the English language subject.

After reviewing the previous studies, the researcher has a concern to find out the relationship between the verbal intelligence among secondary stage students and their cognitive motivation towards English language in Jenin District.

## **1.3 Objectives of the Study**

This study aims at:

1. Identifying the degree of verbal intelligence among secondary stage students in Jenin District.
2. Identifying the degree of cognitive motivation towards English language among secondary stage students in Jenin District.
3. Identifying the role of some variables in the degree of verbal intelligence among secondary stage students in Jenin district.

4. Identifying the role of some variables in the degree of cognitive motivation towards English language among secondary stage students in Jenin District.
5. Identifying the correlation between the degree of verbal intelligence and the degree of cognitive motivation towards English language among secondary stage students in Jenin District.

#### **1.4 Questions of the Study**

The study attempts to answer the following questions:

1. What is the degree of verbal intelligence among secondary stage students in Jenin District?
2. What is the degree of cognitive motivation towards English language among secondary stage students in Jenin District?
3. Are there statistically significant differences in the degree of verbal intelligence among secondary stage students in Jenin District due to gender, educational stream, The Directorate of Education?
4. Are there statistically significant differences in the degree of cognitive motivation towards English language among secondary stage students in Jenin District due to gender, educational stream, The Directorate of Education?
5. What is the correlation between the degree of verbal intelligence and the degree of cognitive motivation towards English language among secondary stage students in Jenin District?

#### **1.5 Hypotheses of the Study**

**The first hypothesis:** There is no statistically significant difference at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of verbal intelligence among secondary stage students in Jenin District due to gender.

**The second hypothesis:** There is no statistically significant difference at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of verbal intelligence among secondary stage students in Jenin District due to educational stream.

**The third hypothesis:** There is no statistically significant difference at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of verbal intelligence among secondary stage students in Jenin District due to the Directorate of Education.

**The fourth hypothesis:** There is no statistically significant difference at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of cognitive motivation towards English Language among secondary stage students in Jenin District due to gender.

**The fifth hypothesis:** There is no statistically significant difference at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of cognitive motivation towards English language among secondary stage students in Jennin District due to the educational stream.

**The sixth hypothesis:** There are no statistically significant differences at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of cognitive motivation towards English language among secondary stage students in Jenin District due to the Directorate of Education.

**The seventh hypothesis:** There is no statistically significant relationship at ( $\alpha \leq 0.05$ ) between the degree of verbal intelligence and the degree of cognitive motivation towards English language among secondary stage students in Jenin District.

## **1.6 Significance of the Study**

The importance of the study stems from the fact that it links between two variables which are verbal intelligence and cognitive motivation. Moreover, this study may serve curriculum designers in designing curriculums that aim at improving verbal intelligence and cognitive motivation towards English

language among students. It is also expected to help teachers especially language teachers to employ various teaching methods which can improve their students' verbal intelligence and promote their cognitive motivation.

In addition, this study may draw the attention of the supervisors in directing teachers to employ strategies that enhance verbal intelligence and cognitive motivation towards English language. Finally, this research may be a reference for other similar studies.

### **1.7 Limitations of the Study**

This study is limited to the following limitations:

1. **Human limitation:** The sample of the study consisted of 11<sup>th</sup> grade students (males and females) in governmental schools in Jenin District.
2. **Locative limitation:** the study took place in governmental secondary stage schools in Jenin District.
3. **Temporal limitation:** the study was carried out in the first semester of the academic year 2018/2019.
4. **Topical limitation:** this study was limited to the terms and concepts that contained in it.

### **1.8 Definition of Terms**

**Verbal intelligence:** defined by Sreenidhi & Helena (2017) as the ability to use words efficiently, whether verbally (e.g., as a storyteller, speaker) or in writing (e.g., as a poet, playwright, editor). This intelligence encompasses the capability to manipulate the syntax or structure of language, the phonology or sounds of language, the semantics or meanings of language, and the pragmatic dimensions or practical uses of language.

**The researcher defines verbal intelligence** as the ability to use verbal and written language structures competently, and it is measured in this study by the students' degree in the verbal intelligence questionnaire.

**Secondary stage:** It's the stage that follows the basic education stage. It includes 11<sup>th</sup> and 12<sup>th</sup> grades. It is also divided in to two tracks which are academic education and vocational and technical education (Ministry of Education, 2018).

**Cognitive motivation:** Valler et.al (1992) defined cognitive motivation as the sense of comfort and satisfaction when learning, revealing and trying to understand something new.

**The researcher defines cognitive motivation** as the desire to research and acquire information from various sources, and it is measured in this study by the students' degree in the cognitive motivation questionnaire.

**English Language:** It is the compulsory foreign language course that is taught from primary stage to secondary stage in governmental schools of Palestine (Kesgin & Arslan, 2015).

**Jenin District:** It is one of the Palestinian cities which is located in the south east corner of Marj Ibn Amer. It has a population of (314.866) according to the Palestinian Statistical Center. It is under the Administration of the Palestinian Authority (Jenin Visitor's Center, 2018).

## **Chapter Two**

### **Literature Review and Related Studies**

#### **2.1 Literature Review**

##### **2.1.1 Intelligence**

##### **2.1.2 Verbal intelligence**

##### **2.1.3 Motivation**

##### **2.1.4 Cognitive motivation**

#### **2.2 Related Studies**

##### **2.2.1 Studies related to verbal intelligence**

##### **2.2.2 Studies related to cognitive motivation**

#### **2.3 Summary**

## **Chapter Two**

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### **Literature Review and Related Studies**

#### **2.1 Literature Review**

In this chapter, the researcher introduces the literature and previous studies related to verbal intelligence among secondary stage students and its relationship to their cognitive motivation towards English language in Jenin District. Mainly, this chapter composes of two parts. The first one highlights the literature review about intelligence, verbal intelligence, motivation and cognitive motivation. In the previous studies part, summaries of results of the related studies will be shown .After that, the researcher intends to have a link between her study and the previous studies in the same area.

##### **2.1.1 Intelligence**

Allah has given man intelligence that is the reason of notability among other creatures. Intelligence is fundamental in individual's life. Thus, researchers have curiosity and interest to explore the idea of intelligence (Ahvan & Pour, 2016).

The concept of intelligence was and will be a confusing concept. Although it looks like a comprehensible concept, but it's really not. The human intelligence is connected with individuals' experience, feeling and knowledge.

Besides, many researches and studies were done while an obvious definition of intelligence is not yet determined (Imlahi, 2015).

### **What is intelligence?**

Queensoap et.al (2014) stated that since intelligence is considered a complex field, Educators, authors and psychologists attempted to define it as they perceive. As a result, there is no definite definition for intelligence.

Albus (1991) defined intelligence as the capability to sense the environment, to make judgments and decisions, and to control behaviors.

Also, Gardener and Hatch (1989, p.5) stated that "intelligence is the capability to solve problems or to create products that are valued in one or more cultures."

According to Carter (2005), intelligence is the ability to acquire knowledge and comprehend.

In this research, intelligence is defined as the individuals' ability to use previous knowledge, experience and logic, in order to find a solution for the troubles encountered them.

### **Theories of intelligence**

Halstead (1976) stated that there are many theories that try to explain the concept of intelligence. Every theory has its own perspective and assumptions. In addition, these theories were classified in to four classes.

- 1. The unit- factor theory (One- factor theory)**
- 2. The two factor theory**
- 3. The three factor theory**
- 4. Multi-factor theory**

A brief summary will be introduced of each theory based on the previous studies and theoretical framework.

### **The unit-factor theory**

This theory visualized intelligence as a single factor. All the abilities were minimized in to a single capacity of intelligence. This would indicate that all the abilities were integrated. Subsequently, there were no differences among people. That's why, this theory was out of date (Pal et.al, 2004).

### **The two factor theory**

The impetus for this trend has come from Charles Spearman (the British psychologist) who has developed statistical instruments for exploring the nature of intelligence in the first decade of the twentieth century (Halstead, 1976). He also created the first psychometric theory of intelligence. His job in factor analysis flagged the way to apply statistical methods to the study of human intelligence (Williams et.al, 2003).

Spearman supposed that all intellectual responses in the cognitive field were resolvable into two factors. The first factor is named general factor and it is running through all aspects of intelligence. It is also called as (G) (general ability) .The other one is a specific factor and it is called as (S) (specific ability). Consequently, (G) factor is the power reservoir in the mind upon which the (S) factor gets its fuel (Halstead, 1976).

Williams et.al (2003) claimed that although it was the first psychometric theory, it was criticized by others. This theory was purely psychometric. Thus, it was failed to give a cognitive theory.

## **The three factor theory**

According to Halstead (1976), this theory was referred to Holzinger who worked with Charles Spearman for a long period. He assumed the presence of group factors as well as (G) and (S) factors.

## **The four factor theory**

There are many theories related to the four factor theory. They are described below.

### **1. Thurston theory**

He believed that Charles Spearman oversimplifies the concept of intelligence. Therefore, he expanded the concept of intelligence and he proposed that intelligence consisted of many mental abilities. Moreover, he carried out 57 experiments on one group of subject and he found out that instead of Spearman's (G) factor there are seven primary abilities (Pal et. al, 2004).

According to Halstead (1976), Thurston has secluded by his method (distinguishable cognitive functions) which he described as primary intellectual abilities.

Thurston has presented the following primary factors:

1. Deductive factor (D)
2. Inductive factor or reasoning factor (I)
3. Memory factor (M)
4. Spatial factor (S)
5. Word factor or word fluency factor (W)
6. Number factor (N)
7. memory factor (M)

Depending on these factors, Thurston created a brilliant test of intelligence famous as Test of Primary Mental Abilities (PMA) (Pal et.al, 2004).

## **2. Thorndike theory**

According to him, intelligence composes of a great number of combined abilities which correspond to interconnections within the brain. The more the number of these interconnections, the more will be the intelligence level of the person (Halstead, 1976).

Thorndike has divided the intellectual activity into three kinds as cited in (Pal et.al, 2004).

1. Social intelligence
2. Concrete intelligence
3. Abstract intelligence

## **3. Multiple intelligence theory**

It was evolved by Howard Gardener in the late 1970s and early 1980s. He refuted the traditional idea of human intelligence which described intelligence as a single dimension (Davis, 2011). He confirmed that individuals' intelligence is better characterized as a group of abilities and intellectual proficiencies (Ebadi & Beighzadeh, 2016).

His supervisions of persons who have some extraordinary abilities in mental capacity and they did not obtain a high score on the IQ test helped him to create this theory. Hence, he found that intelligence composes of many capacities. In addition, people have distinctive patterns of strengths and weaknesses in intellectual abilities. As a result, they study, learn and teach in different ways (Al-Salameh, 2012).

According to Gardner, this theory deals with intelligence as multiple dimensions. Each individual has at least eight kinds of intelligences and every individual is born with these capabilities, but they differ in the degree of the intelligence (Ebadi & Beighzadeh, 2016). He also stated that these intelligences are not separated, but rather combine to complete each other (Imlahi, 2015).

Initially, Gardner divided intelligences into seven types. These types are verbal intelligence, intrapersonal intelligence, musical intelligence, logical-mathematical intelligence, visual-spatial intelligence, bodily and interpersonal intelligence. Later, he added two types which are naturalistic and existential intelligence (Wilson, 2018).

Kandeel (2016) presented a brief definition of the intelligences:

- 1) Verbal intelligence:** the ability to use language or other languages to fulfill goals.
- 2) Logical intelligence:** people with strong logical mathematical intelligence enable to use numbers, logic and relations. In addition, they can conduct mathematical calculations and carry out scientific explorations.
- 3) Visual-spatial intelligence:** the ability to perceive visual patterns, and people with high visual-spatial intelligence are sensitive to colors, fonts, shapes and the place.
- 4) Bodily intelligence:** Using parts of the body to express ideas and feelings solve problems and create products.
- 5) Self-intelligence or intrapersonal intelligence:** the ability to know yourself, strength and weak points, being conscious of your needs, fears, capabilities.

**6) Social intelligence or interpersonal intelligence:** the ability to perceive others' emotions, intentions and requirements.

**7) Musical intelligence:** people with strong musical intelligence have the ability to recognize sounds, rhythms and pitches.

**8) Natural intelligence:** the ability to identify and divide types of things .For example, plants and animals, and comprehend the parts of the physical environment.

**9) Existential intelligence:** A lot of researches neglect this type of intelligences. Indeed, they do not use it. People who own this intelligence always pose questions about the meaning of life and death and they practice meditation.

### **The history of intelligence tests**

Paul Broca and Sir Francis Galton were the first to think about the idea of measuring intelligence. They believed that through measuring the size of the human skull, they could define intelligence. Then, Wilhelm Wundt tried to measure intelligence by using introspection (the examination of one's own mental and emotional process). Although his idea and thoughts are out of date now, but it has an important part in the history of intelligence quotient test (Classical Intelligence Report, 2015).

In 1905, Alfred Binet and Theodore Simon created intelligence scale called the Binet Simon intelligence scale which is considered the first intelligence test. After that, Lewis Terman attempted to review the earliest intelligence scale and it was called Stanford-Binet intelligence test. As a result, the idea of intelligence quotient, which is the ratio of computed mental age to chronological age multiplied by 100, was appeared (Nelson, 1998).

## **Types of IQ test**

Imlahi (2015) mentioned the main types of IQ tests:

### **1. Raven Progressive Matrices (RPM)**

It is used to analyze the capability of solving perplexing information. The applicant was given a set of images and sketches in the form of 6×6 or 4×4 with a missing one, and then he or she has to find out the relationships of these figures to discover the last one.

### **2. Stanford-Binet Intelligence Scale**

It is considered the oldest and most updated test. This type of test evaluates verbal and non verbal intelligence as well as knowledge, working memory and visual spatial intelligence.

### **3. Wechsler Intelligence Scale**

This scale was invented by the American psychologist (David Wechsler) who thought that intelligence is not about amount and capacity, but about performance of the individual. Therefore, he added processing speed ability to his test. In order to include all the ages, he introduced two tests which are Wechsler Intelligence for Children and Wechsler Adult Intelligence Scale.

#### **2.1.2 Verbal intelligence**

Verbal intelligence is considered one of the basic components of Howard Gardener's theory. This type of intelligence is widely focused in school curriculums and can be recognized through clear indicators like memorizing quickly, constant desire to read books and telling anecdotes and jokes (Gardener, 1983).

Martinez et.al (2012) defined verbal intelligence as the capability to use language for achieving specific aims.

Kentab (2016) also defined verbal intelligence as the ability to investigate information including spoken and written language like verbal communications and books. It also means the sensitivity to sound structure and how language and words function.

The researcher defines verbal intelligence as the ability to use verbal and written language structures competently.

Visser et.al (2006) maintained that verbal intelligence field looks to include various specific abilities. The American psychologist Thurston, for instance, distinguished between his two primary mental abilities which are verbal comprehension and word fluency, while Gardner composed both under the field of verbal intelligence. Verbal comprehension comprised the capability to comprehend the meaning of spoken or written passages. Word fluency includes the ability to give many examples of words according to some criteria. For example, words started with specific letters.

**The general aspects of verbal intelligence:(Shearer & Karanian, 2017)**

- 1) Having internal speech skills.
- 2) Having reading skills.
- 3) Having listening skills.
- 4) Having writing skills.
- 5) Having speaking skills.

**Characteristics of high verbal intelligence learners:**

Hali (2017) mentioned the characteristics of learners who have verbal intelligence as follows:

1. They can write their daily experiences and trials.
2. They have the ability to demonstrate their thoughts and ideas easily.

3. They can produce much vocabulary and employ it correctly than pupils at their age.
4. They constantly read books, articles, stories, novels and newspapers.
5. They always try to give their feedback and ideas to others.
6. They like discussions.
7. They enjoy learning foreign languages.
8. They have curiosity to find out the origins of meaning.
9. They are sensitive to structure and they can form grammatically correct sentence.

Tamilselvi and Geetha (2015) added that learners with high verbal intelligence are good talkers and speakers. They also have a good memory. In addition, they like to acquire information through language and words. Moreover, they like oral and written methods and they are sensitive to sounds of words and meanings.

### **Verbal intelligence activities**

There are many activities that based on verbal intelligence. For example, choral speaking, storytelling, retelling, creative writing and reading activities, lecturing, dialogue ,discussion, publishing, crossword puzzles and listening to tapes (Tamilselvi & Geetha, 2015).

Chen (2005) stated that people with high verbal intelligence usually select jobs like language teachers, editors, librarians, translators, lawyers, reporters, Journalists and interpreters. Visser et.al (2006) added that they like to be poets, writers and public speakers.

### **Ways to develop students' verbal intelligence**

Hali (2017) reported that there are many ways that can develop students' verbal intelligence such as playing cross word games, memorizing poems,

stories and songs. In addition, reading books and daily news papers. Browsing book stores as well as keeping notebooks are good methods to promote students' verbal intelligence.

### **2.1.3 Motivation**

The term of motivation is not simple to determine. The reason for this, There are different schools of thoughts and every school viewed the concept differently. For example, the behaviorists perceived motivation as an expectation of rewards. Cognitivests visualized the concept in regarding to individuals decision. Whereas, the constructivists viewed it in relation to social context (Al-Tamimi, 2009).

Redondo & Martin (2015) reported that the variety of the definition indicated the difficulty in describing the term. And they list problematic aspects of the concept in their study.

1. Motivation cannot be noticed immediately, so it is not a physical quality.
2. Motivation is not the only peace of the complex mechanism which moves individuals' behavior.

Amirkhanova et.al (2016) maintained that motivation derived from the Latin word "move", and it is the energy that makes someone to do something.

According to Alkaabi et.al (2017, p. 193), motivation is" the source or the power that provides the impetus for human beings and sustain good directed action."

Also, Brouse et.al (2010) defined motivation as the push to conduct a particular action.

Motivation is a psychological response in which the learners get advantages and reward (Salikin et.al, 2017).

In this study, motivation is defined as the driving force that direct individuals' conduct.

## **Characteristics of motivation**

Kondalkar (2007) mentioned the main qualities of motivation:

1. Motivation is considered as a psychological phenomenon. It is the interior wish for a person to fulfill something more.
2. Motivation is a constant process. Human needs are changeable and continuous. If one need is satisfied, the other need appears. Thus, people push to work and the constant chain is emerged.
3. The anticipated perceived value from a behavior conduct is the primary cause for motivation.
4. Persons are motivated by positive motivation. It refers to the stimulants offered by the institution to fulfill effectively. There are two types of incentives. The first is monetary. For example, payment for bonus. The other can be non monetary like recognition and upgrade.

## **The sources of motivation**

Qashoa (2006) mentioned the main sources of motivation as follows:

1. Learners everlasting desire to learn.
2. The teacher.
3. Success in the task.

## **Types of motivation:**

Al -Sohbani (2014) listed two types of motivation:

**Intrinsic motivation:** Learners' self power to do a task without any threat or push. For example, reading a book or a novel which are not required in the free time. This type is stronger than the other kind. Amirkhanova et.al (2016) added that the one who motivated intrinsically does not need rewards or prizes and he behave voluntarily.

**Extrinsic motivation:** Doing a task in response of external rewards, motives, benefits and prizes, or to avoid punishment or pass the exam. Grajcevcia and Shala (2017) stated that students who have extrinsic motivation involved in tasks due to external prizes and rewards. As a result, they employ surface learning and do not engage in tasks for which they foresee no prizes or rewards.

### **The importance of motivation**

Motivation has an important effect in the education process. Without motivation, learning process is not occurred. Additionally, It rises the level of individuals' performance and production. People with a high degree of motivation perform well in their work. Consequently, learners should be motivated by monetary and non monetary incentives (Rehman & Haider, 2013).

Moreover, it decreases individual's absenteeism. Low motivated people have a tendency of absenteeism because of being unmotivated and this cause dissatisfaction and poor quality. Finally, Motivation is the impetus that provides students with energy. It also creates a healthy and relax atmosphere (Kondalkar, 2007).

### **Theories of motivation**

#### **1. Maslow's Hierarchy of Needs Theory**

Abraham H. Maslow has established a hierarchy of needs pyramid in 1954. He classified it in to five needs from the lowest to the highest level (Adeile & Abraham, 2013). Kondalkar (2007) and Pardee (1990) introduced a brief definition of each need as presented below.

**Psychological needs:** it is the first need in the hierarchy of needs and considered the strongest need as compared to the other needs. For example,

clothing, shelter and hunger. They are the most basic needs and they are essential for survival.

**Safety needs or security needs:** It is the second need in the hierarchy of needs and it is related to protection against threat, danger and deprivation.

**Social needs:** It is the third need in the hierarchy of needs. When the security need is satisfied, the social need emerges. Every person like to be a member of a social group where find their emotional need of love, warmth and friendship.

**Esteem need or Ego need:** It is the fourth need in the hierarchy of needs. It is connected with self-confidence, self-esteem, need and strength.

**Self actualization need:** It is the last need in the hierarchy of needs and it appears only after all other needs have been satisfied. It is the desire to perceive one's capabilities for constant self growth and the need to become more and more of what one is.

## **2. Herzberg's Two Factor Theory**

It is called the Two-Factor theory because it is consisted of two independent groups of factors. The first factors named motivation factors. While the other factors named Hygiene factors (Castellanos, 2014).

This theory appears as a consequence of a study about job satisfaction conducted by Herzberg Manser and Snyderman when the sample was asked to clarify their feeling in the workplace. The participants stated that when they feel good they names internal contents like achievement. On contrast, they states external contents like work conditions when they feel bad. According to the finding of the study, the factors that affect job satisfaction are classified in to two groups. The first on is hygiene factors (external factors). The other is internal factors (Kandalkar, 2007).

Dartey-Baah (2011) added that there are two types of factors related to Herzberg's two factor theory.

### **Motivational factors**

These factors have a positive impact on job satisfaction. These factors are: achievement, advancement, possibility of growth, Recognition, work itself and responsibility.

### **Maintenance factors or Hygiene factors**

They are called dissatisfiers because when they exist, they do not stimulate in a strong way. However, when absent they dissatisfy. These factors are: Employ policy and administration, technical supervision, interpersonal relationship with superiors, interpersonal relationship with peers, and interpersonal relationship with subordinates, Salary, job security, personal life, working condition and status.

## **3. Theory X and Theory Y**

### **Theory X**

This theory proposes that workers are passive and they do not like to work. They also lack hope and dislike to be leaders, they prefer to be followers. Due to these propositions, workers must be threatened and punished to fulfill aims. Therefore, this theory is negative in view (Kayodi, 2013).

### **Theory Y**

This theory is positive in view. Newton (1980) listed the propositions of the theory.

1. It is natural to spend mental and physical effort in order to achieve goals. Self direction and self control are the means for bringing about effort towards the objectives of the institution.

2. Adherence is a function of prizes and rewards related to the fulfillment of goals.
3. The capability to practice a relatively high level of imagination, visualization and creativity.

#### **4. Vroom's Theory (Expectancy theory)**

It was created by Victor Vroom in 1964. It is one of the process theories. According to the theory, the power of a tendency to behave in a specific way relies on the strength of an expectation that the behavior will be followed by a specified result and on the attractiveness of that result to the person (Priyat, 2014).

#### **The Way in which the expectancy theory work**

Firstly, all persons and employees have aims and they have the desire to fulfill these goals. That's why; they like to work in institutions. These aims can be achieved by work out comes and rewards . In addition ,these organizational rewards depend on the individual performance of the employee or the worker. Finally, the perception of the opportunities by the individual which affect on his will lead to high performance is important. Therefore, there are four variables that concern in motivation which are individual effort, individuals' performance, organizational rewards and work out comes and personal goals (Priyat, 2014).

#### **5. ERG theory**

Clayton conducted many studies and researches on Maslow's Theory of need hierarchy. He maintained that instead of the five needs in Maslow's Hierarchy. There are three primary needs of human being.

**E- Existence need:** they are related to Maslow's bodily and safety needs.

**R-Relatedness:** It is the willingness of a person to maintain interpersonal relationship. It is related to Maslow's social need.

**G-Growth:** it is an internal desire for individual progress; it is related to internal component of esteem need. For example, self –actualization, self -esteem, need and achievement (Kondalkar, 2007).

### **Porter and Lawler Theory**

Porter and Lawler's theory of motivation include all motivation theories. It was developed by L.W Porter and E.E Lawler, so it is called Porter-Lawler Model. This theory was expanded from Vroom's Expectancy theory. According to this theory, satisfaction is determined by the difference between the real rewards and rewards that are perceived by the person. Indeed, people compare their rewards with other who did the same work. In case of equal conditions, person will satisfy. If not, the sense of the dissatisfaction is occurred. They divided the rewards into two types. The first type is intrinsic rewards, whereas the other is extrinsic rewards (Turabic & Baskan, 2014).

### **Simple ideas to improve learners' motivation**

Rehman and Haider (2013) mentioned some ideas to develop learners' motivation.

#### **1) Adopt a supportive style for learners**

Giving necessary support and guidance stimulate and improve the learning process. Teachers should let their students to choose the task and help them to fulfill it. This gives them impetus and provides them with a sense of control.

#### **2) Clarify the objectives**

Teacher should explain the objectives of the assignment or the task. Obvious objectives and instructions stimulate students towards the objectives.

### **3) Create a healthy atmosphere**

The environment influenced learners' motivation. Teacher can make a non-threatening and relax atmosphere by appreciating learners in the class and understanding student's problems.

### **4) Organizing field trips**

Students learn a lot of things inside the classroom. However, they sometimes need to refresh their learning. Therefore, school should organize field trips according to their curriculum.

### **5) Provide different experiences**

Every student is born with unique capabilities, so students are learned in different ways. In order to keep all students motivated and attracted, teacher should use variety of teaching methods and activities that are related to students' interests, culture and experiences.

Sultan (2017) added ideas to enhance learners' motivation as introduced below.

#### **1) Develop positive competition in students**

Students will be motivated if they compete and learn from each other. Competition increases learners' knowledge.

#### **2) Rewards**

Rewards are considered effective in improving students' motivation. Teacher can motivate students by offering simple rewards. For instance, stickers and sweets.

### **3) Give praise**

Encouragement has an effective impact on students at all ages. They also like to be praised for a job well done.

### **4) Knowledge about learners**

When teachers know more about their students even just their names, students feel that they are motivated and they have the sense of love and loyalty towards the teacher.

### **5) Giving feedback and offer opportunities to improve**

Feedback is important in any learning process. It gives students the ability to identify their weak and strong points. If the teacher provide his students with feedback where they went wrong and help them to overcome their weak points, they will be motivated.

## **Motivation and language learning**

Motivation plays an important role in all forms of success and language learning (Mulaice & Obralice, 2016). There are many factors that affect students' language acquisition which are age, personality and motivation. Motivation is considered the most important one (Mahdi, 2012).

Tulgare (2018) added that motivation is a decisive element in various fields of human life and language learning. However, it has received increasing attention in learning students.

According to Jin (2014), motivation is the primary source in the success of language learning and has influence in teaching and learning English language.

Al Tamimi (2009) asserted that motivation of second or foreign language learners refer to two kinds of motivations. The first one is instrumental which

means learning the language to pass the exam or because someone else learned it, the other type is integrative motivation which means learning the language due to internal wish or to learn more about the language.

Students who do not have instrumental or integrative motivation face difficulty in learning any language (Mahdi, 2012).

#### **2.1.4 Cognitive motivation**

John & Petty (1982) stated that cognitive motivation is one of the important topics in cognitive psychology. It has a great influence on individuals' life. In addition; it helps individuals to solve their problems and avoid the dangers and circumstances that encountered them. Moreover, this type of motivation can assist students to overcome the challenges in different aspects of life.

Shaqura (2002 ، شقورة) also defined cognitive motivation as the constant need for the individual to acquire information, and overcome risks to obtain it. It is the greatest and the highest level of motivation.

In this research cognitive motivation is defined as a driving power that stimulates individuals to conduct behaviors in order to fulfill goals.

The cognitive motivation differs from other orientations in its focus on the learners' vitality and activity. Also, it involves learners in organizing learning experiences in order to achieve knowledge balance (Graham & Galan, 1991).

Cognitive motivation can be identified through the students' choice of classroom activities i.e. when students start the activity if given the opportunity and intensity to perform the activity. Moreover; student's feeling during the activity (Weiner, 1992).

### **Sources of cognitive motivation:**

Rayan and Deci (2000) mentioned the main sources of cognitive motivation:

**Internal sources:** In this case, students are self-motivated to acquire and expand their knowledge.

**External sources:** Students are struggling to acquire knowledge in order to achieve success, obtain a certificate or rewards.

### **Components of cognitive motivation:**

Al-Ahmadi (2006، الأحمدي) listed the major components of cognitive motivation:

1. Cognitive determination: the individuals' continuous desire to participate in activities that require deep thinking.
2. Cognitive complexity: the individuals' desire to conduct complex mental activities.
3. Cognitive trust: the individuals' confidence in integrating in mental activities.

### **The characteristics of highly cognitive motivation students**

Firstly, mastering knowledge and has an interest in cultural and scientific aspects. Additionally, highly cognitive motivation students overcome challenges and risks in order to acquire knowledge. They also have a curiosity to find everything related to knowledge. Furthermore, they use different search strategies (2007، هيازة).

## **2.2 Related Studies**

### **2.2.1 Studies Related to Verbal Intelligence**

Al Jabouri ( الجبوري، 2018 ) conducted a study tried to find out the effect of verbal jokes on developing linguistic intelligence of second intermediate graders in Arabic Language. The researcher used the experimental method. The study has been applied on a purposeful sample composed of two groups with (70) students and they were distributed as an experimental group (35) and a control group (35). The researcher used a linguistic intelligence test as a main instrument. The results showed statistically significant differences between the means of the experimental group and the control group in the post test of verbal intelligence in favor of the experimental group. The results also indicated statistically significant differences between the means of the experimental group in the pre-test and the means of the post test for the same group.

Zoghi (2017) conducted a study aimed to investigate the relationship between verbal intelligence and visual, auditory and kinesthetic preferences of Iranian EFL learners. A cluster sample of 100 females students in Senior High School EFL in Tabriz were took part in this study. In order to achieve the purpose of the study, the researcher used VAK questionnaire that were developed by Victoria chislett and a verbal intelligence test. The results showed a significant relationship between verbal intelligence and visual preference of Iranian EFL learners. In addition, there were a negative relationship between verbal intelligence and auditory preferences of the respondents. Finally, there were a significant relationship between verbal intelligence and kinesthetic of the respondents.

Al-Hawamdeh (2016) accomplished a study aimed to investigate the effect of exploration and thinking loudly strategies on analytical reading and verbal

intelligence among Second middle Grade female students in Najran. A Semi-experimental method was adopted. The sample of the study composed of 60 female students in Motawseta El Sa'baa School in El Fahd district. They are divided in to three groups. The first one is experimental group who studied with exploration strategy. The Second one is experimental group who studied with thinking loudly strategy. The final group was the control group. Also, each group has 20 students. To achieve the objective of the study, the researcher had prepared two instruments which are analytical reading test and verbal intelligence questionnaire. The results indicated that there were a positive effect of exploration and thinking loudly strategies on analytical reading and verbal intelligence.

Al-Samerai' and Muhammad (2016) conducted a study aimed at identifying the relation between written expression and verbal intelligence among sixth grade preparatory students. The researchers used the descriptive correlation study. In order to achieve the purpose of the study,(240) students (males and females) from sixth grade preparatory Humaities section were selected randomly from Public Schools related to the General Directorates of Education in Baghdad. Besides, The researchers adopted a subject for expression and standards to correct it. Moreover, the researchers themselves prepared a questionnaire to measure the verbal intelligence. The results indicated that there were statistically significant differences at the level ( $\alpha \leq 0.05$ ) in written expression among sixth grade preparatory students in favor of females. Furthermore, there were statistically significant differences at the level ( $\alpha \leq 0.05$ ) in verbal intelligence among sixth grade preparatory students in favor of females. In addition, there was a positive relationship between written expression and verbal intelligence.

Fortuna (2016) accomplished a study to figure out the student's written verbal intelligence and English mastery among eighth grade students in State Islamic

Junior High School 1 Gambut. The researcher used the descriptive method. The sample of the study composed of 92 eighth grade students in State Islamic Junior High School 1 Gambit. In order to gather the data, the researcher prepared a questionnaire to measure the degree of student's verbal intelligence as well as a test to measure student's English mastery. The results of the study indicated that the degree of verbal intelligence among eighth grade students in State Islamic Junior High School 1 Gambut was medium and student's mastery English as well.

Momani (2016) conducted a study aimed to explore the degree of verbal and spiritual intelligence among Al-Balqa' Applied University students in the light of some variables. The Sample of the study consisted of (60) undergraduate students (30 of them were new students and the rest were expected to graduate) at University College of Ajloun who were chosen randomly for the academic year 2015-2016. The researchers have designed a questionnaire consisted of 25 items to measure the level of verbal intelligence as well as a scale to measure the level of spiritual intelligence. The major results of the study showed that there were statistically significant differences at the level ( $\alpha \leq 0.05$ ) in the degree of verbal intelligence due to the academic year variable in favor of students who were expected to graduate. Additionally, there were statistically significant differences at the level ( $\alpha \leq 0.05$ ) in the degree of spiritual intelligence due to the academic year variable in favor of students who were expected to graduate. There were no statistically significant differences in verbal intelligence due to gender variable and in spiritual intelligence as well.

Hasan and Farah (2016) conducted a study entitled verbal intelligence among children of the pre-school education in the state of Khartoum. The researchers tried to find out the effect of these variables (gender, the order of the child in the family, availability of cultural factors at home) on verbal intelligence. The

researchers used descriptive method due to its suitability for conducting such a study. The purposive sample of the study was (59) children from Kindergarten College of Education for the academic year 2014-2015. Howard's Gardeners verbal intelligence scale for children of pre-school education was used to collect the data. The results of the study revealed that the degree of verbal intelligence among children of the pre-school education in the state of Khartoum was high. Furthermore, there were no statistically significant differences at the level ( $\alpha \leq 0.05$ ) in verbal intelligence due to gender variable. There were also no statistically significant differences at the level ( $\alpha \leq 0.05$ ) in verbal intelligence due to the order of the child in the family variable. Finally, There were statistically significant differences at the level ( $\alpha \leq 0.05$ ) in verbal intelligence among children of the pre-school education in the state of Khartoum due to the availability of cultural factors at home variable in favor of children who had both computer and books at home.

Subeih (2016، صبيح) conducted a study aimed at investigating the effect of using a strategy based on communicative language skills on teaching Arabic language in improving 5<sup>th</sup> grade students' verbal intelligence and written expression. The study has been applied on a purposeful sample consisted of 4 sections with (126) students males and females. The researcher used the experimental method with a quasi-experimental design in her study. To achieve the purpose of the study, the researcher prepared a teachers' guide to explain how to use a strategy that is based on communicative language skills in teaching Arabic language. A questionnaire was also used to measure the verbal intelligence as well as a test for written expression. The findings of the study revealed that there were statistically differences in the fifth grade students' verbal intelligence in Arabic language due to the teaching method in favor of the experimental group. In addition, there were no statistically differences in the fifth grade students' verbal intelligence in Arabic language

due to the students' gender and interaction between method and students' gender.

Abdullah and Kathem (2013) led a study to identify the level of verbal intelligence among college of education students. The researchers used the descriptive method to carry out the study. A stratified random sample consisted of (180) students (males and females) from two Colleges of Education in University of Kerbela took part in applying the study, and they were distributed as: (63) students (16 males and 47 females) from College of Education for Pure Sciences and (117) students ( 28 males and 89 females) from College of Education for Humanities. In order to measure the verbal intelligence, the researchers adopted the verbal intelligence scale prepared by Armstrong which consisted of 10 items. The results of the study showed that the degree of the verbal intelligence among College of Education student was medium. Moreover,

There were statistically significant differences in the degree of verbal intelligence due to the College of Education in favor of College of Education for Humanities students. Finally, there were statistically significant differences in the degree of verbal intelligence due to gender variable in favor of males.

Luwel et.al (2013) accomplished a study to identify the extent to which verbal and performance intelligence contribute to children's strategy selection and execution in the context of a numerosity judgment task. The sample of the study was 120 seventh grade students (52 boys and 68 girls) from all private schools in Greece. The result revealed that verbal intelligence is a predictor for all parameters of strategic competence. While, performance intelligence demonstrated a single part of the variance above and beyond verbal intelligence in the speed of strategy execution.

Sukker and Ghanim (2011 ، سكر وغانم) carried out a study to figure out the verbal intelligence among the students of middle School. The sample of the study was (400) students from the preparatory stage in Baghdad (Al Karkh Directorates of Education) for the academic year 2010-2011. The researchers used cluster method due to its suitability for the study. In order to collect the data, the researchers adopted a verbal intelligence scale consisted of 13 items prepared by Gardener. The results of the study showed that the degree of verbal intelligence among students of middle Schools is medium. Besides, there were statistically significant differences at the level ( $\alpha \leq 0.05$ ) in verbal intelligence due to gender variable in favor of females. Moreover, there were statistically significant differences at the level ( $\alpha \leq 0.05$ ) in verbal intelligence due to specialization variable in favor of Humanities specialization.

Al Ruweili (2011) accomplished a study aimed at identifying the degree of verbal intelligence and cognitive motivation among gifted students in writing in Al -Jouf region, Saudi Arabia. It also aimed to identify the impact of both gender and educational level on verbal intelligence and cognitive motivation. Besides, this study examined the relationship between the verbal intelligence and cognitive motivation among gifted students in writing. The study followed the descriptive correlation method. The study sample composed of (134) gifted students( males and females) in writing and those enrolled in intermediate, secondary and university levels in Al-Jouf region, Saudi Arabia for the academic year 2010-2011. The researcher developed two questionnaires to measure verbal intelligence and cognitive motivation. The results revealed that the degree of verbal intelligence and cognitive motivation was high among gifted students in writing in Al -Jouf region, Saudi Arabia. Moreover, there was a positive relationship between verbal intelligence and cognitive motivation among gifted students in writing in Al -Jouf region, Saudi Arabia.

Rabeh (2011) wrote a paper to figure out the degree of verbal intelligence of Khalwa students in the River Nile State .A case study of Kadabass area. The researcher used the descriptive method due to its suitability for the study. A random sample composed of 60 khalwa students participating in applying this study. In order to collect the data, the researcher adopted the verbal section of Oskar's Scale for children's intelligence (the third edition). The findings of the study indicated that the degree of verbal intelligence among khalwa students was high. Additionally, there were no statistically significant differences in the degree of verbal intelligence among khalwa students due to gender variable.

Syzmanowicz & Funham (2011) fulfilled a study entitled gender differences in self-estimates of general, mathematical, spatial and verbal intelligence. The researchers used the descriptive analytical method. The resulting 53 articles (74 studies) yielded 205 independent effect sizes – 37 for overall IQ, 55 for mathematical, 56 for spatial and 57 for verbal intelligence – which entered the Meta analysis. The four meta-analysis of self estimates of general, mathematical, spatial and verbal intelligence showed that males provide high estimates than females for all mentioned intelligence, except verbal intelligence.

In a study carried out by Pishghadam (2009), explored the effect of emotional and verbal intelligence on English Language learning in Iran. The study was carried out in June 2006 up to September 2006. The participants were (45) students in College of Ferdowsi University in Mashhad and they were BA and MA students in different majors including social sciences, humanities, engineering and medicine. Three classes were selected to investigate the effect of emotional and verbal intelligence on second language. TOEFL was administered to measure the proficiency level and to determine the effect of emotional and verbal intelligence on Second language learning. Moreover,

interviews were conducted to check the speaking ability. The results showed that the emotional intelligence is effective in learning different skills especially productive ones. Besides, there were statistically significant differences in reading ability in favor of the verbal intelligence group. On the other hand, there were no statistically significant differences in listening ability. In writing, there were significant differences among the three groups. Both verbal and emotional group outperformed the control group. In speaking, there were statistically significant differences in favor of emotional intelligence group.

Amzian( 2008، أمزيان) conducted a study aimed to assess verbal intelligence among six-year old Moroccan children at Elementary School. It also aimed to show the correlation between verbal intelligence and intelligence quotient through activities of verbal intelligence like (storytelling, movie report and weekend news).On the other hand, the study tried to present the relation between children's verbal intelligence activities and their problem solving styles. The researcher randomly selected a sample composed of (86) six-year Moroccan children (38 females and 30 males) from Elementary School. The researcher used three instruments to achieve the purpose of the study. Firstly, children's intelligence measurement test to measure children's intelligence, Secondly, verbal intelligence test battery was used to measure verbal intelligence .Finally, a checklist was used to measure problem solving styles. The findings of the study revealed that there was a correlation between verbal intelligence and intelligence quotient. In addition, there were statistically significant differences between the children's problem –solving styles.

Ayduk (2007) did a study entitled verbal intelligence and self-regulatory competencies: Joint predictors of boy's aggression. The participant of the study was (98) boys in fifth and sixth grade who have delay of gratification and verbal intelligence. The researcher used two instruments which are the

classical delay of gratification paradigm and Peabody Picture vocabulary test. The results of the study indicated that verbal intelligence has an effect on boy's aggression.

### **2.2.2 Studies Related to cognitive motivation**

Sağlam and Tunç (2018) aimed to identify the relationship between thinking style and cognitive motivation among students in Faculty of Education. A descriptive correlation study was used to achieve the purpose of the study. The sample of the study composed of (820) students (522 females and 298 males) in Gaziantep Faculty of Education in the academic year 2014-2015. Thinking style scale and cognitive motivation questionnaire were used to gather the data. The results showed that there were statistically significant differences in cognitive motivation among students in Gaziantep Faculty of Education due to gender variable in favor of females. Additionally, there were statistically significant differences in cognitive motivation among students in Gaziantep Faculty of Education due to class level in favor of the fourth level. Finally, there were a positive relationship between thinking style and cognitive motivation among students in Faculty of Education.

Tarish et.al ( طارش وآخرون، 2017 ) fulfilled a study aimed at identifying the degree of cognitive motivation among Faculty of Education students in Al Qadisiyah University. Descriptive method was used in this study. A cluster sample composed of 220 males and females students from Faculty of Education were took part in this study. In order to collect the data, Al Shamari's Cognitive Motivation Scale was adopted. The findings of the study indicated that the degree of cognitive motivation among faculty of education students was high. In addition, there were no statistically significant differences in cognitive motivation among faculty of education students due

to gender variable. Also, there were no statistically significant differences in cognitive motivation due to specialization variable.

Almajali et. al (2017 ، المجالي وآخرون ) accomplished a study to identify the degree of cognitive motivation among fifth and sixth grade students with learning difficulties in the Directorate of Amman's Fourth Education. A descriptive analytical method was used. The sample of the study composed of 118 males and females students with learning difficulties from fifth and sixth grades and they were chosen randomly. The researchers themselves developed a cognitive motivation questionnaire to measure the degree of cognitive motivation. The findings of the study revealed that the degree of cognitive motivation among fifth and sixth grade students with learning difficulties was medium. Moreover, there were statistically significant differences in cognitive motivation among fifth and sixth grade students with learning difficulties due to gender variable in favor of females .Furthermore, there were no statistically significant differences in cognitive motivation among fifth and sixth grade students with learning difficulties due to grade variable.

Ibrahim (2016) carried out a study to investigate the effect of portal system on achievement and cognitive motivation among 5<sup>th</sup> grade students in geographic Humaities material. Semi experimental method was used. the sample of the study composed of 5<sup>th</sup> grade (boys) from secondary schools in Baghdad. The researcher used two instruments. The first one was a questionnaire to measure the cognitive motivation. The second one was an achievement test to measure the achievement in Geography material. The findings of the study showed that there were statistically significant differences in cognitive motivation and achievement test in favor of experimental group.

Al Hazmi (2015 ، الحازمي) fulfilled a study to identify the degree of cognitive motivation and its relationship with the aspects of memory operations among secondary stage students in Mecca. The researcher used the descriptive correlation study. The cluster random sample included 360 secondary stage students (males and females) in Mecca for the academic year 2014-2015. The researcher adopted Al Farmawi's scale to measure the degree of cognitive motivation. In order to measure the aspects of memory operation, a memory operation scale was developed. The findings of the study revealed that the degree of cognitive motivation among secondary stage students in Mecca was low. However, there were no statistically significant differences in cognitive motivation among secondary stage students in Mecca due to specialization variable. Finally, there were no statistically significant relationship between cognitive motivation and aspects of memory operation.

Qalawa et.al (2015) conducted a study aimed to identify the relationship between cognitive motivation, student adjustment and attitude towards nursing profession. The researchers used the descriptive comparative study. This study was carried out in the Faculty of Nursing from three universities in two countries and they are distributed as follows: Egypt (Suez Canal 49, Port-Said University 55) and Sudan (133) from Shendi University in the academic year 2011/2012. Data was collected by one single instrument divided in to four parts which are socio -demographic data, cognitive motivation, attitudes towards nursing career and students' adjustment. The results showed that there were significant differences in cognitive motivation among nursing students due to the academic level in favor of 4<sup>th</sup> level. Moreover, there were significant differences in cognitive motivation among nursing students due to gender variable in favor of females. However, there were no statistically significant differences in cognitive motivation among nursing students due to university variable.

Bshoty (2015 ، بشوتي) conducted a study aimed at identifying the level of cognitive motivation and its relationship with problem solving ability among students living in social welfare institutions compared with ordinary peers at Akka Area. The sample of the study consisted of (240) students; of whom (120) were living in social welfare institutions and (120) ordinary students living with their families at Akka Area- Palestine in the academic year 2014-2015. To fulfill the purpose of the study, Huckestein cognitive Motivation Scale and Tsai Problem Solving Ability Scales were used. The results of the study highlighted that the degree of cognitive motivation among students living in social welfare institutions and their ordinary peers was medium. Also, there were statistically significant differences in cognitive motivation level among students living in social welfare institutions and their ordinary peers due to gender in favor of females. Finally, there was a positive relationship between cognitive motivation and problem solving ability among students living in social welfare institutions and their ordinary peers.

Al-Alwan et.al (2013) carried out a study aimed at identifying the level of undergraduate student's cognitive motivation and it's relation to their meaningful cognitive engagement. The researcher used the descriptive correlation study. 361 undergraduate students in the academic year 2012-2013 at Hashmite University were chosen randomly. Two instruments were used to collect the data which are the cognitive motivation scale which was prepared by Cacioppo Petty and Kao and Miller's questionnaire. The findings of the study showed that the degree of cognitive motivation among undergraduate students was high. Moreover, there was a positive relationship between cognitive motivation and meaningful cognitive engagement.

Yahia ( 2010، يحيى) conducted a study to measure the degree of cognitive motivation among Basic Education college students at Mosul University. The

researcher used the descriptive study due to its suitability for the purpose of the study. A random sample consisted of 126 students (74 males and 52 females) at Basic Education college (Mosul University) were took part in applying the study in the academic year 2007/2008. Mahmud's Cognitive Motivation Scale was adopted. The findings of the study revealed that there were no statistically significant differences in cognitive motivation among Basic Education College students due to gender variable. Furthermore, there were no statistically significant differences in cognitive motivation among Basic Education College students due to specialization variable.

### **2.3 Summary**

This chapter introduced the Arabic and foreign studies which dealt with verbal intelligence and cognitive motivation. These previous studies expanded the researchers' knowledge about verbal intelligence and cognitive motivation.

After reviewing the previous studies, the researcher realized that there is an acceptable number of studies that are related to the verbal intelligence whether as a single aspect or included in multiple intelligences studies. On the other hand, the researcher found that there are not enough studies related to cognitive motivation. Moreover, most of the studies are Arabic and the foreign studies are few.

The researcher also noted the significance of the study dependent variables. Most of the researchers agreed that verbal intelligence is one of the most common and used intelligence. Hence, the researcher have to shed the light on this kind of intelligence. According to cognitive motivation, the importance of this variable is not less than verbal intelligence. Since the spread of technology, there is a need to acquire more knowledge, or people cannot keep up with cognitive developments.

This study is special because it is the first study that measures the cognitive motivation towards English language in Palestine- According to the knowledge of the researcher. It also provides an instrument to measure the degree of cognitive motivation towards English language. Moreover, none of the previous studies discussed the directorate of education variable. However, this study discussed this variable.

In order to accomplish the objectives of the study, The researcher used the descriptive method due to its suitability to conduct such a study. Subsequently, most of the previous studies used the descriptive method. For instance, Zoghi (2017) , Al-Samerai' and Muhammad (2016), Fortuna (2016) , Momani (2016), Hasan and Farah (2016), Abdullah & Kathem (2013), Luwel et.al (2013), Sukker and Ghanim (سكر وغانم ، 2011) , Al Ruweili (2011), RabeH (2011), Syzmanowicz and Funham (2011), Amzian (أمزيان، 2008) , Ayduk (2007), Sağlam and Tunç (2018) , Tarish et.al (طارش وآخرون، 2017) , Almajali et.al (المجالي وآخرون ، 2017) , Al Hazmi (الحازمي ، 2015) , Qalawa et.al (يحيى، 2010) , Bshoty (بشوتي ، 2015) , Al-Alwan et.al (2013) and Yahia (2010).

On the other hand, the experimental studies are few but relevant. All of these studies discussed the verbal intelligence and cognitive motivation as dependent variables and this agreed with the present study. For example, Al Jabouri (الجبوري، 2018) , Al-Hawamdeh (2016), Subeih (صبيح، 2016) and Ibrahim (2016). Except one study which is Pishghadam (2009). It discussed verbal intelligence as independent variable.

As for the sample of the studies, the current study included Secondary stage students and agreed with Zoghi (2017), Al Ruweili (2011), RabeH (2011) and Hazmi (الحازمي ، 2015) , whereas, the rest of the studies were directed to different samples. Moreover, all the samples of the previous studies are

humans whether students, children, pupils, etc. Except one study which is Syzmanowicz and Funham (2011).

Concerning the sample selection method, there are four studies agreed with the present study and used the cluster sample. For instance, Sukker and Ghanim (2011) (سكر وغانم), Abdullah and Kathem (2013), Tarish et.al (طارش) (2017) (الحازمي) and Al Hazmi (2015) (وأخرون).

For data collection, the researcher used two questionnaires. The first one to measure the degree of verbal intelligence. While the second one used to measure the degree of cognitive motivation. Concerning verbal intelligence studies, about eleven studies agreed with the present study and used a questionnaire as a main instrument. For example, Al Ruweili (2011), Rabeh (2011), Al-Samerai' & Muhammad (2016), Fortuna (2016), Momani (2016), Hasan & Farah (2016), Abdullah & Kathem (2013), Luwel et.al (2013), Sukker and Ghanim(2011) (سكر وغانم), Al-Hawamdeh (2016), Al Ruweili (2011) and Subeih (2016) (صبيح).Whereas, the rest of the studies used test to measure the degree of verbal intelligence. For instance, Al Jabouri (2018) (الجبوري), Zoghi (2017), Amzian (2008) (أمزيان), Ayduk (2007) and Pishghadam (2009).

Finally, The results of the previous studies were various. Every study dealt with different variables. Some studies agreed with the current study in one aspect or one variable like Al-Samerai' and Muhammad (2016), Fortuna (2016), Sukker and Ghanim (2011) (سكر وغانم), Alnajjar (2016) (النجار), Yahia (2010) (يحيى), Almajali et.al (2017) (المجالي وأخرون) and Tarish et.al (طارش) (2017) (وأخرون). Moreover, all the mentioned studies agreed with the current study in two variables which are gender and educational stream.

## **Chapter Three**

### **Methodology and procedures**

#### **3.1 Methods**

#### **3.2 Population of the Study**

#### **3.3 Sample of the Study**

#### **3.4 Instruments of the study**

##### **3.4.1 Verbal intelligence questionnaire**

##### **3.4.2 Cognitive motivation questionnaire**

#### **3.5 Procedures of the Study**

#### **3.6 Variables of the Study**

#### **3.7 Statistical Analysis**

## **Chapter Three**

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### **Methodology and procedures**

In this chapter, the researcher described the procedures followed throughout the study. It introduces the methodology. It also introduces the population and the sample who took part in applying this study. Besides, the instruments which were used to measure the degree of verbal intelligence and the degree of cognitive motivation towards English Language, as well as, validity and reliability of the questionnaires. Finally, statistical treatments were presented in this chapter.

#### **3.1 Methodology**

This study aimed at identifying the degree of verbal intelligence among secondary stage students and its relationship to their cognitive motivation towards English language in Jenin District. Therefore, the researcher used the descriptive correlation method. The researcher adopted this method due to its relevance and suitability for the purpose of this study.

#### **3.2 Population of the Study**

The population of the study consisted of all 11<sup>th</sup> grade students (males and females) in Governmental Schools in Jenin District for the academic year

2018/ 2019. The study population was (4605) males and females students according to the statistics of the Directorates of Education in Jenin District. They are distributed as (1362) males and (1800) females in Jenin Directorate of Education. Whereas, Qabatiah Directorate of Education consisted of (609) males and (834) females.

### 3.3 Sample of the Study

The researcher used the stratified cluster sample constituting (6%) of the study population which is composed of all 11<sup>th</sup> grade students ( males and females) in Governmental Schools in Jenin District for the academic year 2018/2019. Hence, the sample is representative to the population. The study sample was (277) males and females students.

The following table shows the distribution of the sample according to the study variables:

Table (3.1): Distribution of the study sample according to the variables of the study.

<b>Variables of the study</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Gender</b>		
Male	119	0.43
Female	158	0.57
<b>Total</b>	<b>277</b>	<b>0.100</b>
<b>Stream</b>		
Scientific	81	29.2
Humanities	98	35.4
Commercial	56	20.2
Industrial	13	4.7
Technology	29	10.5
<b>Total</b>	<b>277</b>	<b>100.0</b>
<b>The directorate of Education</b>		
Jenin	190	68.6
Qabatiah	87	31.4
<b>Total</b>	<b>277</b>	<b>100.0</b>

### **3.4 Instruments of the Study**

The suitable instruments for this study are two questionnaires to measure the degree of verbal intelligence and the degree of cognitive motivation towards English Language. Therefore, they were developed after reconsiderations of the previous studies.

The English version of the questionnaires were translated to the Arabic language, so that students easily completed the questionnaires. Moreover, the translation was exposed to two Arabic linguists and a translation lecturer to check the translation and to confirm that the items maintained their essential meaning during translation and back translation.

The researcher distributed (277) questionnaires. All the instruments were valid and they met the requirements of the statistical analysis. After that, the data was collected and statistical analysis was conducted.

#### **3.4.1 Verbal intelligence questionnaire**

The researcher depended on the previous studies to prepare the questionnaire. For example, Momani (2016), Armstrong (2009), Nokelainen et.al (2002) and Terri & Nokelainen (2011) . See Appendix ( 1 ) for the questionnaire.

The questionnaire consisted of 22 items .Each item consisted of a five-point Likert type response scale ranging from (5-1) representing (very much, to a large extent, to a medium degree, to a small extent, to a very limited extent).

##### **3.4.1.1 Validity of verbal intelligence questionnaire**

In order to validate the questionnaire, the researcher introduced it to a group of arbitrators. See Appendix (5).

The researcher also asked the arbitrators to evaluate the questionnaire by checking its relevance to the subject of the study. After that, the researcher

deleted two items and also modified some items according to the arbitrators' suggestions. However, the initial draft of the questionnaire was 24 and the final draft was 22.

#### **3.4.1.2 Reliability of the verbal intelligence questionnaire**

The researcher applied the questionnaire on a pilot study consisted of 30 students (from the population and out of the sample).

The reliability of the questionnaire was measured by Chronbach's Alpha, and the results showed that the reliability was (0.864). It means that the questionnaire was suitable for conducting such study.

#### **3.4.2 Cognitive motivation questionnaire**

The researcher depended on the previous studies to prepare the questionnaire. For instance, Al Ruweili (2011) and Fortier & Burkell (2014). See appendix (2) for the questionnaire.

The questionnaire consisted of 20 items. Each item consisted of a five-point Likert type response scale ranging from (5-1) representing (always, usually, sometimes, rarely, never).

##### **3.4.2.1 Validity of cognitive motivation questionnaire**

In order to validate the questionnaire, the researcher introduced it to a group of arbitrators. See Appendix (5).

The researcher also asked the arbitrators to evaluate the questionnaire by checking its relevance to the subject of the study. After that, the researcher modified some items according to the arbitrators' suggestions.

### **3.4.2.2 Reliability of the cognitive motivation questionnaire**

The researcher applied the questionnaire on a pilot study consisted of 30 students (from the population and out of the sample).

The reliability of the questionnaire was measured by Cronbach's Alpha, and the results showed that the reliability was (0.914). It means that the questionnaire was suitable for conducting such study.

## **3.5 Procedures of the Study**

In order to complete this study, the researcher carried out the following procedures:

- The researcher prepared the instruments of the study after taking in to consideration the literature review.
- The researcher coordinated with the Faculty of Graduate Studies at Al-Quds University to obtain the permission of the Directorates of Education in Jenin District. See Appendix (6).
- After obtaining the permission of the Directorates of Education in Jenin District to implement the study, the researcher applied the questionnaires on a pilot study (from the population and out of the sample) consisted of 30 students. See appendix (7). Then, the results showed that the reliability of the questionnaires were suitable to conduct the study.
- The researcher distributed (277) questionnaires in the Arabic language to 11<sup>th</sup> grade students (males and females) in Governmental Schools for the academic year 2018/2019. See appendix (3) and (4).
- The data was analyzed using the statistical package for social science (SPSS).
- Finally, the researcher introduced recommendations and suggestions according to the results of the study.

### **3.6 Variables of the Study**

This study included the following variables:

#### **Independent variables**

- Gender (male and female)
- Educational stream (Scientific, Humanities, Commercial, Industrial and Technology).
- The Directorate of Education (Jenin and Qabatiah).

#### **Dependent variables.**

- Verbal intelligence :It is measured in this study by the students' degree in the verbal intelligence questionnaire.
- Cognitive motivation: It is measured in this study by the students' degree in the cognitive motivation questionnaire.

### **3.7 Statistical Analysis**

After collecting the questionnaires and reviewing them, they were encoded and given specific numbers to save data entry on the computer for statistical analysis.

t-test for independent samples was used to measure the statistical differences in means between (gender and the directorate of education) variables. Whereas; one way Anova was used to examine whether or not there were statistically significant differences in the degree of verbal intelligence and cognitive motivation towards English Language due to educational stream variable. Besides, Descriptive statistics (Arithmetic means - standard deviation) of each item , Chronbach's Alpha, Pearson Correlation were used.

## **Chapter Four**

### **Results of the Study**

#### **4.1 Results Related to the First Question**

#### **4.2 Results Related to the Second Question**

#### **4.3 Results Related to the Third Question**

##### **4.3.1 Results of the first null hypothesis**

##### **4.3.2 Results of the second null hypothesis**

##### **4.3.3 Results of the third null hypothesis**

#### **4.4 Results Related to the Fourth Question**

##### **4.4.1 Results of the fourth null hypothesis**

##### **4.4.2 Results of the fifth null hypothesis**

##### **4.4.3 Results of the sixth null hypothesis**

#### **4.5 Results Related to the Fifth Question**

## Chapter Four

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### Results of the Study

The aim of this study is to identify the degree of verbal intelligence among secondary stage students and its relationship to their cognitive motivation towards English language in Jenin District. This chapter aims to present the results of the study by answering the research questions.

In order to determine the degree of response averages of the study sample, the following table shows the grades that were adopted:

Mean average	Degree
1.00-1.80	very low
1.81-2.60	Low
2.61-3.40	Medium
3.41-4.20	High
4.21-5.00	very high

#### 4.1 Results Related to the First Question

The first question stated that,

**What is the degree of verbal intelligence among secondary stage students in Jenin District?**

To answer this question, arithmetic means and standard deviations were calculated of the responses of the study sample on the verbal intelligence questionnaire, and table (4.1) shows that:

Table (4.1): Arithmetic means and standard deviations of responses of the study sample on the verbal intelligence questionnaire.

No.	Items	Mean	Std. Deviation	Degree
19	I write to my friends on social networking sites.	4.28	1.12	very high
7	I listen carefully to people's conversations.	4.09	1.00	high
3	I read signs while walking along the road.	3.87	1.16	high
18	I can elicit the main ideas of a particular text.	3.76	1.07	high
5	I listen carefully to audio media.	3.75	1.08	high
4	I am proficient in cross words games.	3.63	1.09	high
20	Reading books is enjoyable for me.	3.55	1.27	high
9	I take part in general discussions.	3.50	1.05	high
1	I can express my feeling clearly.	3.44	.97	high
17	I can form grammatically correct sentences.	3.41	1.11	High
22	I have the ability to say improvised speech without any mistakes.	3.40	1.20	Medium
6	I like attending cultural meetings organized by the school.	3.36	1.22	Medium
12	I have the ability to memorize as many words as possible.	3.32	1.12	Medium
10	I feel happy when I use language sounds.	3.15	1.15	Medium
8	I constantly keep a diary.	3.14	1.36	Medium
16	I have curiosity to explore words origins.	3.13	1.30	Medium
13	I can write stories easily.	3.02	1.25	Medium
11	I participate in creative writing activities organized by the school.	2.54	1.19	Low
21	I like participating in school morning broadcast.	2.50	1.42	Low
15	I write articles that appealed to many people.	2.43	1.24	Low
14	I am interested in poetic competitions.	2.10	1.09	Low
2	I read daily newspapers.	1.94	1.02	Low
<b>Total degree</b>		<b>3.24</b>	<b>.595</b>	<b>Medium</b>

The previous table (4.1) shows the arithmetic mean and standard deviation of each item of the questionnaire that measures the degree of verbal intelligence among secondary stage students in Jenin District.

As presented in table (4.1), the results showed that arithmetic mean of the total score is (3.24) and the standard deviation is ( 0.595). This indicates that the degree of verbal intelligence among secondary stage students in Jenin District is medium.

The items used for the verbal intelligence questionnaire were (22). All of the items were positive. See Appendix (1) for the items. The researcher arranged the items in descending order, according to the arithmetic mean.

The item (19) which is (I write to my friends on social networking sites) has the highest mean of (4.28) with a standard deviation (1.122). Whereas, the item (2) which is ( I read daily newspapers) has the lowest mean of (1.94) with a standard deviation (1.020).

#### **4.2 Results Related to the Second Question:**

The second question stated that,

**What is the degree of cognitive motivation towards English language among Secondary Stage Students in Jenin District?**

To answer this question, arithmetic means and standard deviations were calculated of the responses of the study sample on cognitive motivation questionnaire, and the following table shows this:

Table (4.2): Arithmetic means and standard deviations of the responses of the study sample on the cognitive motivation questionnaire.

No.	Items	Mean	Std. Deviation	Degree
1	I have a desire to improve my English Language.	4.40	.99	very high
17	I aspire to obtain a distinguished level in the field of English Language.	3.81	1.28	High
3	I use the internet to write English Language researches.	3.71	1.31	High
8	I constantly insist to study English Language.	3.65	1.30	High
18	I like to have a discussion with my English teacher.	3.62	1.36	High
4	I automatically rush to investigate the questions raised by the English teacher.	3.53	1.20	High
10	Everything new related to the teaching of English excites me and arouses my interest.	3.41	1.33	High
7	I try to get familiar with everything about English Language.	3.32	1.30	Medium
5	I find the knowledge included in the English book quite enough.	3.23	1.30	Medium
2	I like reading cultural books related to English Language.	3.18	1.22	Medium
14	I initiate questioning after the teacher has presented the lesson.	3.16	1.27	Medium
9	I would like to conduct a study on English Language and its literature.	3.15	1.48	Medium
11	I share my colleagues in writing English Language researches.	3.11	1.30	Medium
6	I spend a lot of time to obtain any new information relevant to English.	3.08	1.28	Medium
12	I am interested in programs presented in the English Language.	3.06	1.38	Medium
19	I look for external references related to the English Language.	2.86	1.31	Medium
13	I read journals that are related to the English Language.	2.59	1.28	Low
15	I participate in English Language classes.	2.58	1.33	Low
20	I participate actively in the English Language clubs organized by the school.	2.51	1.31	Low
16	I constantly follow the achievements of English Language writers.	2.44	1.29	Low
<b>Total degree</b>		<b>3.22</b>	<b>.799</b>	<b>Medium</b>

The previous table (4.2) shows arithmetic mean and standard deviation of each item of the questionnaire that measures the degree of cognitive motivation towards English language among secondary stage students in Jenin District.

As appeared in table (4.2), the results showed that arithmetic mean of the total score is (3.22) and the standard deviation is (.799). This indicates that the degree of cognitive motivation towards English language among secondary stage students in Jenin District is medium.

The items which were used for the cognitive motivation questionnaire were (20). All of the items were positive except item (5) which is (I find the knowledge included in the English book quite enough). See Appendix (2) for the items. The researcher arranged the items in descending order according to the arithmetic mean.

The item (1) which is (I have a desire to improve my English Language) has the highest mean of (4.40) with a standard deviation (.990). Whereas, the item (16) which is (I constantly follow the achievements of English Language writers) has the lowest mean of (2.44) with a standard deviation (1.294).

### **4.3 Results Related to the Third Question:**

The Third question stated that,

**Are there statistically significant differences in the degree of verbal intelligence among secondary stage students in Jenin District due to gender, educational stream, the Directorate of Education?**

To answer the third question, It was transformed in to these null hypotheses.

**The first hypothesis:** There is no statistically significant difference at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of verbal intelligence among secondary stage students in Jenin District due to gender.

**The second hypothesis:** There is no statistically significant difference at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of verbal intelligence among secondary stage students in Jenin District due to educational stream.

**The third hypothesis:** There is no statistically significant difference at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of verbal intelligence among secondary stage students in Jenin District due to the Directorate of Educational.

#### 4.3.1 Results of the first null hypothesis

The first hypothesis stated that,

**There is no statistically significant difference at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of verbal intelligence among secondary stage students in Jenin District due to gender.**

To examine the first null hypothesis, t-test for independent samples and arithmetic means were calculated of the responses of the study sample of verbal intelligence questionnaire due to gender variable, as shown in the table (4.3).

Table (4.3): t-test results of the verbal intelligence among secondary stage students in Jenin District due to gender.

Gender	N	Mean	Std. Deviation	DF	"t" value	Sig.
Male	119	3.041	.594	275	5.193	.000*
Female	158	3.399	.548			

\*: statistically significant differences

As noted from table (4.3), computed t value was (5.193) and the significant level was ( .000) . The significant level is less than ( $\alpha < 0.05$ ) . Thus, there are statistically significant differences at ( $\alpha < 0.05$ ) in the degree of verbal intelligence among secondary stage students in Jenin District due to gender variable in favor of the females. Subsequently, the null hypothesis was rejected.

#### 4.3.2 Results of the second null hypothesis

The second null hypothesis stated that,

**There is no statistically significant difference at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of verbal intelligence among secondary stage students due to educational stream.**

To examine the second null hypothesis, mean scores were calculated of the responses of the study sample on verbal intelligence questionnaire due to educational stream variable as illustrated in table (4.4 ).

Table (4.4): Results of mean scores and standard deviations of the responses of the study sample on verbal intelligence questionnaire due to educational stream.

<b>Educational stream</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>Scientific</b>	81	3.304	.606
<b>Humaities</b>	98	3.232	.586
<b>Commercial</b>	56	3.163	.582
<b>Industrial</b>	13	3.028	.541
<b>Technological</b>	29	3.384	.623
<b>Total</b>	<b>277</b>	<b>3.245</b>	<b>.595</b>

As presented in table (4.4), there is a significant difference in the verbal intelligence among secondary stage students in Jenin District due to educational stream. In order to find out the significant of the differences, one - way Anova test was used, as illustrated in table (4.5).

Table (4.5): Results of one-way Anova of the responses of the study sample on the verbal intelligence questionnaire due to Educational stream.

Source	Sum of Squares	DF	Mean Square	F	Sig.
<b>Between Groups</b>	1.852	4	.463	1.313	.265
<b>Within Groups</b>	95.889	272	.353		
<b>Total</b>	<b>97.742</b>	<b>276</b>			

According to the results, F value was (1.313) and the significant level was (.265), which is more than ( $\alpha \leq 0.05$ ). This outcome shows that there is no statistically significant difference in the degree of verbal intelligence among secondary stage students in Jenin District due to Educational stream. Therefore, the null hypothesis was accepted.

### 4.3.3 Results of the third null hypotheses

The third null hypothesis stated that,

**There is no statistically significant difference at ( $\alpha \leq 0.05$ ) arithmetic means in verbal intelligence among secondary stage students in Jenin District due to the Directorate of Education.**

To examine the previous null hypothesis, t-test for independent samples and arithmetic means were calculated of the responses of the study sample on verbal intelligence questionnaire due to the Directorate of Education, as shown in the table (4.6).

Table (4.6) t-test results of the verbal intelligence among secondary stage students in Jenin District due to the Directorate of Education.

Directorate of Education	N	Mean	Std. Deviation	DF	"t" value	Sig.
Jenin	190	3.253	.621	275	.331	.741
Qabatiah	87	3.228	.536			

As presented in table (4.6), computed t value was ( .331) and the significant level was (.741). In addition, the significant level is greater than (0.05) .It means that there is no statistically significant difference in the degree of verbal intelligence among secondary stage students in Jenin District due to the Directorate of Education. Hence, the null hypothesis was accepted.

#### 4.4 Results Related to the Fourth Question:

The fourth question stated that,

**Are there statistically significant differences in the degree of cognitive motivation towards English language among secondary stage students in Jenin District due to gender, educational stream, and the Directorate of Education?**

To answer the fourth question, it was converted into these three null hypotheses.

**The fourth hypothesis:** There is no statistically significant difference at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of cognitive motivation towards English language among secondary stage students in Jenin District due to gender.

**The fifth hypothesis:** There is no statistically significant difference at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of cognitive motivation towards English language among secondary stage students in Jenin District due to educational stream.

**The sixth hypothesis:** There is no statistically significant difference at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of cognitive motivation towards English language among secondary stage students in Jenin District due to the Directorate of Education.

#### 4.4.1 Results of the fourth null hypothesis

The fourth hypothesis stated that,

**There is no statistically significant difference at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of cognitive motivation towards English language among secondary stage students in Jenin District due to gender.**

To examine the previous null hypothesis, t-test for independent samples and arithmetic means were calculated of the responses of the study sample on cognitive motivation questionnaire due to gender variable as illustrated in the table (4.7).

Table (4.7) t-test results of the cognitive motivation towards English Language among secondary stage students in Jenin District due to gender.

Gender	N	Mean	Std. Deviation	DF	"t" value	Sig.
Male	119	2.968	.824	275	4.837	.000
Female	158	3.419	.723			

As presented in table (4.7), computed t value was (4.837) and the significant level was (.000). The significant level is less than (0.05). It means that there are statistically significant differences in the degree of cognitive motivation towards English Language among secondary stage students in Jenin District due to gender in favor of females. Hence, the null hypothesis was rejected.

#### 4.4.2 Results of the fifth null hypothesis

The fifth hypothesis stated that,

**There is no statistically significant difference at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of cognitive motivation towards English Language among secondary stage students due to educational stream.**

To examine the fifth null hypothesis, mean scores were calculated of the responses of the study sample of cognitive motivation towards English Language among secondary stage students in Jenin District due to educational stream, as shown in table (4.8).

Table (4.8): Results of mean scores and standard deviations of the responses of the study sample on cognitive motivation questionnaire due to educational stream.

<b>Educational stream</b>	<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>
<b>Scientific</b>	81	3.364	.653
<b>Humanities</b>	98	3.177	.887
<b>Commercial</b>	56	3.100	.820
<b>Industrial</b>	13	3.957	.819
<b>Technological</b>	29	3.365	.762
<b>Total</b>	<b>277</b>	<b>3.225</b>	<b>.799</b>

As presented in table (4.8 ), there are significant differences in the degree of cognitive motivation towards English language among secondary stage students in Jenin District due to educational stream. In order to find out the significant of the differences, one -way Anova test was used, as illustrated in table (4.9).

Table (4.9): Results of one-way Anova of the responses of the study sample on the verbal intelligence questionnaire due to Educational stream.

Source	Sum of Squares	DF	Mean Square	F	Sig.
<b>Between Groups</b>	4.166	4	1.042	1.647	.163
<b>Within Groups</b>	172.047	272	.633		
<b>Total</b>	<b>176.213</b>	<b>276</b>			

According to the results, F value was (1.647) and the significant level was (.163). Thus, there is no statistically significant difference in the degree of cognitive motivation towards English language among secondary stage students in Jenin District due to educational stream. Therefore, the null hypothesis was accepted.

#### **4.4.3 Results of the sixth null hypothesis**

The sixth hypothesis stated that,

**There is no statistically significant difference at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of cognitive motivation towards English language among secondary stage students in Jenin District due to the Directorate of Education.**

To examine the previous null hypothesis, t-test for independent samples and arithmetic means were calculated of the responses of the study sample on cognitive motivation questionnaire due to the Directorate of Education, as presented in table (4.10).

Table (4.10) t-test results of the cognitive motivation towards English Language among secondary stage students in Jenin District due to the Directorate of Education.

Directorate of Education	N	Mean	Std. Deviation	DF	"t" value	Sig.
Jenin	190	3.206	.813	275	.583	.560
Qabatiah	87	3.267	.769			

As presented in table (4.10), computed t value was ( .583) and the significant level was (.560). The significant level is greater than (0.05) . It means that there are no statistically significant differences in the degree of cognitive motivation towards English language among secondary stage students in Jenin District due to the Directorate of Education. Hence, the null hypothesis was accepted.

#### 4.5 Results Related to the Fifth Question

The fifth question stated that,

**What is the correlation between the degree of verbal intelligence and the degree of cognitive motivation towards English language among secondary stage students in Jenin District?**

To answer this question, It was transformed into this null hypothesis.

There is no statistically significant relationship at ( $\alpha \leq 0.05$ ) arithmetic means between the degree of verbal intelligence and the degree of cognitive motivation towards English language among secondary stage students in Jenin District.

Pearson Correlation and the significant level were calculated for the responses of the study sample between the degree of verbal intelligence among secondary stage students and their cognitive motivation towards English language in Jenin District, and the following table clarifies that:

Table (4.11) Pearson correlation and the significant level between verbal intelligence and cognitive motivation.

Variables		Pearson correlation	Sig.
Verbal intelligence	Cognitive motivation towards English Language	.498**	.000*

\*\* : Positive relationship

\* : statistically significant differences

According to the table (4.11), Pearson Correlation was ( .498), and the significant level was (.000). It means that there is a statistically significant value. Hence, there is a positive relationship between the degree of verbal intelligence among secondary stage students and the degree of cognitive motivation towards English language in Jenin District. That means the higher the verbal intelligence, the greater the cognitive motivation towards English and vice versa.

## **Chapter Five**

### **Discussion and Recommendations**

- 5.1 Discussion of the Results Related to the First Question**
- 5.2 Discussion of the Results Related to the Second Question**
- 5.3 Discussion of the Results Related to the Third Question**
  - 5.3.1 Discussion of the first null hypothesis**
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  - 5.3.3 Discussion of the third null hypothesis**
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  - 5.4.1 Discussion of the fourth null hypothesis**
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- 5.5 Discussion of the Results Related to the Fifth Question**
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## **Chapter Five**

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### **Discussion and Recommendations**

This chapter discusses the results of the study in the light of research questions. Then, it sheds light on the recommendations based on the findings of the study.

#### **5.1 Discussion of the Results Related to the First Question**

The first question stated that,

##### **What is the degree of verbal intelligence among secondary stage students in Jenin District?**

To answer this question, arithmetic means and standard deviations were computed of the responses of the study sample on the verbal intelligence questionnaire. The results also indicated that the degree of verbal intelligence among secondary stage students in Jenin District was medium according to table (4.1).

The researcher attributes this medium degree of verbal intelligence among secondary stage students in Jenin District to the relationship between the students, their schools and the surrounding environment.

Each type of intelligence is affected by the environment, so the environment is an important factor to acquire language and improve the degree of verbal

intelligence. May be, secondary stage students are not stimulated enough by the environment.

In addition, the weakness of verbal outputs of the students is to some extent. Moreover, schools lack sufficient library classes to encourage students to read. Besides, the spread of social networking sites affect students' lives, and they usually waste their free time using these sites instead of reading a useful book. Furthermore, there is a scarcity of public libraries in Jenin District. They only have one public library.

This result agreed with Fortuna (2016), Abdullah and Kathem (2013) and Sukkar and Ghanim (2011، سكر وغانم). However, it did not agree with Al-Ruweili (2011) and RabeH (2011).

## **5.2 Discussion of the Results Related to the Second Question**

The second question stated that,

### **What is the degree of cognitive motivation towards English language among secondary stage students in Jenin District?**

To answer this question, arithmetic means and standard deviations were calculated of the responses of the study sample on the cognitive motivation questionnaire. The results revealed that that the degree of cognitive motivation towards English language among secondary stage students in Jenin District was medium.

There are many reasons behind the medium degree of the cognitive motivation towards English language among secondary stage students in Jenin District. The first reason stems from the fact that English language is taught in Governmental Schools as a foreign language, so students are not motivated enough towards it. Moreover, School libraries do not have a large quantity of the English books, stories, short novels that are funny and encourage students to read more.

Moreover, this finding is a result of many factors. For example, psychological factors, the student himself, the teacher, the environment and the curriculum. According to the psychological factors, The spread of the students misconception about the difficulty of English has spread widely .Hence, students' motivation for the English language itself and the knowledge related to it is not good.

Concerning the student, maybe the student does not have the desire to improve the degree of cognitive motivation towards English Language. Furthermore, the environment has an effect in cognitive motivation because if they do not have a motivating environment towards English language, the degree of cognitive motivation among students will be low or medium.

This result agreed with Al-Majali et.al ( المجالي وآخرون, 2017), and it did not agree with AL-Alwan et.al (2013).

### **5.3 Discussion of the Results Related to the Third Question**

The third question stated that,

**Are there statistically significant differences in the degree of verbal intelligence among secondary stage students in Jenin District due to gender, educational stream, and the directorate of education?**

This question was transformed in to these null hypotheses:

#### **5.3.1 Discussion of the first null hypothesis**

There are no statistically significant differences at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of verbal intelligence among secondary stage students in Jenin District due to gender.

To examine the first null hypothesis, t-test for independent samples was used to determine whether there were statistically significant differences at

( $\alpha < 0.05$ ) arithmetic means in the degree of verbal intelligence among secondary stage students in Jenin District due to gender variable. Table (4.3) showed that the significant level was (0.000). This outcome indicated that there were statistically significant differences at ( $\alpha \leq 0.05$ ) in the degree of verbal intelligence among secondary stage students in Jenin District due to gender variable. It's clear that the results were in favor of females.

This pointed out that the reason behind the superiority of females to males in verbal intelligence is the social factors. Females in general spend most of their time indoors with their mothers, so there is a continuous verbal communication between the mother and the daughter. Moreover, they do not like to play or do activities outside; especially they are secondary stage and they are at the stage of adolescence. On contrast, males like to play outdoors and they prefer physical and sports activities more than language activities.

In addition, there is an important reason behind the superiority of females to males in verbal abilities which is the biological factors. Most of the researchers agreed that these factors are fundamental. The verbal development of females is higher than males due to many reasons. Firstly, there are two areas in the frontal and temporal lobes related to language named as Broca and Wernicke. Indeed, they are significantly larger in females. Furthermore, the brain matures faster in females than males especially in language aspect. As a result, females can introduce sounds faster and the average of language acquisition is higher (Shakouri et. al, 2016).

This finding agreed with Al-Samerai' and Muhammad (2016), Abdullah and Kathem (2013) and sukker and Ghanim ( 2011, سكر وغانم). However, it did not agree with Momani (2016), Hasan and Farah (2016) and Rabeh (2011).

### **5.3.2 Discussion of the second null hypothesis**

There are no statistically significant differences at ( $\alpha < 0.05$ ) arithmetic means in verbal intelligence among secondary stage students in Jenin District due to educational stream.

To examine the second null hypothesis, one way Anova was used to find out if there were statistically significant differences in the degree of verbal intelligence among secondary stage students due to educational stream. The null hypothesis was accepted and the result showed that there were no statistically significant differences in the degree of verbal intelligence among secondary stage students in Jenin District due to educational stream variable.

It indicates that students in different educational streams face similar conditions; they also have the same environment. Moreover, they all study in governmental schools in Jenin District.

Additionally, in most Governmental Schools, teachers who teach language subjects for Humanities students are the same who teach language subjects for scientific, commercial etc. They are also assigned according to the same criteria. Possibly, their competences are the same.

None of the researchers discussed educational stream variable except Sukker and Ghanim (سكر وغانم, 2011). However, the results of their study did not agree with the result that there were no statistically significant differences in the degree of verbal intelligence among secondary stage students in Jenin District due to educational stream. In contrast, their results showed statistically significant differences in the degree of verbal intelligence among students of middle school due to educational stream in favor of Humanities stream.

### **5.3.3 Discussion of the third null hypothesis**

There are no statistically significant differences at ( $\alpha < 0.05$ ) arithmetic means in the degree of verbal intelligence among secondary stage students in Jenin District due to the Directorate of Education.

To examine the previous null hypothesis, t-test for independent samples and arithmetic means were calculated of the responses of the study sample on verbal intelligence questionnaire. The results in table (4.6) showed that there were no statistically significant differences in the degree of verbal intelligence among secondary stage students in Jenin District due to the Directorate of Education.

None of the researchers discussed this variable before. This outcome may be referred to the similarity in the plans, strategies, regulations, motives and systems which were applied. Moreover, both directorates of education (Jenin and Qabatiah) related to the same ministry of education which provides students with the same instructions and motives. In addition, they have the same curriculum in both Directorates of Education. Consequently, students will not show a difference in the degree of verbal intelligence.

### **5.4 Discussion of the Results Related to the Fourth Question**

The fourth question stated that,

**Are there statistically significant differences in the degree of cognitive motivation towards English language among secondary stage students in Jenin District due to gender, educational stream, The Directorate of Education?**

This question was transformed in to these null hypotheses.

#### **5.4.1 Discussion of the fourth null hypothesis**

There are no statistically significant differences at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of cognitive motivation towards English language among secondary stage students in Jenin District due to gender.

To examine the previous null hypothesis, t-test for independent samples was used to determine whether there were statistically significant differences at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of cognitive motivation towards English language among secondary stage students in Jenin District due to gender variable.

The results showed that there were statistically significant differences at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of cognitive motivation towards English language among secondary stage students in Jenin District due to gender in favor of females.

This result attributed that females in general spend most of their time at home or they have free time while men are busy at work. Therefore, they like to search and to develop their cognitive motivation towards English. They also like social status, so they try their best to gain knowledge as possible as they can especially after the spread of English Language.

This result agreed with Sağlam and Tunç (2018), Qalawa et.al (2015), Bshoty (2015، بشوتي). On contrast, it did not agree with Tarish et.al (2011، طارش وآخرون).

#### **5.4.2 Discussion of the fifth null hypothesis**

There is no statistically significant difference in the degree of cognitive motivation towards English language among secondary stage students in Jenin District due to educational stream.

To examine the fifth null hypothesis, , One Way Anova was used to find out if there were statistically significant differences in the degree of cognitive motivation towards English Language among secondary stage students due to educational stream variable. The null hypothesis was accepted and the result showed that there were no statistically significant differences in the degree of cognitive motivation towards English Language among secondary stage students in Jenin District due to educational stream variable.

It is indicated that all students in different educational streams have goals and aspirations in cognitive and scientific disciplines regardless to their educational stream. Moreover, the spread of English language and being the dominant language, the continuous development in the knowledge base and the internet contributes in developing students' cognitive motivation. Hence, students can easily search, browse any site they need.

Additionally, students in all streams have a desire to improve their cognitive motivation towards English because they like to satisfy their cognitive needs. Moreover, the target sample of the study was secondary stage students and when students grow older, their motivation will be directed towards the goal.

This result is agreed with Taresh et.al (2011، طارش وآخرون), Al Hazmi (2015، الحازمي) and Yahia (2010، يحيى).

#### **5.4.3 Discussion of the sixth null hypothesis**

There are no statistically significant differences in the degree of cognitive motivation towards English language among secondary stage students in Jenin District due to the directorate of education.

To examine the previous null hypothesis, T-test for independent samples and arithmetic means were calculated of the responses of the study sample on

cognitive motivation towards English questionnaire. The results in table (4.10) showed that there were no statistically significant differences in the degree of cognitive motivation towards English language among secondary stage students in Jenin District due to the Directorate of Education.

Cognitive motivation is shaped by external factors such as social factors and the surrounding environment. These factors can enhance students' cognitive motivation towards English or decrease it according to the rewards or moral support or incentives. Since the students are in both directorates of education (Jenin and Qabatiah) and related to the same ministry of education, they are given the same support and incentives. Hence, there were no statistically significant differences in the degree of cognitive motivation towards English language in Jenin District due to the Directorate of Education variable.

### **5.5 Discussion of Results Related to the Fifth Question**

The fifth question stated that,

**What is the correlation between the degree of verbal intelligence and the degree of cognitive motivation towards English language among secondary stage students in Jenin District?**

This question was transformed in to the seventh hypothesis, which states that:

There is no statistically significant relationship at ( $\alpha \leq 0.05$ ) arithmetic means between the degree of verbal intelligence and the degree of cognitive motivation towards English language among secondary stage students in Jenin District.

To examine the previous hypothesis, Pearson Correlation and the statistical significance of the responses of the study sample were calculated. The results

revealed that there was a statistically significant value. Hence, the hypothesis which indicates that there is a positive relationship between the degree of verbal intelligence and the degree of cognitive motivation towards English language among secondary stage students in Jenin District was accepted.

The researcher confirmed the relationship because students with high verbal intelligence have a tendency to acquire knowledge, and they like to learn the language, so they do their best to expand their knowledge towards the language.

This result agreed with Al Ruweili (2011) who found out that there is a positive relationship between verbal intelligence and cognitive motivation among gifted students in Al-Jouf Region, Saudi Arabia.

## 5.6 Summary

The following table shows the total scores of the arithmetic means and standard deviations of the responses of the study sample on the verbal intelligence and cognitive motivation questionnaires.

<b>Variable</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Degree</b>
<b>Verbal intelligence</b>	3.2458	.59509	Medium
<b>Cognitive motivation</b>	3.2258	.79903	Medium

Accordingly, the degree of the verbal intelligence among secondary stage students in Jenin District is medium. Furthermore, the degree of the cognitive motivation towards English language among secondary stage students in Jenin District is medium.

### **Results of the hypotheses:**

- There are statistically significant differences at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of verbal intelligence among secondary stage students in Jenin District due to gender and in favor of femals.
- There are no statistically significant differences at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of verbal intelligence among secondary stage students in Jenin District due to Educational stream.
- There are no statistically significant differences at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of verbal intelligence among secondary stage students in Jenin District due to the Directorate of Education.
- There are statistically significant differences at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of cognitive motivation towards English language among secondary stage students in Jenin District due to gender, and in favor of females.
- There are no statistically significant differences at ( $\alpha \leq 0.05$ ) arithmetic means in the degree of cognitive motivation towards English language among secondary stage students in Jenin District due to educational stream.
- There are no statistically significant differences at ( $\alpha \leq 0.05$ ) arithmetic means in cognitive motivation towards English language among secondary stage students in Jenin District due to the Directorate of Education.
- There is a positive relationship between the degree of the verbal intelligence among secondary stage students and their cognitive motivation towards English Language in Jenin District.

## **5.7 Recommendations**

Based on the results of the study, the researcher recommended the following:

1. Developing strategies and educational methods that enhance students' verbal intelligence and promote students' cognitive motivation towards English language especially for males.
2. Provide enough library classes that encourage students to read.
3. Creating a motivating environment that stimulates students' verbal intelligence and cognitive motivation towards English language.
4. Focusing on the importance of the verbal intelligence and the cognitive motivation towards English language and paying attention to these variables.
5. Educators and supervisors have to shed the light of the teachers to focus on the verbal intelligence and cognitive motivation towards English Language through using various ways.
6. Conducting other researches and studies on the relationship between the degree of verbal intelligence and the degree of cognitive motivation on other samples.
7. Carrying out other studies on the relationship between the degree of verbal intelligence and the degree of cognitive motivation using new variables.

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# Appendix (1): Verbal Intelligence Questionnaire



**Al-Quds University**

**Faculty of Graduate Studies**

**Educational Sciences College**

**Dear student,**

The researcher will conduct a study entitled "**Verbal intelligence among Secondary Stage students and its relationship to their cognitive motivation towards English language in Jenin District.**" This research is done in fulfillment of the requirements of the Master's Degree in the Teaching Methods Program. I will be grateful if you answer all the questions by putting the sign (×) next to the item that suits your situation. Note that the information received will be assigned for scientific purposes and your answers will be dealt with confidentially.

**Thank you for your cooperation**

**The researcher: Ro'a Abdullah**

## **Section one : General Information**

- 1.Gender**                      1- Male        2-Female
- 2.Education Stream**            1-Scientific     2-Humanities     3-Commercial
- 4-Industrial                5-Technology
- 3.Directorate of Education**    1-Jenin        2-Qabatiah

**Section two: Verbal intelligence**

Number	Items	Very much	To a large extent	To a medium degree	To a small extent	To a very limited extent
1.	I can express my feeling clearly.					
2.	I read daily newspapers.					
3.	I read signs while walking along the road.					
4.	I am proficient in cross words games.					
5.	I listen carefully to audio media.					
6.	I like attending cultural meetings organized by the school.					
7.	I listen carefully to people's conversations.					
8.	I constantly keep a diary.					
9.	I take part in general discussions.					
10.	I feel happy when I use language sounds.					
11.	I participate in creative writing activities organized by the school.					
12.	I have the ability to memorize as many words as possible.					
13.	I can write stories easily.					
14.	I am interested in poetic competitions.					
15.	I write articles that appealed to many people.					
16.	I have curiosity to explore words origins.					
17.	I can form grammatically correct sentences.					
18.	I can elicit the main ideas of a particular text.					
19.	I write to my friends on social networking sites.					
20.	Reading books is enjoyable for me.					

21.	I like participating in school morning broadcast.					
22.	I have the ability to say improvised speech without any mistakes.					

**Thank you for your cooperation**

## Appendix (2): Cognitive Motivation Questionnaire



**Al-Quds University**

**Faculty of Graduate Studies**

**Educational Sciences College**

**Dear student,**

The researcher will conduct a study entitled "**Verbal intelligence among Secondary Stage students and its relationship to their cognitive motivation towards English language in Jenin District.**" This research is done in fulfillment of the requirements of the Master's Degree in the Teaching Methods Program. I will be grateful if you answer all the questions by putting the sign (×) next to the item that suits your situation. Note that the information received will be assigned for scientific purposes and your answers will be dealt with confidentially.

**Thank you for your cooperation**

**The researcher: Ro'a Abdullah**

### **Section one : General Information**

- 1.Gender**                      1- Male        2-Female
- 2.Education Stream**                      1-Scientific        2-Humanities        3-Commercial
- 4-Industrial                          5-Technology
- 3.Directorates of Education**    1-Jenin        2-Qabatiah

## Section two: Cognitive motivation

Number	Items	Always	Usually	Sometimes	Rarely	Never
1.	I have a desire to improve my English Language.					
2.	I like reading cultural books related to English Language.					
3.	I use the internet to write English Language researches.					
4.	I automatically rush to investigate the questions raised by the English teacher.					
5.	. I find the knowledge included in the English book quite enough.					
6.	I spend a lot of time to obtain any new information relevant to English.					
7.	I try to get familiar with everything about English Language.					
8.	I constantly insist to study English Language.					
9.	I would like to conduct a study on English Language and its literature.					
10.	Everything new related to the teaching of English excites me and arouses my interest.					
11.	I share my colleagues in writing English Language researches.					
12.	I am interested in programs presented in the English Language.					
13.	I read journals that are related to the English Language.					
14.	I initiate questioning after the teacher has presented the lesson.					

15.	I participate in English Language classes.					
16.	I constantly follow the achievements of English Language writers.					
17.	I aspire to obtain a distinguished level in the field of English Language.					
18.	I like to have a discussion with my English teacher.					
19.	I look for external references related to the English Language.					
20.	I participate actively in the English Language clubs organized by the school.					

**Thank you for your cooperation**

## Appendix (3): Verbal Intelligence Questionnaire

(The Arabic version)



عمادة الدراسات العليا  
جامعة القدس  
كلية العلوم التربوية

### استبانة

عزيزي/ تي الطالب/ة ,

تحية طيبة وبعد,

تقوم الباحثة بدراسة بعنوان "الدكاء اللغوي لدى طلبة المرحلة الثانوية وعلاقته بدافعيتهم المعرفية نحو اللغة الإنجليزية في محافظة جنين." وذلك استكمالاً لمتطلبات الحصول على درجة الماجستير في برنامج أساليب التدريس, يرجى الإجابة عن العبارات التي تضمنتها الاستبانة بوضع إشارة (×) أمام كل فقرة كما ترونه مناسباً, علماً بأن المعلومات الواردة لغاية البحث العلمي فقط.

شاكرين حسن تعاونكم

الباحثة: رؤى عبدالله

القسم الأول: معلومات عامة

- |                          |                    |                          |            |
|--------------------------|--------------------|--------------------------|------------|
| <input type="checkbox"/> | 1. النوع الاجتماعي | <input type="checkbox"/> | 1. ذكر     |
| <input type="checkbox"/> | 2. التخصص          | <input type="checkbox"/> | 1. علمي    |
| <input type="checkbox"/> | 3. المديرية        | <input type="checkbox"/> | 1. جنين    |
| <input type="checkbox"/> | 2. قبائلية         | <input type="checkbox"/> | 2. قبائلية |
| <input type="checkbox"/> | 3. تجاري           | <input type="checkbox"/> | 2. أدبي    |
| <input type="checkbox"/> | 4. صناعي           | <input type="checkbox"/> | 2. أنثى    |
| <input type="checkbox"/> | 5. تكنولوجي        | <input type="checkbox"/> | 3. تجاري   |

القسم الثاني: الذكاء اللغوي

الرقم	الفقرة	درجة كبيرة جداً	درجة كبيرة	درجة متوسطة	درجة ضعيفة	درجة ضعيفة جداً
1.	أمتلك مهارة التعبير عن مشاعري بلغة واضحة.					
2.	أقرأ الصحف اليومية.					
3.	أقرأ اللافتات أثناء سيرتي في الطريق.					
4.	أنا بارع في حل ألعاب الكلمات المتقاطعة.					
5.	أنصت باهتمام إلى وسائل الاتصال المسموعة.					
6.	أرغب في حضور الندوات الثقافية التي تنظمها المدرسة.					
7.	أنصت باهتمام إلى أحاديث الآخرين.					
8.	أحتفظ بمذكرة باستمرار.					
9.	أشارك في المناقشات العامة.					
10.	أشعر بالسرور عند استخدام الأصوات اللغوية.					
11.	أشارك في أنشطة الكتابة الإبداعية التي تنظمها المدرسة.					
12.	لدي القدرة على حفظ أكبر عدد من الكلمات.					
13.	يسهل علي تأليف القصص.					
14.	أتابع باهتمام المسابقات الشعرية.					
15.	أكتب مقالات تنال إعجاب الكثيرين.					
16.	لدي الفضول للكشف عن أصول الكلمات.					
17.	أستطيع تكوين جمل صحيحة لغوياً.					
18.	أستطيع استخلاص الأفكار الرئيسية لنص معين.					

					19. أتواصل مع أصدقائي على مواقع التواصل الاجتماعي كتابةً.
					20. قراءة الكتب ممتعة بالنسبة لي.
					21. أحب المشاركة في تقديم برنامج الإذاعة الصباحية.
					22. لدي القدرة على إلقاء كلام ارتجالي دون أخطاء.

شكراً لحسن تعاونكم

## Appendix (4): Cognitive Motivation Towards English Questionnaire (The Arabic version).



عمادة الدراسات العليا  
جامعة القدس  
كلية العلوم التربوية

### استبانة

عزيزي / تي الطالب/ة ,

تحية طيبة وبعد,

تقوم الباحثة بدراسة بعنوان "الذكاء اللغوي لدى طلبة المرحلة الثانوية وعلاقته بدافعتهم المعرفية نحو اللغة الإنجليزية في محافظة جنين." وذلك استكمالاً لمتطلبات الحصول على درجة الماجستير في برنامج أساليب التدريس. يرجى الإجابة عن العبارات التي تضمنتها الإستبانة بوضع إشارة (×) أمام كل فقرة كما ترونه مناسباً، علماً بأن المعلومات الواردة لغاية البحث العلمي فقط.

شاكرين حسن تعاونكم

الباحثة: رؤى عبدالله

القسم الأول: معلومات عامة

- |                          |                   |            |                          |          |                          |
|--------------------------|-------------------|------------|--------------------------|----------|--------------------------|
| <input type="checkbox"/> | 1.النوع الاجتماعي | 1. ذكر     | <input type="checkbox"/> | 2.أنثى   | <input type="checkbox"/> |
| <input type="checkbox"/> | 2.التخصص          | 1. علمي    | <input type="checkbox"/> | 2.أدبي   | <input type="checkbox"/> |
| <input type="checkbox"/> | 3.المديرية        | 1.جنين     | <input type="checkbox"/> | 2.قباطية | <input type="checkbox"/> |
| <input type="checkbox"/> | 4.صناعي           | 5.تكنولوجي | <input type="checkbox"/> | 3.تجاري  | <input type="checkbox"/> |

## القسم الثاني: الدافعية المعرفية

الرقم	الفقرة	دائماً	غالباً	أحياناً	نادراً	أبداً
1.	أرغب في تطوير لغتي الإنجليزية.					
2.	أقبل على قراءة الكتب الثقافية ذات العلاقة بمادة اللغة الإنجليزية.					
3.	أوظف الإنترنت في كتابة بحوث مادة اللغة الإنجليزية.					
4.	أندفع تلقائياً لتقصي الإجابة عن الأسئلة التي تثيرها معلمة اللغة الإنجليزية.					
5.	أكتفي بما يحتويه كتاب اللغة الإنجليزية من معرفة.					
6.	أمضي كثيراً من الوقت للحصول على معلومات جديدة في مجال اللغة الإنجليزية.					
7.	أحاول الإلمام بكل ما يتعلق بمادة اللغة الإنجليزية.					
8.	أصر على متابعة دراسة مادة اللغة الإنجليزية.					
9.	أرغب في إكمال دراسة تتعلق بمادة اللغة الإنجليزية.					
10.	يثير اهتمامي كل ما هو جديد في مجال اللغة الإنجليزية.					
11.	أشارك زملائي في كتابة بحوث مادة اللغة الإنجليزية.					
12.	أتابع باهتمام البرامج العلمية المقدمة باللغة الإنجليزية.					
13.	أقرأ المجالات العلمية باللغة الإنجليزية.					
14.	أبادر بطرح الأسئلة بعدما تقوم معلمة اللغة الإنجليزية من عرض المادة.					
15.	أشارك في دورات اللغة الإنجليزية.					
16.	أتابع إنجازات أدياء اللغة الإنجليزية.					
17.	أطمح لمستوى متميز في مجال اللغة الإنجليزية.					

					تعجبي إثارة المناقشة مع معلمة اللغة الإنجليزية.	18.
					أبحث عن المراجع الخارجية ذات العلاقة باللغة الإنجليزية	19.
					أشارك بفاعلية في نوادي اللغة الإنجليزية التي تنظمها المدرسة.	20.

شكراً لحسن تعاونكم

## Appendix (5): List of arbitrators

<b>N.</b>	<b>Name</b>	<b>Workplace</b>
1.	Prof.Afif Zaidan	Al-Quds University
2.	Prof.Raja' Abdullah	University of Kerbala
3.	Dr.Inas Nasser	Al-Quds University
4.	Dr.Ibrahim Sleibi	Al-Quds University
5.	Dr.Muhsen Adas	Al-Quds University
6.	Dr.Eyad Halaq	Al-Quds University
7.	Dr.Amir Alawneh	Al-Quds Open University / Nablus Branch
8.	Dr.Munther Zioud	Al-Quds Open University/Jenin Branch
9.	Dr.Emad Abu Al-Rub	Arab American University
10.	Dr.Suheil Salha	Al-Najah National University
11.	Dr.Alia' Alasali	Al-Najah National University
12.	Mr.Said Hamed	University College of Educational Sciences
13.	Dr.Sa'ed Rabai'a	Al-Quds Open University
14.	Dr.Muhammed Dabous	Al Istiqlal University
15.	Dr.Raja' Sweidan	Al Istiqlal University

## Appendix (6): The permissions from Al-Quds University

Al-Quds University  
Faculty of Educational Sciences  
Deans Office

بسم الله الرحمن الرحيم

جامعة القدس  
كلية العلوم التربوية  
مكتب العميد

التاريخ: 2018/10/2

الموضوع : تسهيل مهمة

حضرة السادة / مديرية التربية والتعليم المحترمين  
جنين

10.10.2018

المديرية لاداريه لمعي  
رشد كنعان لعام

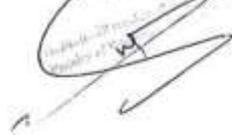
صام



تحية طيبة وبعد،،  
تقوم الطالبة رؤى عبدالله خضر أبو غره ورقمها الجامعي 21620235، بإجراء دراسة  
بعنوان:  
"النكاح اللغوي لدى طلبة المرحلة الثانوية وعلاقته بدافعيتهم المعرفية نحو اللغة الانجليزية في محافظة  
جنين"  
لذا نرجو من حضرتكم تسهيل مهمة الطالبة المذكورة أعلاه وذلك لتطبيق الدراسة خلال  
الفصل الدراسي الحالي .

شاكرين لكم حسن تعاونكم

د. ايناس ناصر  
عميد كلية العلوم التربوية





التاريخ: 2018/10/2

حضرة السادة/ مديرة التربية والتعليم المحترمين  
قباطية

الموضوع : تسهيل مهمة

تحية طيبة وبعد،،

تقوم الطالبة رؤى عبدالله خضر أبو غره ورقمها الجامعي 21620235، بإجراء دراسة  
بعنوان:

"الذكاء اللغوي لدى طلبة المرحلة الثانوية وعلاقته بدافعيتهم المعرفية نحو اللغة الانجليزية في محافظة  
جنين"

لذا نرجو من حضرتكم تسهيل مهمة الطالبة المذكورة أعلاه وذلك لتطبيق الدراسة خلال  
الفصل الدراسي الحالي .

شاكرين لكم حسن تعاونكم

3.10.2018

د. ايناس ناصر

عميد كلية العلوم التربوية

## Appendix (7): The permissions from the Directorates of Education

State Of Palestine  
Ministry of Education & Higher Education  
Directorate of Education & Higher Education -  
Jenin

دولة فلسطين  
وزارة التربية والتعليم العالي  
مديرية التربية والتعليم العالي - جنين

الرقم: م/ج/ 30 / 27 / 5145  
التاريخ: 2018/10/10 م  
الموافق: 1 / صفر / 1440 هـ

حضرة مديرة مدرسة ..... المحترم/ة  
تحية طيبة وبعد !!!

### الموضوع : تسهيل مهمة باحثة

تهديكم أطيب التحيات، أرجو تسهيل مهمة الباحثة " رؤى عبدالله خضر أبو غرة " استكمالاً للحصول على شهادة الماجستير من جامعة القدس \_ أبو ديس ، في تنفيذ دراستها بعنوان " الذكاء اللغوي لدى طلبة المرحلة الثانوية وعلاقته بدافعتهم المعرفية نحو اللغة الانجليزية في محافظة جنين " .  
راجياً تعبئة الاستمارة المرفقة، بما لا يؤثر على سير العملية الإدارية والتعليمية .

مع الاحترام !!!

أ. طارق علاونة  
مدير التربية والتعليم العالي



أ. غ. ان. م.  
ن. م.

التعليم العام

تحدي القراءة العربي  
نحو فوز مدرسة بنات العودة الأساسية بجائزة برنامج تحدي القراءة العربي للعام 2018 م

04/2 503 503

32 جنين

04/2 438 567, 04/2 501 138 , 04/2 501 061



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حضرات مديري ومديرات المدارس المحترمين  
تحية وبعد،،،

الموضوع: تسهيل مهمة

أرجو تسهيل مهمة الطالب/ة (رؤى عبدالله خضر أبو عرة) بإجراء دراسته/ا الميدانية بعنوان  
\* الذكاء اللغوي لدى طلبة المرحلة الثانوية وعلاقتها بدافعتهم المعرفية نحو اللغة الانجليزية في محافظة  
جنين" وذلك بتعبئة الاستبانة المعدة لهذه الغاية ، شريطة أن لا يؤثر ذلك سلباً على سير العملية التعليمية.

مع الاحترام، ، ،

أ. محمّد زكارنة

مدير التربية والتعليم العالي



2018/10/03

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