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## **The Level Of Ambition And Its Relationship To The Ability To Solve Problems For First Year Secondary School Students A Field Study In The Secondary Schools (Ahmed Aroua, Khiri Al Khier ) In Magra, Of The Wilaya Of M'sila. Algeria**

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### **Abstract**

The current study aimed to identify the nature of the relationship between the ability to solve problems and the level of ambition among a sample of first-year secondary school students studying during the 2023/2024 academic year at the two high schools (Ahmed Ouroua, Khiri khier) in the town Magra of the Wilaya of M'sila, which numbered (120) male and female students who were selected randomly according to the gender variable. To achieve the objectives of the study, the researchers used two tools, one to measure the ability to solve problems, and the other to measure the level of ambition. After analyzing the data, the study concluded that there was no statistically significant correlation between the ability to solve problems and the level of ambition. The results also showed statistically significant differences in the ability to solve problems according to the gender variable in favor of males, and statistically significant differences in the level of ambition according to the gender variable in favor of females.

**Keywords:** Problem-solving ability, level of ambition.

### **Introduction**

#### **1-Statement of the problem:**

One of the variables that influence the components of the required performance (the ability to solve problems) in general, and in the educational field in particular, is the level of ambition, which is an essential part of the psychological structure of the human being (personality); it enhances the optimistic beliefs of the individual to be able to deal with the obstacles that stand in his way in achieving what he aspires to in his/her life. The level of ambition also represents an individual social

motive; through which the individual tries to feel that he is able to achieve his/her goals and accomplish his/her daily life obligations. On this basis, measure must be taken to make the student aspire to have better performance in his school (academic achievement) in order to reach the desired goal (academic success).

Many of the achievements and progress of nations and peoples maybe due to the availability of the appropriate level of ambition among their individuals in addition to the availability of productive factors, as it is known that productive sufficiency is positively linked to a high level of ambition, in addition to the ability to solve problems and the skill of using the thinking methods that the individual possesses. The level of ambition also plays an important role in the life of the individual as it contributes to forming a clearer image of the self and a better vision of future goals and ambitions.

Problem-solving behavior is the most important aspect of employing thinking and using it in daily life, in which the cognitive representation of previous experiences is organized with the elements that make up the problem in order to achieve the goal, and because it includes many abilities such as the ability to form relationships between stimuli and responses. The educational institution can play a major role in developing it as it is an effective tool in acquiring knowledge and making decisions (Al-Atoum & Alauna, 2016, p. 285). Problem solving is also considered one of the methods that are focused on in teaching science, in order to help learners find solutions (to problematic situations) by themselves, based on the principle of this method that aims to encourage learners to research, investigate, question and experiment, which represents the pinnacle of scientific activity carried out by scientists. According to Gagne; problem solving includes mental, academic and educational processes in which the learner discovers a set of previously learned rules and principles that the individual (student) can apply to reach solutions to unfamiliar problems (Zaytoun, 2001, p. 148-150). Within the systems theory, the student represents an open system that interacts with the surrounding environment, and faces difficult and confusing situations and conditions that push him to think, research and investigate in order to reach convincing solutions. In general, the life of an individual represents a set of problems imposed on him by the factors and pressures of the surrounding environment, whether these factors are cultural, professional, educational, social or economic.(Abu Rayash & Qatit, 2008, p. 61).

One of the most important goals of education today is to prepare learners to solve the problems that they and their societies will face tomorrow. There is no doubt that this is one of the difficult tasks oriented to education because the future is unknown and the problems of the future are also unknown.(Balqis and Marai, 1996, p. 352).In this context, (Siry, 1990) conducted a study that aimed to verify

the relationship between the level of ambition among those with high and low achievement motivation and their ability to solve problems. The results of this study revealed that students with a high level of achievement ambition had high performance in solving problems, with a statistically significant difference from their colleagues with low achievement ambition. It was also found that the level of ambition of the study individuals fluctuated during work on the problem-solving task, and statistically significant differences were found between males and females in the level of achievement ambition. Al-Tuwaijri' (2002) concluded that there were no differences in the level of social ambition attributed to the gender variable. Barakat (2008) concluded that there were no fundamental differences in the degrees of the level of ambition according to the variables of gender and specialization. Al-Gharib indicated that the level and degree of ambition depend on the individual's mental ability, including the ability to solve problems. The more mentally capable the individual is, the more he is able to achieve further and more difficult goals. Since the child's ability increases with age until he reaches a certain level, meaning that the level of ambition in the child changes with his chronological age.(Al-Gharib, 1990, p. 329).

In the same vein, Al-Aswad (2003, p. 97) explained that mental abilities play a prominent role in determining the level of ambition in the individual, as the intelligent student tends to lower his level of ambition if he fails to achieve his goals, especially if they are unrealistic goals, while the less intelligent student resorts to developing feelings of incompetence and placing blame on others, as he fails to recognize the reality of his abilities and does not lower his level of ambition to become more realistic. Hence, the relationship between the level of ambition and the ability to solve problems as the researchers see it, as the student who is characterized by an acceptable level of ambition is supposed to have sufficient ability to solve the problems that confront him, especially for the high school student who is supposed to have reached a level of ambition that is consistent with his mental and emotional maturity on the one hand; considering on the other hand the importance of the stage that will qualify him to reach the later stages of education. Some studies also addressed the ability to solve problems, including the study (Maleh, 2003) which showed the relationship between memory and the ability to solve problems among tenth grade students, while the study (Al-Adl 2001) investigated the path analysis of the relationship between the components of the ability to solve problems, which concluded that there is a relationship between them. The study (Al-Adl and Abdelouahab, 2003) also revealed the possibility of predicting the ability to solve problems through metacognitive skills.(Bennaceur, 2015, p. 10).

In light of the above, it seems that these two variables have a great importance in human life in general, and in the educational field in particular. Considering that the researchers have not found any local or foreign study that investigated the relationship between the two variables; they felt the need to conduct this current study to identify the nature of the relationship between the level of ambition and the ability to solve problems. The problem of the study is determined to answer the following questions:

1-1- Is there a statistically significant correlation between the ability to solve problems and the level of ambition in the sample of study?

1-2- Are there statistically significant differences in the ability to solve problems in the sample of study attributable to the gender variable?

1-3- Are there statistically significant differences in the level of ambition in the sample of study attributable to the gender variable?

## **2- Research Hypothesis:**

**2-1-** There is a statistically significant correlation between the ability to solve problems and the level of ambition in the sample of study.

**-2-2-** There are statistically significant differences in the ability to solve problems among the sample of study attributed to the gender variable.

**2-3-** There are statistically significant differences in the level of ambition among the sample of study attributed to the gender variable.

## **3-Research Objectives:**

The study aimed to identify the relationship between the level of ambition and the ability to solve problems in a sample of secondary school students. It also aimed to identify the differences in the level of ambition and the ability to solve problems in light of the gender variables.

## **4-The Importance of the Study:**

The importance of the study lies in the importance of its variables, which can be stated as follows:

- Determining the nature of the relationship between the level of ambition and the ability to solve problems among secondary school students;

- The results obtained may help education sector officials to reconsider and develop current curricula, especially in the field of problem-solving pedagogy; to

raise the level of academic and professional ambition among secondary school students;

- This study, with its current variables, is considered one of the rare studies , according to the researchers' knowledge, in Algeria, as the researchers did not find local studies that dealt with the level of ambition and its relationship to the ability to solve problems in secondary school.

## **5- The Limits of the Study:**

The limits of this study were as follows:

- Time limits: This study was conducted during the second semester of the 2023/2024 academic year.

- Human limits: This study was conducted on a sample of first-year secondary school students at "Dr. Ahmed Aroua" and "Khiri khier" high schools in the town of Magra, the Wilaya of M'sila who are pursuing their studies in the 2023/2024 academic year.

## **6- Operational definitions:**

### **6-1- Level of ambition:**

Ambition is a strong desire to do or achieve something and the determination to achieve success. It is a relatively stable trait that refers to a person who is optimistic, able to set goals, accept everything new, and tolerate failure and frustration. It is operationally defined in this study as the degree that the student obtains in the ambition scale prepared for this purpose.

### **6-2-Problem solving ability:**

It is the use of thinking processes to understand and reformulate the problem to reach different solutions in preparation for choosing the appropriate solution with perseverance by exerting effort over and over again to reach the solution using qualitative representations of the problem, and skills to respond to the requirements of an unfamiliar situation to reach the solution. And it is is procedurally defined by the degree that the student obtains in the problem-solving skills scale prepared for this purpose in this study.

## **Theoretical Framework:**

### **First: Level of Ambition:**

#### **1. Definition of Level of Ambition:**

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### **1.1 Linguistic Definition:**

According to Ibn Manzoor in the entry (to aspire; 'ṭamaha' = طمح), 'ṭamaha' means looking high, and when water reaches its peak. A "ṭamah" sea is one with high waves (Ibn Manzoor, 2012, p. 588).

### **1.2 Terminological Definition:**

Specialized writings do not explicitly define ambition, but it can be deduced from what linguists have stated. Ambition refers to a person's drive toward achieving higher goals and striving to improve their condition to something better and superior. This ambition is good only when it complies with religious principles.

### **1.3 Definition of Level of Ambition:**

- It is the level of achievement that an individual desires to reach and believes he can attain.
- It is the level or goal that an individual sets in various aspects of life, striving to reach it with perseverance based on his abilities and previous experiences.
- It serves as a standard that individuals aim to achieve, varying with the degrees of success and failure (Sarkis, 1997, p. 125).
- It is the level one aspires to reach, whether in academic achievement, scientific endeavors, productivity, or profession, striving to attain it based on his/her competence and ability to adapt into personal and environmental conditions (Al-Anzi, 2016, p. 105).
- It is a relatively stable trait which indicates that an ambitious person is characterized by optimism, the ability to set goals, embrace new things, and handle failure and frustration (Mawad & Abdel Azim, 2005, p. 3).
- It is also known as the extent to which an individual can set and plan his/her goals in various life aspects, striving to achieve these goals by overcoming obstacles, aligning with his psychological makeup, reference framework, abilities, and past experiences.
- It is the criterion by which an individual judges his/her own performance, whether success or failure, in achieving what s/he expects of himself/herself, distinguished from actual achievement and aspirations (Al-Mashikhi, 2009, p. 91).
- When ambition is based on imagination and detached from reality, it is often unattainable.

## **2. Importance of Ambition in Human Life:**

Ambition has numerous benefits for both individuals and society, contributing to the good and welfare of all. Its importance in human life lies on the following:

- Ambition helps individuals achieve goals in various life domains.
- Ambition fosters good feelings and optimism within individuals.
- Ambition improves behavior, making individuals more aware, cultured, ethical, and positive in all life aspects, encouraging personal development and faster achievement of success.
- It enhances intellectual and mental capacity and increases the ability to contribute and achieve in ambitious individuals.
- Ambition significantly contributes to economic growth, both for society and the individual, serving as the foundation for societal advancement, success, innovations, and new discoveries across various life domains.

### **3. Types of Ambition Levels:**

#### **3.1 Academic Ambition:**

This type of ambition relates to educational field, beginning from the early years of schooling. Where a child aspires to progress from one level to another, eventually reaching secondary education and choosing a field of study based on their interests. Achieving success in this field especially in his/her third-year secondary school to reach baccalaureate as a door to university that becomes a driving force for their perseverance and effort, especially as they aim to succeed in high school and fulfill their highest academic ambitions. This type of ambition evolves with the learner's age, helping them adapt to various life stages.

#### **3.2 Professional Ambition:**

This type of ambition is formed during or after one's education and may even exist in individuals with no formal education. Many students aspire to certain professions and admire them and those who work in them, such as teaching, medicine or some other professions. In some cases, ambition only becomes evident in the final year of secondary or university education when individuals reach a stage where they balance reality with personal readiness.

#### **3.3 Social Ambition:**

This type of ambition is linked to the aspirations of groups and communities, differing from one society to another. Individual ambitions depend on the social and economic status of the society they live in. As a developed society, its level of

ambition goes in parallel with its level of development. Within the same society, ambitions can differ from one person to another. It also changes over time. For example, in the past, individuals might have aspired to become doctors or engineers, but with current societal advancements, ambitions have been shifted towards modern professions that correspond with this progress. Social ambition can also refer to the aspirations of a specific group or generation within the same society.

### **3.4 Personal Ambition:**

This type of ambition is linked to an individual and his/her specific goals and abilities. Personal ambitions vary among people depending on their age or different areas of life. Some may have economic ambitions, others political, professional, or athletic ambitions, among many other areas people strive to achieve.

### **3.5 Natural Ambition:**

Ambition is a strong desire to do or achieve something and a determination to succeed. This type of ambition can be divided into natural and unnatural ambition. Natural ambition is based on an individual's abilities and is more realistic, focused on achieving goals within one's capabilities. Unnatural ambition, however, is often limited by obstacles and thoughts that hinder reaching one's goals. Each person is born with natural curiosity, developing their mind and abilities, observing, imitating, and learning behavior from everyone and everything around them.

However, ambition can be positive or negative. Both the individual and society benefit from positive ambition, while negative ambition leads to selfishness and greed, harming society with the individual's behavior.

### **3.6 Imaginary Ambition (like a fantasy disease):**

This type of ambition is based on the individual's desire to escape from his negative reality and feelings of frustration. His/her ambition is built on fantasy and is detached from reality, making it often unattainable.

## **4. Factors Influencing the Level of Aspiration:**

In general, an individual's level of aspiration is influenced by personal (internal) factors such as gender, intelligence, maturity, and self-esteem, as well as external factors like family, environment, and socio-economic status. Some key factors include:

#### **4.1 Personal Factors (Internal):**

##### **4.1.1 Gender:**

Ambition levels vary by gender, with differences often observed between males and females. Gender influences an individual's ambition level, with societal upbringing playing a significant role. Cultural and civilizational and other fields development make such ambition levels differences. Studies indicate that males generally have higher ambition levels than females.

##### **4.1.2 Intelligence:**

Ambition levels differ according to an individual's intellectual abilities. People with high intelligence levels tend to have more realistic ambitions and can map out the most direct path to achieve them. In contrast, those with lower intelligence often have exaggerated and unrealistic ambitions that do not match with their abilities. In general, intelligence provides an individual with the ability to foresee ways to manage opportunities, solve problems, overcome obstacles, draw conclusions, and have the ability to anticipate and predict. Therefore, the greater an individual's intellectual capacity, the more s/he is capable of achieving more distant and challenging goals.

##### **4.1.3 Maturity:**

The level of ambition grows and develops as the individual ages. Each stage of life is characterized by a different type of ambition. For example, ambition in childhood may be vague but is present in a formative stage, becoming more defined during adolescence and reaching realism in adulthood. The emergence and clarity of ambition are influenced by the extent of an individual's awareness and increased maturity. This means that adolescent ambition may appear during childhood, effectively preceding the stage in which it is typically expected, depending on the individual's physical, social, and psychological maturity.

##### **4.1.4 Emotional Stability:**

An emotionally unstable individual tends to have a low level of ambition and compatibility, fearing failure due to a lack of confidence in their ability to complete tasks. In contrast, an emotionally stable individual can balance their abilities and resources when setting goals and forming ambitions. It is also with clear awareness and understanding that an individual comprehends their abilities, potential, and purposeful performance. (Ali, 2010, pp. 77-83).

#### **4.1.5 Self-Esteem:**

An individual's self-image plays a crucial role in determining his/her level of ambition. A person who values himself/herself and has confidence in his abilities will set realistic goals and choose actions that match with his/her capabilities. Therefore, the level of ambition is closely linked to a person's self-concept, and the type and extent of ambition may be influenced by this self-perception.

### **4.2 External Factors:**

External factors play an important role in determining an individual's level of ambition, including economic and social factors. These are influenced by the degree of others' appreciation of the individual, particularly from parents and relatives, which may affect the individual's life and level of ambition, such as:

#### **4.2.1 The individual's frame of reference:**

Family members, particularly parents, siblings, and peers, significantly influence an individual's moral standards and ambition levels.

#### **4.2.2 Parents' Ambitions and Expectations:**

The family is the primary support system for an individual throughout various life stages. Parents may channel their unachieved goals into their children's ambitions, providing them with the necessary means to achieve them.

#### **4.2.3 Environmental and Social Factors:**

The social environment plays a significant role in shaping an individual's level of ambition, as it provides concepts and values that form his reference framework. However, this influence varies from one individual to another depending on his/her personal abilities and the nature of the values and concepts presented to him/her. These can either foster the growth of a realistic level of ambition or lead to the development of an unrealistic level of ambition.

#### **4.2.4 Socio-Economic Status:**

Socio-economic status plays a crucial role in shaping an individual's personality and determining his/her ambitions. An improvement in a family's economic status can lead to higher ambitions. As well as, a low socio-economic status may drive higher ambitions as individuals strive to overcome their circumstances and prove their capabilities.(Kamelia, 1990, p.19).

## **Second: Problem-Solving Ability:**

### **1. Concept of a Problem:**

#### **1.1 Linguistic Meaning:**

A problem is a singular of problems, derived from the verb to problematize "ashkal" ; meaning confused or ambiguous. A problem is a situation that is difficult to understand (Dakhil Allah, 2014, p. 76).

#### **1.2 Terminological Meaning:**

There are several definitions of a problem, varying depending on the perspective of the scholar:

- A problem is a new challenging situation not previously encountered by the individual.
- A problem is the feeling or awareness of an obstacle that must be overcome to achieve a goal.
- It is a situation that requires treatment or preparation, or an experience that causes confusion and demands decision-making or problem-solving.
- A problem exists when an individual faces a specific goal they cannot reach using familiar methods.
- The problem is a situation that contains a goal to be achieved.

## **2. The nature of problem-solving ability:**

### **2.1. Concept of Ability:**

- **Linguistically:** "Ability" is derived from the verb "to enable = can," and the plural forms are "abilities." It appears in content systems.
- **Ability:** Energy or power, meaning the strength to do something and the capacity to perform it. (Al-Bustani, 2008, p. 217).
- **Terminologically:**
  - **Ability:** It is the recall of specific information to apply (utilize) it skillfully and use it in new situations or problems that the individual faces.
  - **Ability:** The power that enables the performance of a physical or mental act. (Abu Hatab and Fahmy, 1984, p. 3).

### **2.2. The Concept of Problem Solving:**

Various definitions have been provided for this concept, and some of the most prominent are:

- Problem-solving means the process of moving from the initial state of the problem to the target state (the goal), and during this process, the individual goes through several intermediate states of the problem.
- Problem-solving refers to the behaviors and cognitive processes directed at performing a task that requires mental abilities, which could involve a calculation task. (Jarwan, 1999, p. 95).
- It is a set of processes carried out by an individual using the information and knowledge previously learned and the skills acquired to overcome a situation effectively and reach a solution. (Al-Qudat and Al-Tartouri, 2007, p. 305).

### **2.3. The Concept of Problem-Solving Ability:**

- It is a process that involves insight and mental and sensory processing, requiring purposeful mental effort that results in solving the issue that concerns the learner. (Qatami, 2013, p. 403).
- It is the individual's ability to face problems and difficulties encountered in life through the life and social situations they experience.
- A mental visualization that includes a series of organized steps followed by the individual to reach a solution. (Zaitoun, 2003, p. 327).

### **3-Conditions for Problem Solving:**

The conditions for problem-solving are as follows:

- The teacher must be capable of solving problems and know the principles, foundations, and strategies necessary for that.
- The teacher must acquire the ability to identify the learning objectives for each step of the five-step research process.
- The problem should be one that stimulates and challenges the learner outside the classroom; it should not be a problem that can be solved by rote learning.
- The problems presented for training should be real and realistic, meeting the conditions of a good solvable problem within the available possibilities. The problem should belong to the planned learning objectives and relate to the learners' needs and interests.
- The teacher should use an appropriate method to assess the learners' ability to solve problems.

- Ensuring the basic requirements for problem-solving are met before starting to teach them, and organizing the learning situation to provide appropriate practice.
- Providing practical conditions suitable for learning problem-solving in a practical manner (choosing practical, realistic methods, techniques, and strategies for problem-solving, providing the largest possible number of different and diverse problems, and helping learners develop a clear pattern to solve problems).
- Providing insight and a Gestalt perspective on the problem.
- Availability of necessary materials and tools for solving; guidance and support in the form of helpful hints for solving.
- Group and symbolic work make problem-solving an enjoyable activity. (Balqis and Mar'i, 1996, p. 358-362).

#### **4. Steps of Problem Solving:**

Problem-solving requires a series of organized steps that help reach a solution. Together, they form the steps of problem-solving. These steps can be learned, practiced, and used by learners (students) in problem-solving. The results of the analysis of model situations for problem-solving, especially if the problem of interest lies in the field of science, indicate several stages that must be followed when performing the desired solution tasks. Psychologists have differed in determining the number of stages and their names, but they can be traced back to four main stages:

- The stage of recognizing and understanding the problem (feeling and sensing the problem).
- The stage of generating ideas and hypotheses (generating alternatives and searching for the solution among different alternatives).
- The stage of making a decision with the appropriate hypothesis (choosing the suitable alternative and method).
- The stage of testing and evaluating the hypothesis (implementing and evaluating the solution). (Nashwati, 1996, p. 453-454).

#### **4. Assumptions of Problem-Solving Behavior:**

- Problem-solving behavior involves completing sequential stages, where the learner progresses to the next stage at the moment he finishes the previous stage.
- Each stage is considered independent of the other stages.

- Each stage is equal to the others in difficulty, and the average time taken to move from one stage to another is almost constant. (Qatami, 2014, p. 276).

### **Third: Field study procedures:**

#### **1-Methodology:**

The researchers used the descriptive method due to its suitability for the purposes, nature and objectives of the study.

#### **1-The community and sample of the basic study:**

The original community of the study was chosen from first year secondary school students of the academic year 2023/2024 at the Dr. Ahmed Oroua and Khiri Khier high schools in the city of Magra, Wilaya of M'Sila, where the number of their students is 380, from which the basic study sample was selected using the stratified random method, which numbered (120) male and female students at a rate of (31.57%), as shown in the following table:

**Table No.1 shows the distribution of the study sample by gender**

	Male	Female	total	percentage
Gender	52%	68%	120%	
percentage	43.33%	56.66%	100%	

#### **1-Study tools:**

##### **3-1- Problem solving ability scale:**

This scale was prepared by (Hamdi Nazih, 1998) and consists of 40 statements distributed over five dimensions: general orientation, problem definition, generating alternatives, decision making, and evaluation. At a rate of eight statements for each dimension, the answers to which are according to the four-alternative Likert scale (applies to a large extent, applies to a medium extent, applies to a small extent, does not apply at all).

**A- Validity of the scale:** The validity of the scale was verified by applying it to a survey sample from outside the main study sample consisting of (30) male and female students selected from Khiri Khier Secondary School in Magra, specializing in science and literature, by calculating the correlation coefficient between the score of each dimension and the total score of the scale. The results were as shown in the following table:

**Table No. (2) shows the values of the correlation of the dimensions with the total score of the problem solving ability scale.**

Dimensions	Correlation coefficient with the total score of the scale
General tendency	0.518**
Problem Definition	0.645**
Generative alternatives	0.746**
Decision making	0.538**
evaluation	0.687**
Significant at the level	0.01**

It is clear from Table (2) that the values of the correlation of dimensions with the total score came at acceptable rates, as they ranged between (0.538) as the lowest value and (0.746) as the highest value, and they were all significant at the (0.01) level, which indicates that the paragraphs measure what they were designed to measure.

**B- Scale stability:** The stability of the scale was calculated using the test-re-application method (with a two-week interval) and Cronbach's alpha coefficient, where Pearson's correlation coefficient between application and re-application was (0.745) and Cronbach's alpha value was (0.835), which are two acceptable values indicating that the scale is characterized by acceptable stability.

**3-2-Ambition level scale:** In this study, a scale prepared by Mohamed Abdel Tawab Moawad and Sayed Abdel Azim Mohamed (2005) was adopted, which consists of thirty-six paragraphs distributed over four dimensions: optimism, ability to set goals, acceptance of new things, tolerance of frustration. Four alternatives were identified for answering each item of the scale, which are: always, often, sometimes, rarely, with these scores reflected in the negative items (36, 32, 30, 23, 6). **A- Scale validity:** The validity of the scale was verified by applying it to a survey sample consisting of (30) studentsAnd a female student from outside the basic study sample, by calculating the correlation coefficient between the score of each dimension and the total score of the scale.The results were as shown in the following table:

**Table No. (3) shows the values of the correlation of the dimensions with the total score of the aspiration level scale.**

Dimensions	Correlation coefficient with
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	the total score of the scale
Optimism	0.643**
Ability to set goals	0.514**
Acceptance of the new	0.786**
Acceptance of frustration	0.613**
Significance level	0.01**

From Table (3), we note that the values of the correlation of the dimensions with the total score of the test are statistically significant, ranging between (0.514) as the lowest value and (0.786) as the highest value, which indicates that the scale has validity indications that allow it to be applied in this study.

**B- Scale stability:** The stability was calculated using the test re-application method (with a two-week interval), and the Cronbach's alpha coefficient, where the value of the "Pearson" correlation coefficient between application and re-application was (0.612), and the value of the Cronbach's alpha coefficient was (0.782), which are values that indicate that the scale has a high degree of stability.

#### 4- Statistical methods:

To answer the study questions, the following statistical methods were used: arithmetic means and standard deviations, the "Pearson" correlation coefficient, and the "t" test.

### Fourth: Presentation, Interpretation, and Discussion of the Study Results.

#### 1- Presentation, interpretation and discussion of the results of the first hypothesis:

The first hypothesis stated that: There is a statistically significant correlation between the ability to solve problems and the level of ambition in the study sample. In order to verify the validity of this hypothesis, the Pearson correlation coefficient was calculated between the two variables, and the results were as follows:

**Table No. (4)** shows the value of the Pearson correlation coefficient between the ability to solve problems and the level of ambition.

Correlation Matrix	Problem Solving Ability	Significance Level	decision
Ambition level	-0.165	0.074	Not significant

It is clear from the previous results in Table (4) that the Pearson correlation coefficient between the ability to solve problems and the level of ambition reached (-0.165), which is a statistically insignificant value, thus rejecting the research hypothesis and accepting the null hypothesis.

Perhaps this result is due to the fact that the level of ambition is not directly related to the ability to solve problems, but rather is related to other factors that were not included in the current study. Also, the adoption of current Algerian programs and curricula of pedagogy based on providing learning in problematic situations gave all learners equal opportunities to acquire this ability and employ it in life situations regardless of their levels of ambition. In addition, the paragraphs and dimensions included in the scale focused on the ability to solve educational and life problems as a whole and not on solving mathematical problems.

This result was contrary to the researchers' expectations, and contrary to what was emphasized by educational literature, which acknowledges the existence of a relationship between the level of ambition and mental abilities, especially intelligence, because intelligence is the ability to solve problems (according to the theories explaining the level of ambition), as the level of ambition is directly proportional to intelligence, and this was also confirmed by the studies referred to previously, such as the study (Siri, 1990), the study (Al-Gharib 1990), and the study (Al-Aswad, 2003).

2- Presentation, interpretation and discussion of the results of the second hypothesis:

To verify the validity of the second hypothesis, the (t) test was used to indicate the differences between the averages, and the results came as shown in the following table:

**Table No. (5) shows the differences between males and females in the ability to solve problems.**

	F-test	Significance level	Gender	Number	Arithmetic mean	Deviation standard	Value (Tt)	Value (Tc)	Significance level	Latitude	De
Problem solving ability	3.245	0.06	Males	52	93.32	8.9	2.358	2.654	0.04	118	Sig
			females	68	58.47	12.45					

Table (5) shows that the value of Levene's homogeneity test (F) is not statistically significant at (0.05), which indicates the presence of homogeneity between the two groups, which required the use of the "t" test for two independent homogeneous

samples, where the calculated "t" reached (2.654), which is greater than the tabulated "t" value (2.358) at the significance level (0.05), and thus the second hypothesis was achieved.

These differences in the ability to solve problems in favor of males are attributed to the nature of the gender itself, as males enjoy high self-confidence. Their quest in this is to achieve independence, bear responsibility, prove themselves, and obtain a decent social status. They are helped in all this by frequent contact and communication with organizations, exploiting social situations, and participating with others in solving problems. Males also enjoy greater freedom in words and actions, and the ability to control themselves while acquiring mental abilities that facilitate their understanding of relationships and solving difficult problems, and are more capable of facing obstacles. Accordingly, it is natural that there are differences according to gender in the ability to solve problems. In this context, the Holy Quran referred to this in the Almighty's saying: "And when she delivered her, she said, 'My Lord, indeed I have delivered a female.' And Allah is most knowing of what she delivered. And the male is not like the female. And indeed, I have named her Mary, and indeed, I seek refuge for her and her offspring in You from Satan, the accursed." (Surat Al Imran, verse 36). This result is consistent with the study of (Al-Adl and Abdul-Wahab, 2003).

**1- Presentation, interpretation and discussion of the results of the third hypothesis:** The third hypothesis stated that: "There are statistically significant differences in the level of ambition among the study sample attributed to the gender variable." To verify the validity of this hypothesis, the (t) test was used to indicate the significance of the differences between the averages, and the results came as shown in the following table:

**Table (6) shows the differences between males and females in the level of ambition.**

	F-test	Significance level	Gender	Number	Arithmetic mean	Deviation standard	Value (Tt)	Value (Tc)	Significance level	Latitude	Decision
Ambitio Leve l	4.6 42	0.04	Mal es	52	83.64	13.14 7	2.3 5	2.7 1	0.014	118	Signif icant
			fem ales	6 8	39.42	9.653					

Table (6) shows that the value of Levene's homogeneity test (F) is statistically significant at (0.05), which means that there is no homogeneity between the two groups, which necessitated the use of the "t" test for two independent, heterogeneous samples, as the calculated "t" reached (2.719), which is a value greater than the tabulated "t" value (2.358) at the significance level (0.01), and thus the hypothesis was achieved. This result is attributed to the change in the view of both the school and the family in the absence of discrimination in social roles between the sexes and equal opportunities between them in most aspects, and to the development that occurred in the methods of social upbringing as a result of social change, which prompted the girl to acquire a positive view and confidence in her abilities and qualifications to achieve her ambitions and aspirations in light of the positive academic competition observed among girls to reach the maximum possible level academically and professionally. In fact, the specificity of some professions required the presence of a female worker such as education, medicine and administration... The girl also sees that high ambition is the only way to appear superior and aspire to a prestigious social and professional status and to obtain a job position that provides her with comfort and reassurance about the future, as well as giving her additional opportunities to obtain a life partner. All this happens in light of the tendency of males to material temptations and quick profit at the expense of perseverance in academic achievement and achieving academic success. The results of this study are consistent with the study of (Al-Mashikhi, 2009) and (Barakat, 2008).

### **Conclusion:**

Based on the results that have been reached, it becomes clear to us that ambition is the goal of every person, and its level is one of the most important distinguishing characteristics of his personality, and it is an essential part of the psychological structure of the person as it refines his personality, enhances his optimism and enthusiasm for life, and makes him able to deal with different forms of psychological pressures, and thus the ability to control the environment and its challenges; Ambition is a natural ability that helps the family, school and culture in nurturing it. Therefore, schools must play a more important role in identifying, nurturing and developing students' ambition by creating an environment and programs that support and encourage individuals. If students are more positively ambitious, society will benefit from growth in innovation, achievement and discovery; Ambition is the path to success and perseverance is the vehicle that reaches it. Especially if it is linked to some mental abilities such as the ability to solve problems, which is considered one of the most important developmental topics that organize the way individuals think when facing problems in all different aspects of practical life; The problem-solving skill is a complex skill consisting of a

set of skills represented in objective research and scrutiny, the skill of effective analysis and searching for the real causes of the problem, in addition to the ability to make decisions and communicate effectively with the surrounding environment and the ability to take actions at appropriate times and places as well; Accordingly, the researchers suggest the following: - Making the level of ambition commensurate with the learners' age, mental and educational abilities, by inoculating educational curricula in various educational stages to achieve this; - Working on training learners on problem-solving methods to ensure improving their abilities and skills to understand and move to new and future situations; - Conducting similar future studies on the study variables at various levels in the educational stages due to their importance in the teaching-learning process; - Parents must provide the appropriate atmosphere within the family (security, love, stability, cooperation) in order to build a healthy psyche for children, encourage them to achieve their ambitions, and work on developing their skills. - Focusing on the problem-solving approach that has become the focus of education in modern educational trends, while selecting situations that have meaning and are closest to the environmental reality surrounding the learner.

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