

Motivation for Learning among Students: An Exploratory Study at Abbas Moussa Secondary School – El Bouni 02, Annaba

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Abstract

The study aimed to identify the level of intrinsic and extrinsic learning motivation among second-year secondary students across academic streams at Abbas Moussa High School (El Bouni 2, Annaba). Using a descriptive method, Vallerand et al.'s (1992) 28-item Academic Motivation Scale was applied to a purposive stratified sample of 31 students. Findings revealed that extrinsic motivation was dominant, intrinsic motivation moderate, and amotivation very low, with significant gender differences favoring females in both motivation types and males in amotivation.

Keywords: Motivation for learning, student, secondary education, exploration.

دافعية التعلم لدى المتدربين -دراسة استكشافية بثانوية عباس موسى-البوني 02 عنابة

ملخص

هدفت الدراسة إلى تحديد مستوى الدافعية للتعلم (الداخلية، الخارجية) لدى تلاميذ السنة الثانية ثانوي بمختلف الشعب بثانوية عباس موسى، البوني 2، ولاية عنابة، واعتمدت الدراسة على المنهج الوصفي، وطبق مقياس فاليراند للدافعية الأكاديمية (Vallerand et al., 1992) المكون من 28 فقرة، على عينة قصدية طبقية بلغت 31 تلميذاً، وأظهرت النتائج أن الدافعية الخارجية هي النمط السائد لدى أفراد العينة، وتليها الدافعية الداخلية بمستوى متوسط، بينما سجل انعدام الدافعية بمستوى منخفض جداً. كما توصلت النتائج إلى فروق دالة حسب الجنس، حيث تفوقت الإناث على الذكور في كلا نوعي الدافعية، في حين سجل الذكور نسبة أعلى نسبياً في انعدام الدافعية.

الكلمات المفتاحية: دافعية التعلم، تلميذ، تعليم ثانوي، استكشاف.

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Introduction:

Secondary education is considered a decisive stage in the student's educational path, as it is during this period that his academic and professional orientations are determined. At the same time, he faces a set of challenges that may affect his academic performance and continuity in learning.

In this context, **motivation for learning** emerges as one of the most important psychological factors that determine the extent of the student's readiness to engage in the educational process and to confront the difficulties he encounters.

Motivation for learning has been defined as the force that drives the student to learn and persist in learning. It is divided into **intrinsic motivation**, which comes from the student's own desire to acquire knowledge and achieve success, and **extrinsic motivation**, which is influenced by rewards, punishments, and social pressures that in turn leave their mark on the learner's orientation and path.

Although there are several theories that explain motivation for learning, the Self-Determination Theory (SDT) has, according to researchers, explained this concept in an integrated way. Developed by its founders, Deci and Ryan, this theory assumes that motivation is shaped by the satisfaction of three basic psychological needs: the feeling of competence, autonomy, and social relatedness.

Thus, the learner becomes aware of his ability to succeed in academic tasks, feels a sense of freedom and control over his own learning without external coercion, and feels supported by teachers, peers, and family members. All this reinforces his desire to learn.

Many studies have also shown that students who feel competent, autonomous, and socially connected are more capable of achieving academic success, while the absence of these factors leads to a decline in the level of motivation and an increase in school problems such as absenteeism, lack of concentration, and low academic achievement.

For example, in the study by **Gourari Nasser and Zahaf Abdelkader (2019)**, it was found that a higher level of motivation is positively related to improved academic performance. Likewise, Naglaa **Ibrahim (2017)** confirmed that the absence of a sense of autonomy and competence results in lower engagement in school activities. Moreover, **Izbal's study (2014)** indicated that family and social factors play a central role in enhancing motivation, as students who receive family support and encouragement are more able to face academic challenges.

Based on what has been mentioned above, the topic of learning motivation was addressed within the framework of Self-Determination Theory (concept and analysis), in order to raise the following main question:

- What is the level of learning motivation among second-year secondary school students at Abbas Moussa El-Bouni High School in the Wilaya of Annaba?
- **From this main question, the following sub-questions were derived:**
- What type of learning motivation is the highest among second-year secondary school students?
- What is the relationship between the overall level of learning motivation and the gender of these students?
- What is the relationship between the overall level of learning motivation and the academic specialization of these students?

Research Objectives:

The purpose of this study is to:

- Identify the level of learning motivation among secondary school students (second year, all streams).
- Determine the most common type of motivation among these students.
- Explore the relationship between the level of motivation and the variables of gender and academic specialization.
- To achieve these objectives, the study aims to:



- Measure the level of learning motivation among a sample of secondary school students using the scale developed by Vallerand et al.
- Identify the most common type of motivation (intrinsic or extrinsic) among students at this stage of education.
- Analyze the differences in motivation levels between male and female students in order to see whether gender affects learning motivation.
- Compare motivation levels across different academic streams (scientific, literary, etc.) to determine the effect of specialization on motivation.

Operational Definitions:

Learning Motivation: Learning motivation is the degree of readiness of the student to make an effort and to persist in learning in order to achieve his or her academic goals and satisfactory school performance. In this study, this degree is measured through the total score obtained by the student after answering the questionnaire based on Self-Determination Theory, which includes the dimensions of motivation: intrinsic, extrinsic, and amotivation. This tool also identifies the types of motivation secondary school students possess (various forms of intrinsic motivation, various forms of extrinsic motivation, or amotivation).

Secondary School Student: In this study, a secondary school student refers to any male or female learner officially enrolled in one of the three years of secondary education, whose age ranges between 15 and 19 years, and who is studying at Abbas Moussa High School in the Wilaya of Annaba, who constituted the research sample.

Previous Studies:

First Study: The Validity of the Academic Motivation Scale (Ramadan & Ismail, 2015)

This study aimed to identify the psychometric properties of the Academic Motivation Scale developed by Vallerand et al. (1992). It was applied to a sample of fourth- and sixth-grade pupils, consisting of 302 students from different schools. Exploratory factor analysis was used to test the validity of the scale in the Arab environment.

The results showed that the scale retained its original structure of three dimensions: intrinsic motivation, extrinsic motivation, and amotivation. The study also confirmed the high reliability of the scale when applied to pupils at this age level.

Second Study: Academic Motivation (Intrinsic and Extrinsic) among New Students at King Faisal University (Al-Hao Jui, 2017)

This study aimed to measure the levels of academic motivation, both intrinsic and extrinsic, among new students at King Faisal University. The sample included 150 male and female students from different faculties. The Academic Motivation Scale, which consists of two dimensions (intrinsic and extrinsic), was used.

The results indicated that intrinsic motivation was higher than extrinsic motivation among new students, with statistically significant differences between genders in favor of females in intrinsic motivation.

Third Study: Learning Motivation and Its Relationship with Academic Achievement among Secondary School Students (Al-Alwani, 2018)

The aim of this study was to explore the level of learning motivation among secondary school students and its relationship with academic achievement. The researcher used the descriptive correlational method and applied a learning motivation questionnaire to measure the level of motivation, alongside analyzing students' results as an indicator of achievement.

The study involved 200 secondary school students in Algeria. The findings revealed a positive correlation between learning motivation and academic achievement, as students with higher motivation achieved better academic results. Gender differences were also observed, with females showing higher intrinsic motivation than males.

Fourth Study: Academic Motivation among University Students according to Self-Determination Theory (Bouali Badia).



This study aimed to identify the differences in academic motivation among a sample of students at Larbi Ben M'hidi University in Oum El Bouaghi, according to the variables of gender, specialization, and level of study. The researcher adopted the descriptive-analytical method and used a questionnaire to measure academic motivation based on the Self-Determination Theory. The sample consisted of 412 male and female students from different fields and study levels at Larbi Ben M'hidi University (Oum El Bouaghi). The results showed statistically significant differences in academic motivation attributed to gender in favor of females, to specialization in favor of literary fields, and to study level in favor of students in advanced years.

Comment on Previous Studies and the Place of the Current Study:

The first study supports the use of the scale developed by Vallerand et al. (1992) in the current research, as it confirms its validity for application to younger age groups in the Arab context. Although the study focused on primary school students, its results indicate the possibility of applying the scale to older groups, which enhances the reliability of the tool across different educational stages.

The second study highlights the importance of strengthening internal motivation among university students, which can be useful in designing guidance programs for secondary school students to prepare them for university life.

The third study demonstrated the significance of motivation in improving academic achievement, making it a valuable scientific contribution that can be used in the educational field.

Furthermore, the fourth study emphasized the importance of considering individual differences among students in terms of learning motivation and the necessity of developing learning strategies that meet their diverse needs in order to enhance their academic motivation.

Compared with the above-mentioned studies, the current research is exploratory in nature. It focuses on learning motivation among secondary school students at **Abbas Moussa El-Bouni High School in Annaba**, with a sample of second-year students from different streams. It also investigates the role of gender and specialization in relation to the level of learning motivation.

1- Theoretical Framework:

1-1- The Concept of Motivation:

Motivation can be considered a hidden internal energy that we cannot observe directly but can infer through its behavioral effects. This energy is reflected in our observations of the strength or intensity of responses. At the same time, it is a hypothetical construct, similar to magnetism or gravity. For example, we all know that the earth attracts objects when they are thrown upward, and that the earth has magnetic poles, but no one knows exactly where the earth's center of attraction is located or where those poles are.

There is a basic psychological principle that says: no behavior occurs without a motive. Motives are the reasons or causes behind our reactions. The stronger the motive, the stronger the response, and the more intense the activity carried out by the individual. For example, a child who wants to satisfy the need for belonging must establish relationships and engage in activities with others. If the child finds within the family members a suitable group to satisfy this need, the relationship with the family becomes close and strong. If not, the child will search in the social environment for another group that can satisfy this need, even if the group is deviant.

Since motives play a crucial role in shaping and regulating human behavior in general, we will address them in detail. At this point, however, it is important to note that the behavioral patterns resulting from motives are characterized by the following:

- The behavioral pattern is always active, persistent, and increases in intensity as motivation increases.
- The behavioral pattern is always goal-directed and influenced by the level and depth of the goal.



- The behavioral pattern is diverse and takes different forms, becoming more varied as motivation increases.
 - The behavioral pattern continues as long as the motivational state remains high.
 - The behavioral pattern leads to overall adaptation, meaning it may include all body activities depending on the strength and type of the motive.
 - The behavioral pattern is not random but shows a degree of learning.
 - The behavioral pattern generates an individual's ability to face unexpected crises.
- (Al-Jughaiman, 2008: 14–15)

1-2- Motivation for Learning:

Motivation for learning has received wide attention in the field of educational psychology, as it is considered a key factor in directing the learner's educational behavior and sustaining effort to achieve academic goals. Many researchers have defined it differently, according to their theoretical perspectives.

Biggs (1987) defines learning motivation as the learner's readiness to engage in the learning process, driven either by an internal desire, such as love of knowledge, or by an external desire, such as gaining rewards or avoiding punishments (Biggs, 1987).

Similarly, Schunk, Pintrich, and Meece argue that motivation for learning is the set of processes that activate, guide, and sustain learning behavior, including factors such as goals, expectations, self-beliefs, and past experiences (Schunk, Pintrich, & Meece, 2010).

On the other hand, Vallerand et al. (1992) defined learning motivation as the extent to which the learner participates in the learning process for either internal or external reasons (Vallerand et al., 1992). Likewise, Deci and Ryan (1985), within the framework of Self-Determination Theory, emphasized that motivation is divided into two types: internal, where the individual learns out of curiosity or personal interest, and external, where learning is driven by rewards or external pressures (Deci & Ryan, 1985).

Weiner (1992), however, focused on the relationship between motivation and self-attribution of success and failure, arguing that an individual's perception of the causes of their success or failure directly affects their level of motivation to learn (Weiner, 1992).

In the Arab context, Jalal Zaki (2005) defined motivation for learning as a set of internal and external forces that push the learner to pay attention and persevere in learning in order to achieve certain goals, whether personal or imposed by the external environment (Zaki, 2005). Meanwhile, Abdelaziz Thabet (2007) viewed it as an internal state that stimulates the learner's behavior and directs it toward achieving specific educational goals, helping him exert effort and persist in learning (Thabet, 2007: 22).

Based on the above, motivation for learning can be considered a complex process that involves internal factors, such as the love of knowledge and the desire for success, as well as external factors, such as reinforcements and rewards. In this study, the definition of Schunk, Pintrich, & Meece (2010) will be adopted, due to its comprehensive nature, as it focuses on the psychological processes that influence and guide the learner toward achieving his academic goals.

1-3- Types of Motivation for Learning:

Interest in the topic of motivation has existed since ancient times due to its importance and its significant effect on various aspects of human behavior. Despite the agreement on the centrality of motivation in psychological studies, there are variations in the classifications proposed by scholars and researchers. The most prominent are:

Physiological motives and psychological motives: Physiological motives, also called primary motives, are those with clear physiological bases, arising from bodily needs under organic and physiological conditions, such as the need for food and water. On the other hand, psychological motives are called secondary motives, as they lack clear physiological bases, such as the need for ownership, achievement, or curiosity. For humans, primary motives play a lesser role,



depending largely on the extent to which they are satisfied. Under normal circumstances, secondary motives appear to have greater impact.

Internal motives and external motives: An internal motive is defined as the force within the activity itself that attracts the learner and pulls him toward it, so he feels a desire to perform the task and engage with the subject without relying on external reinforcement. Bruner argues that learning is more enduring and continuous when motivation is internal, not dependent on external rewards. He also believes that external motivation may be necessary at the beginning of the learning process, but later the focus should shift to fostering internal motivation (Kahl al-Sanan, Ben Qadidh Laqat, & Boukhmila, 2019: 23).

1-4- The Importance of Motivation for Learning:

The importance of motivation can be summarized as follows:

- Motivation is the basis for understanding individuals and much of their behavior, as it generates and directs the learner's actions.
- Motivation is a source of human energy.
- Motivation directs the individual's activity to satisfy an emerging need, that is, to achieve his intended goal.
- Motivation releases emotional energy, which drives specific activity.
- Motivation makes the individual respond to a certain situation and react in a particular way at that time.
- Motivation is a means that can be used to achieve educational goals more effectively.
- Motivation includes the needs that drive the learner in a certain direction, as well as the objectives and goals aimed at reaching achievement (Kahl al-Sanan et al., 2019: 14).

1-5- Major Theories Explaining Motivation for Learning:

Self-Determination Theory (SDT) as a model: Self-Determination Theory is one of the most important modern theories explaining human motivation. It was developed by Edward Deci and Richard Ryan in 1985 and focuses on the role of self-motivation in achieving effective learning and personal growth. The theory assumes that individuals naturally strive to develop their abilities and realize their potential when the environment supports their basic psychological needs (Adas, 2011: 134).

Basic Psychological Needs in Self-Determination Theory: The theory emphasizes three basic psychological needs. When these needs are satisfied, they enhance self-motivation and academic performance:

- **The need for autonomy:** This refers to the individual's desire to be the source of his own actions and behavior, that is, to feel he is acting according to his will rather than external pressures. When autonomy is supported in the learning environment, students become more engaged in learning and more eager to seek knowledge (Adas, 2011: 135).
- **The need for competence:** This refers to the individual's feeling of being capable of achieving success and completing tasks effectively. It can be promoted by providing challenges that match students' abilities, along with positive feedback that supports their self-confidence (Adas, 2011: 136).
- **Types of Motivation in Self-Determination Theory:** The theory distinguishes between two main types of motivation:
 - **Intrinsic motivation:** Occurs when the motive is internal, meaning the learner engages in an activity for enjoyment, curiosity, or challenge. For example, a student studies a subject because he finds it interesting, not just for grades (Adas, 2011: 138).
 - **Extrinsic motivation:** Occurs when behavior is driven by external rewards or punishments. Deci and Ryan identified several levels of extrinsic regulation, depending on the degree of self-determination involved. These include:
 - **External regulation:** behavior is performed to avoid punishment or obtain a reward.
 - **Introjected regulation:** behavior is driven by guilt or obligation.



- **Identified regulation:** the learner recognizes the importance of the behavior in achieving personal goals.
- **Integrated regulation:** the behavior becomes part of the learner's identity and values (Adas, 2011: 139).

Applications of Self-Determination Theory in Education: According to SDT, motivation is not fixed but influenced by the learning environment. Therefore, teachers can enhance students' motivation by:

- Supporting autonomy: giving students opportunities to choose learning activities and encouraging independent decision-making.
- Enhancing competence: providing tasks suited to students' abilities and offering positive feedback.
- Promoting social relatedness: creating a supportive classroom environment and strengthening teacher-student interactions (Adas, 2011: 140).

Criticisms of Self-Determination Theory: Despite its strength in explaining motivation, SDT has faced criticisms, such as focusing more on intrinsic motivation while underestimating extrinsic motivation, which may be effective in certain contexts. Another challenge lies in the lack of precision in measuring basic psychological needs across all cultural settings (Adas, 2011: 141).

Overall, SDT is considered a modern framework for explaining how motivation can be enhanced, especially in education. It emphasizes the three psychological needs—autonomy, competence, and social relatedness—as central to promoting intrinsic motivation. It also provides practical strategies that teachers can apply to encourage student motivation and improve academic performance (Adas, 2011: 142).

Motivation is a key element in directing students' behavior toward learning, as it determines their level of engagement and persistence in academic activities. It may be intrinsic, driven by personal interest, or extrinsic, driven by factors such as rewards or punishments.

Several theories have attempted to explain motivation. Some focused on satisfying basic needs as a stimulus for learning, while others linked motivation to the development of students' cognitive abilities. Certain perspectives explained motivation through learners' interpretations of success or failure, while others emphasized the role of reinforcement and rewards. Modern approaches stress that motivation becomes stronger when learners feel autonomous in their learning, capable of achieving success, and connected to a supportive environment.

All these factors directly affect academic performance, making it essential to establish a stimulating learning environment that supports students' desire to learn and achieve their academic goals.

High school students are at a critical stage of psychological and cognitive development. During this period, they undergo changes that affect their thinking and learning behavior. They begin to build autonomy and shape their personal and academic identity, becoming more aware of their motives and educational goals. Alongside psychological and social developments, thinking about personal and academic projects becomes crucial, as students start envisioning their academic and professional future. This, in turn, can strongly influence their motivation for learning.

This chapter, therefore, focuses on high school students by defining them, outlining their psychological and cognitive characteristics, and analyzing the nature of this educational stage. It also highlights the role of personal and academic project planning in shaping their educational pathways and motivating them to learn.

1-6- High School Students and Their Characteristics:

A high school student is typically between 15 and 17 years old, and is an individual experiencing adolescence while pursuing education.

High school students face challenges of physical, psychological, and social changes alongside academic demands. During adolescence, the student undergoes transformations in



patterns of thinking and emotions, making him more sensitive to criticism and less emotionally stable, which requires appropriate educational and pedagogical support (Eisawi, 1998: 32).

Freud (1933) pointed out that “adolescence represents a conflict between the id and the ego, as the adolescent seeks to detach from parental authority and build his own identity, which may lead to rebellion or withdrawal depending on the surrounding environment and family dynamics” (Freud, 1933: 210).

Similarly, Eisawi (1998) noted that adolescents experience a gradual transition toward physical, sexual, intellectual, and psychological maturity, and that students at this stage often show behavioral and psychological disturbances due to hormonal and social changes (Eisawi, 1998: 15). Rice and Dolgin (2005) also argued that “adolescence is a transitional period between childhood and adulthood, during which the individual seeks to establish an independent identity, characterized by the development of abstract thinking and increased social and self-awareness” (Rice & Dolgin, 2005).

Furthermore, the adolescent individual seeks economic independence and social integration, as he goes through a critical transitional stage seeking psychological independence and liberation from childhood dependency, leading to personal changes, particularly in the dialectical relationship between the self and the other (Eisawi, 1998: 45).

Educational and psychological literature indicates that the beginning and end of adolescence vary depending on individuals and cultural contexts. In general, adolescence starts with the onset of puberty and continues until full social maturity, usually between the ages of 12 and 18. Researchers also emphasize that adolescence is influenced by cultural and social factors, and that the adolescent experience may differ across societies (Rice & Dolgin, 2005).

An important characteristic shared by high school students during adolescence is the **focus on personal and academic projects**.

Thinking about one's personal and academic future is considered a key feature of adolescence. At this stage, the student begins to form ideas about his educational and career path and seeks to make decisions that align with his ambitions and abilities (Eisawi, 1998: 105).

- A personal project refers to the vision an individual builds about his professional and social future, based on his desires, abilities, and values.
- An academic project refers to planning the educational path that aims to achieve this personal project (Rice & Dolgin, 2005: 88).
- The importance of reflecting on personal and academic projects lies in:
- Helping adolescents make purposeful decisions regarding their academic and professional future (Guichard, 2004: 76).
- Enhancing responsibility and independence in decision-making (Le Breton, 2012: 45).
- Providing motivation for learning and academic success (Rice & Dolgin, 2005: 90).
- Enabling adaptation to labor market and societal requirements (Eisawi, 1998: 110).
- Factors influencing reflection on personal and academic projects include:
- **Internal factors:** personal interests, cognitive abilities, and ambitions (Guichard, 2004: 80).
- **External factors:** the influence of family, school, peers, and the labor market (Le Breton, 2012: 52).

2- Field Study:

2-1- Research Method:

This study adopted the descriptive method, as it is suitable for the nature of the topic, which aims to explore the level of motivation for learning among high school students in order to reach accurate scientific results regarding the problem under investigation (Obeidat et al., 2010).

2-2- Temporal and Spatial Limits

The study was conducted during the 2024–2025 school year, specifically in the second and third terms. It took place at Abbas Moussa High School, located in the municipality of El-Bouni, Annaba Province.



2-3- Pilot Study:

2-3-1- Tool of the Pilot Study:

The tool of the pilot study consisted of a structured interview, which included open-ended questions related to the manifestations of motivation for learning, its concept, its causes, and the factors influencing it according to the students' perspectives. The questions were as follows:

Table n°1: showing Structured Interview

- What is your understanding of motivation?	- Do you feel that you study by your own will, or under pressure?
- What motivates you to study?	- What role do family or teachers play in increasing your motivation to study?
- What are the factors that make you dislike studying or reduce your motivation?	- What is the effect of your field of study on your willingness to learn?

Source: Researcher

2-3-2- Procedures of the Exploratory Study:

Interviews were conducted with 25 second-year secondary school students (both male and female) from different streams (Literature, Sciences, Economics and Management, Mathematics).

The interviews were held inside Abbas Moussa Secondary School after coordination with the school administration.

2-3-3- Results of the Exploratory Study:

The following presents the results of the exploratory study conducted with 25 second-year secondary school students. The aim of the study was to explore the level of students' motivation in their studies, and how different factors such as family support, field of study, and study pressure influence their motivation. The answers were analyzed and categorized according to the different dimensions identified in the questions, namely: intrinsic and extrinsic motivation, study incentives, factors influencing motivation, etc. The following table shows the distribution of answers according to these categories.

Table n°2: showing Interview Content Analysis

Dimension	frequencies	Units of Analysis	Categories of Analysis	Percentage
Concept of Motivation among Students Q1. What is your concept of motivation?	20	I study for success and self-satisfaction	20	66.7%
	10	I study to please my parents.	10	33.3%
	30	Two units	30	100%
Study Motivators Q2. What motivates you to study?	12	I study to achieve my childhood career dream	12	40%
	10	There is a feeling of enjoyment when acquiring new information	10	33.3%
	8	When I see my classmates succeed, I feel a desire to be like them	8	26.7%



	30	Three units (03)	30	100%
Factors that Reduce Learning Motivation Q3. What are the things that make you dislike studying or decrease your motivation to learn? Σ	10	Feeling frustrated when I don't understand the lesson	10	33.3%
	8	Studying out of fear of failure	8	26.7%
	7	Lack of variety in teaching methods	7	23.3%
	5	Facing difficulties in understanding the study material	5	16.7%
	30	Four units	30	100%
Willpower and Academic Pressure Q4. Do you feel that you study willingly, or under pressure? Σ	18	Feeling that studying is a personal responsibility	18	60%
	12	I study because my family pressures me	12	40%
	30	Two units	30	100%
Role of Family and Teachers in Creating/Increasing Students' Learning Motivation Q5. What is the role of your family or teachers in increasing your motivation to study? Σ	15	Moral support from my family relieves pressure and helps me succeed in my studies.	15	50%
	15	The teacher's clear explanation and interaction make me feel enthusiastic about the subject	15	50%
	30	Two units	30	100%
The Impact of Field of Study on Second-Year Secondary Students Q6. What is the effect of your field of study on your willingness to learn? Σ	20	I chose this major willingly.	20	66.7%
	7	I did not choose this major willingly, so I don't feel motivated to study	7	23.3%
	3	The major does not influence me much because I study only for success.	3	10%
	30	Three units	30	100%

Source: Researcher



Thematic Analysis of the Exploratory Interviews:

Preliminarily, the analysis of the interviews conducted with second-year secondary school students, based on the six guiding questions, shows that these students possess both intrinsic and extrinsic motivation that influence their academic performance and learning activities.

Dimension 1: The Concept of Motivation among Second-Year Secondary Students

Analysis of responses revealed that intrinsic motivation is the main factor driving students to study. About 66.7% of students reported studying out of personal desire for learning and success, while 33.3% stated that their motivation stemmed from external factors such as family or teacher expectations.

Dimension 2: Study Incentives among Second-Year Secondary Students

Regarding study incentives, results indicated variations among students. About 40% identified personal achievement as their main incentive, 33.3% mentioned cognitive motivation (feeling motivated when learning new subjects), and 26.7% pointed to social motivation from peers or teachers.

Dimension 3: Factors Behind Low Learning Motivation among Second-Year Secondary Students

Results showed that the most influential negative factors are the difficulty of school subjects and psychological pressure. About 33.3% reported subject difficulty as a barrier, 26.7% highlighted exam-related stress, 23.3% mentioned lack of diversity in teaching methods which leads to boredom and reduced classroom engagement, and 16.7% explained that subject difficulty stems from overloaded content and unclear concepts, making comprehension and preparation challenging.

Dimension 4: Presence of Extrinsic Motivation among Second-Year Secondary Students

Responses were varied, as 53.3% stated they study out of free will, while 46.7% felt they study under family or school pressure.

Dimension 5: The Role of Family and Teachers in Creating Motivation among Second-Year Secondary Students

Students indicated that family and teacher support play a significant role in enhancing their motivation. About 60% reported feeling motivated when encouraged by their families, while 40% emphasized the role of academic support from teachers.

Dimension 6: The Impact of Field of Study on Second-Year Secondary Students

Results revealed that academic specialization positively affects student motivation. About 66.7% reported that their fields align with their personal interests, thereby enhancing their willingness to learn, whereas 33.3% saw no positive impact of specialization on their motivation.

Summary of the Exploratory Study Results:

- The concept of learning motivation among second-year secondary students, regardless of gender or specialization, is dual in nature, encompassing both intrinsic and extrinsic factors.
- Study incentives vary among students, including achievement, curiosity, and social influence.
- Regarding demotivating factors, subject difficulty and psychological stress are the most prominent obstacles affecting motivation.
- Extrinsic motivation among students fluctuates between studying voluntarily and feeling compelled by family or school.
- Family and teachers, according to student responses, play a vital role in fostering academic motivation.
- As for the effect of specialization, responses varied: some acknowledged a positive influence, some considered it neutral, while others saw no relationship between the two variables (study/specialization).



Based on these findings, it was decided to employ the **Learning Motivation Scale** in the final study, in order to gain deeper insights into the different types and aspects of learning motivation.

2-4- The Main Study:

2-4-1- Study Population and Sample:

- Study Population:

The original population was limited to all students at *Abbas Moussa Secondary School*, comprising 1,041 students. The second year of secondary education was chosen due to its suitability: students are no longer in the adaptation stage of the first year, nor are they in the critical final year (baccalaureate).

Thus, the target population was narrowed down to only second-year students from all specializations enrolled at *Abbas Moussa Secondary School* in El-Bouni, Annaba, during the 2024–2025 school year.

- **The Sample:** The following table presents the total number of second-year students at *Abbas Moussa Secondary School*, El-Bouni, Annaba.

Table n°3: Table showing the total number of second-year secondary school students across all specializations

Specializations / Streams	Number of students
Science stream	134
Mathematics stream	16
Literature stream	41
Management and Economics stream	54
Total number	245

Source: Researcher

A stratified purposive sample was selected (i.e., the proportion of each specialization within the total number of second-year secondary school students was considered to ensure a fair representation of the original population). The sample is also purposive, since the selection relied on students who agreed to participate in answering the distributed scale. The sample included 31 students from different fields of study and of both genders.

Table n°4: showing the number of individuals in the sample

Specializations / Streams	Number of students
Science stream	73
Mathematics stream	1
Literature stream	7
Management and Economics stream	12
Total number	93

Source: Researcher

Note on the Actual Final Sample:

It is worth noting that the initial theoretical target sample was 93 students, calculated based on preliminary statistical criteria to ensure proportional representation across academic streams. However, the final sample size was reduced to 31 participants, as completing the motivation scale required the students' free and informed consent. Genuine motivation can only be validly measured when it reflects an intrinsic desire for self-expression rather than a forced or superficial response. Consequently, the researcher chose to include only those students who demonstrated genuine willingness to participate, thereby ensuring data credibility and validity, even at the expense of sample size.



Table n°5: showing the characteristics of the actual study sample in terms of gender and field of study

Specializations / Streams	males	Females	Number of students
Science stream	4	6	10
Mathematics stream	1	0	1
Literature stream	3	8	11
Management and Economics stream	5	4	9
Total number	13	18	31

Source: Researcher

2-5- Research Instrument:

The research instrument consisted of:

A Motivation for Learning Scale developed by Vallerand et al. (1992), translated and adapted to suit the Algerian context.

Description of the Instrument: The scale is composed of a set of items distributed across three main dimensions:

- **Intrinsic Motivation** (towards knowledge, towards achievement, and towards self-stimulation)
- **Extrinsic Motivation** (external regulation, introjected regulation, and identified regulation)
- **Amotivation** (lack of motivation). The scale is based on a five-point Likert scale for responses.

2-6- Statistical Methods Used:

In this study, the standardized Motivation for Learning Scale by Vallerand et al. was used. It consists of 28 statements distributed across three types of motivation:

- **Intrinsic Motivation:** divided into three sub-dimensions (towards knowledge, towards achievement, and self-stimulation)
- **Extrinsic Motivation:** which includes three types (external regulation, introjected regulation, and identified regulation)
- **Amotivation:** which refers to a complete lack of motivation

A five-point Likert scale was used, where the students' responses were divided according to the selected alternatives.

Table n°6: Showing the five-point Likert scale

01	02	03	04	05
Never applies to me	Rarely applies	Sometimes applies	Often applies	Completely applies to me

Source: Researcher

2-7- Presentation of the Study Results:**Reminder of the Research Questions:****Main Question:**

What is the level of learning motivation among second-year secondary school students at Abbas Moussa High School in El Bouni, Annaba?

To answer this, we must address the following sub-questions:

- Which type of learning motivation is the most dominant among second-year secondary school students?
- What is the relationship between the overall level of learning motivation and the students' gender?
- What is the relationship between the overall level of learning motivation and the students' field of study?



First: Presentation of the Results Related to the First Sub-question:**Which type of learning motivation is the highest among second-year secondary school students?**

This part of the study aims to identify the most common type of motivation among students in secondary education. This was done by analyzing the results of the Learning Motivation Scale that was distributed to a sample of **31 students** (male and female) from the second year of secondary school, divided into four specializations:

- Experimental Sciences
- Literature and Philosophy
- Management and Economics
- Mathematics

The study relied on the **Vallerand et al.** scale, which classifies motivation into three main types:

- **Intrinsic Motivation:** divided into three sub-dimensions (towards knowledge, towards achievement, and for self-stimulation).
- **Extrinsic Motivation:** also divided into three sub-dimensions (external regulation, introjected regulation, and identified regulation).
- **Amotivation (Lack of Motivation):** referring to the complete absence of motivation towards learning.

The questionnaires were scored manually. The students' scores were summed in each dimension, then the overall average of each type of motivation was calculated. Afterwards, the averages were converted into percentages to facilitate comparison between the types and determine the dominant one.

Below, we present the tables that show the results of the statistical analysis, followed by their academic interpretation:

Table n°7: Distribution of the Sample According to Type of Motivation and Gender

Motivation	Amotivation	external motivation			internal motivation			total
		Extrinsic Motivation	Introjected Regulation	Identified Regulation	Toward: Stimulation	Toward: Achievement	Toward: Knowledge	
Males	0	2	1	4	1	3	2	13
females	0	2	0	12	1	2	1	18
Total	0	4	1	16	2	5	3	31

Source: Researcher

Statistical Analysis to Answer the First Question:

To answer this question:

The total scores of each of the three types of motivation (internal motivation, external motivation, and amotivation) were calculated for all sample members, who numbered (31) male and female students. A five-point Likert scale was used in the responses, with each item scored from (1) to (5).

The items were distributed as follows:

- **Internal Motivation:** 3 dimensions × 4 items = 12 items
- **External Motivation:** 3 dimensions × 4 items = 12 items
- **Amotivation:** 1 dimension = 4 items

Accordingly:

Table n°8: Statistical Analysis for the First Question



The minimum score for internal and external motivation: $12 \times 1 \times 31 = 372$ The maximum score: $12 \times 5 \times 31 = 1860$ The actual range: $(1860 - 372) \div 3 = 496$	Low level: from 372 to 868 Medium level: from 869 to 1364 High level: from 1365 to 1860
As for amotivation (lack of motivation): Minimum score: $4 \times 1 \times 31 = 124$ Maximum score: $4 \times 5 \times 31 = 620$ The actual range = $(620 - 124) \div 3 = 165$	Low level: from 124 to 289 Medium level: from 290 to 455 High level: from 456 to 620

- After adding up the scores of each type, the results were as follows

Type of motivation	Domain	Total score	Level
internal motivation	372-1860	1271	Moderate
external motivation	372-1860	1496	High
amotivation	124-620	271	Low

Source: Researcher

Conclusion:

The highest level of motivation was **external motivation**, which means that students often learn due to factors related to external influences rather than purely internal reasons.

This indicates the need to **strengthen their internal motivation** through educational strategies that aim to develop a love for knowledge and self-achievement.

The **low level of amotivation** shows that most students are interested in learning, which is a positive indicator that reflects either a supportive educational environment or a general willingness to learn among students.

The most common type of motivation is **external motivation**, meaning that students usually learn based on external incentives rather than self-driven ones.

This suggests the importance of **promoting internal motivation** through pedagogical strategies that foster curiosity, personal achievement, and self-regulation. The **low level of amotivation** also confirms that the majority of students still care about learning, which is encouraging and reflects a relatively positive learning environment.

Table n°9: Descriptive Statistics (Mean Scores) for the Three Main Types of Motivation

Type of Motivation	Number of Items	Total Score (N = 31)	Mean Score (per student)
Intrinsic Motivation	12	1271	41.00
Extrinsic Motivation	12	1496	48.26
Amotivation	4	271	8.74

Since intrinsic and extrinsic motivation are both based on the same number of items (12), their mean scores are directly comparable. The results show that extrinsic motivation obtained a higher mean score (48.26) than intrinsic motivation (41.00), which suggests that, within this sample, external factors may play a more prominent role than internal interest or curiosity in shaping students' engagement in learning. Amotivation recorded the lowest mean score (8.74). Relative to its maximum possible value (20, based on only 4 items), this score falls within a low range, which may point to a generally low level of disengagement among students in the sample. It should be noted that amotivation, being based on fewer items, should be interpreted relative to its own scale rather than compared numerically to the other two dimensions.



Comparison of the current study with previous studies:

The results of the current study regarding the first research question showed that **external motivation** is the most dominant type among secondary school students, appearing at a high level, followed by **internal motivation** at a moderate level, while **amotivation** was low.

This suggests that students are indeed motivated to learn, but their motivation is mainly driven by **external factors** such as rewards, pleasing others, or achieving social status, rather than by **self-driven motives** related to knowledge or the desire for achievement.

These findings partially agree with the study of Gourari Nasser and Zahaf Abdelkader (2019), which showed that a high level of motivation is positively related to improved academic performance. In their study, students demonstrated high motivation — even if external — which can still contribute to enhancing their academic achievement.

The results are also consistent with the study of Naglaa Ibrahim (2017), which confirmed that the lack of autonomy and competence leads to reduced engagement in academic activities. This can be inferred from the dominance of external motivation in the current study, as relying on external incentives may indicate a **weaker sense of autonomy and intrinsic drive**, which could affect the quality of students' participation in the learning process.

According to Izbil's study (2014), which focused on the central role of **family and social factors** in enhancing motivation, the results of the current study may support this perspective. The prevalence of **external motivation** could be attributed to **family and social influences** (such as support, expectations, or pressure), indicating that the learner's **social context plays a major role** in shaping their motivation.

Based on this, it can be concluded that the findings of the current study **align with previous research** in emphasizing the importance of motivation in supporting learning. However, they also show that the **nature of motivation among students tends to be more external than internal**, which calls for strengthening students' **sense of autonomy and self-efficacy within the school environment**.

Second: Presentation of the Results Related to the Second Research Question:

What is the relationship between the general level of learning motivation and the students' gender?

To answer this question, the sample was divided into 13 males and 18 females. The total scores of each of the three types of motivation (internal, external, and amotivation) were calculated separately for each group, based on the Five-Point Likert Scale and the number of statements assigned to each type.

The motivation levels were then determined according to the **minimum and maximum possible scores** and the **calculated score ranges** for each type based on the size of each group.

After collecting and analyzing the results, the values were as follows:

Table n°10: Distribution of the sample individuals by gender for each type of motivation.

Motivation	amotivation	Extrinsic			intrinsic			Total
		Extrinsic Motivation	Introjected Regulation Motivation	Identified Regulation Motivation	Intrinsic Motivation	Toward: Achievement	Toward: Knowledge	
Males	0	2	1	4	1	3	2	13
Females	0	2	0	12	1	2	1	18
total	0	4	1	16	2	5	3	31

Source: Researcher



Statistical Analysis to Answer the Second Question:

In order to identify the level of the different types of motivation (intrinsic, extrinsic, and amotivation) among second-year secondary school students according to the gender variable, the highest and lowest possible scores for each type of motivation were calculated separately for males and females. Then, the actual range was determined and divided into three levels (low, medium, high) as follows:

For males (n = 13 students):

Table n°11: Results of Statistical Analysis for the Second Question (Male Students)

Maximum possible score = $5 \times 12 \times 13 = 780$	Actual range = $780 - 156 = 624$
Minimum possible score = $1 \times 12 \times 13 = 156$	Range for each level = $624 \div 3 = 208$

Classification of Levels:

Level	from	To
Low	156	363
Medium	364	571
High	572	780

Results for Male Students:

Type of Motivation	Obtained Score	Classification
Intrinsic Motivation	494	Medium
Extrinsic Motivation	572	High (at the beginning of the high level)
Amotivation (Lack of Motivation)	120	Very Low (below the minimum threshold)

Source: Researcher

Analysis and Discussion:

It appears that male students have a medium level of intrinsic motivation, while their extrinsic motivation is relatively high, as it lies at the borderline between medium and high. As for amotivation, it was very low, which indicates a general interest in studying among males, even if it is driven mainly by external factors.

For female students (n = 18):

Table n°12: Results of Statistical Analysis for the Second Question (Female Students)

Maximum possible score = $5 \times 12 \times 18 = 1080$	Actual range = $1080 - 216 = 864$
Minimum possible score = $1 \times 12 \times 18 = 216$	Range per level = $864 \div 3 = 288$

Classification of Levels (Females):

level	from	To
Low	216	503
Medium	504	791
High	792	1080

Results of the Female Students:

Type of Motivation	Obtained Score	Classification
Intrinsic Motivation	777	Medium
Extrinsic Motivation	971	High (at the beginning of the high level)



Amotivation (Lack of Motivation)	151	Very Low (below the minimum threshold)
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Source: Researcher

Analysis and Discussion:

The results indicate that the female students exhibit a high level of extrinsic motivation and an upper-medium level of intrinsic motivation, while amotivation was very low. This reflects a strong overall motivation among females, particularly of the external type, such as the desire for recognition or meeting others' expectations.

General Conclusion:

Through the analysis of the study's findings, it became evident that there is a difference in the type and level of learning motivation between males and females.

For males, the results showed a medium level of intrinsic motivation, which means they tend to learn out of a love for knowledge or a desire for personal achievement. Their extrinsic motivation was at the upper end of the medium level, indicating that they are also influenced by external factors such as grades, praise, or recognition.

This suggests a kind of balance between intrinsic motivation and external influences, which may allow them to adapt to various learning contexts. As for females, their extrinsic motivation was high, indicating that they engage more in learning in order to achieve clear goals such as success, excellence, or social recognition. Meanwhile, their intrinsic motivation was at a medium level, which means that although there is an internal desire to learn, it is not the strongest driving force.

The results also showed that the level of amotivation among females was very low, which reflects a clear interest in studying and a high level of commitment to it.

In general, it can be said that:

- Males are characterized by a relative balance between intrinsic and extrinsic motivation.
- Females show strong motivation toward external achievement, with a good level of intrinsic motivation and a significant decrease in amotivation.

Comparison of the Current Study's Results with Previous Studies:

When comparing the findings of this study with previous research, some similarities and differences can be noted. Our results indicated that females possess high extrinsic motivation alongside medium intrinsic motivation, with a significant decrease in amotivation, which reflects commitment and seriousness in following their studies.

On the other hand, the results showed that males have medium intrinsic motivation and medium-level extrinsic motivation, with very low amotivation, which suggests a relative balance in their sources of motivation.

These results are consistent with the findings of the study by Gourari Nasser and Zahaf Abdelkader (2019), which confirmed that a high level of motivation—whether intrinsic or extrinsic—is associated with improved academic performance. This can be related to the high extrinsic motivation among females and the balance found among males.

The results are also in line with the study of Naglaa Ibrahim (2017), which indicated that the absence of autonomy and competence leads to decreased engagement in academic activities; the low level of amotivation among males and females in this study reflects an acceptable level of competence and sense of belonging.

As for the study by Izbai (2014), which highlighted the role of family and social support in enhancing motivation, it can be indirectly connected to the findings of this study, particularly in explaining the high extrinsic motivation among females, as this group may be more responsive to encouragement or familial and societal expectations, making them more engaged in their academic journey.

Overall, the results of this study align with previous literature, confirming that gender can play a role in determining the type and level of motivation. However, with supportive



elements such as competence, autonomy, and social support, both males and females are capable of developing their motivation toward learning.

Third: Presentation of the Results of the Third Research Question:

What is the relationship between the general level of learning motivation and the students' academic specialization?

This question aimed to determine whether the academic specialization of students at the secondary level (second-year students as the sample) has an effect on the general level of learning motivation, by comparing the levels of the different types of motivation (intrinsic, extrinsic, and amotivation) among students according to their four specializations: Sciences, Literature and Philosophy, Management and Economics, and Mathematics.

Table n°13: the distribution of the sample members by specialization for each type of learning motivation

motivation		extrinsic			Intrinsic			amotivation	total
specializations:	Gender and number	Externally Regulated Motivation	Introjected Regulation Motivation	Identified Regulation Motivation	Intrinsic Motivation	Achievement Motivation	Knowledge Motivation		Σ
Sciences	6 females	1	0	4	0	1	0	0	10
	4 males	2	1	1	0	0	0	0	
Literature and Philosophy	8 females	0	0	6	1	1	0	0	11
	3 males	0	0	0	1	1	1	0	
Management and Economics	4 females	1	0	2	0	0	1	0	9
	5 males	0	0	3	0	2	0	0	
Mathematics	1 male	0	0	0	0	0	1	0	1
Σ		04	01	16	02	05	03	0	31

Source: Researcher

Classification of Motivation Level According to Academic Specialization:

In this section, the sample members were classified according to their academic specialization, in order to determine whether specialization has an effect on the level and type of motivation among students.

The sample included four specializations: Experimental Sciences, Literature and Philosophy, Management and Economics, and Mathematics.

First: Calculating the Actual Range for Each Specialization.

Given the different number of students in each specialization, we calculated the minimum and maximum possible scores for each type of motivation, and determined the actual range as follows:

- Experimental Sciences Specialization (10 students):

Number of items: 28



Table n°14: Classification of Motivation Level in Experimental Sciences Specialization

Maximum score: $5 \times 28 \times 10 = 1400$	Actual range: $1400 - 280 = 1120$
Minimum score: $1 \times 28 \times 10 = 280$	Dividing by 3 to determine the levels: $1120 \div 3 = 373.33$

Range:

High 1027 to 1400	Medium 654 to 1026	Low 280 to 653
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Source: Researcher

- **Literature and Philosophy Specialization (11 students):****Table n°15: Classification of Motivation Level in Literature and Philosophy Specialization**

Maximum score: $5 \times 28 \times 11 = 1540$	Actual range: $1540 - 308 = 1232$	$1232 \div 3 = 410.66$
Minimum score: $1 \times 28 \times 11 = 308$		

Range:

high from 1129 to 1540	Medium from 719 to 1128	Low from 308 to 718
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Source: Researcher

- **Management and Economics Specialization (9 students):****Table n°16: Classification of Motivation Level in Management and Economics Specialization**

Maximum score: $5 \times 28 \times 9 = 1260$	Actual range: $1260 - 252 = 1008$	$1008 \div 3 = 336$
Minimum score: $1 \times 28 \times 9 = 252$		

Range:

high from 925 to 1260	Medium from 589 to 924	Low from 252 to 588
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Source: Researcher

- **Mathematics Specialization (1 student):****Table n°17: Classification of Motivation Level in Mathematics Specialization**

Maximum score: $5 \times 28 \times 1 = 140$	Actual range: $140 - 28 = 112$	$112 \div 3 = 37.33$
Minimum score: $1 \times 28 \times 1 = 28$		

Source: Researcher

Second: Results by Specialization:

The total scores obtained by students in each specialization were collected, and the results were as follows:

Table n°18: Results by Specialization

Specialization	Number of students	Intrinsic motivation	Level	Extrinsic motivation	level	amotivation	Level of motivation
Sciences	10	382	Medium	482	High	80	Low
Literature and Philosophy	11	492	High	497	High	84	Low
Management and Economics	9	346	Medium	429	High	75	Low



Mathematics	1	56	High	48	High	5	Very low
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Source: Researcher

Analysis and Discussion:

The results revealed differences between specializations regarding the levels and types of motivation:

Students in the Literature and Philosophy specialization demonstrated the highest levels of both intrinsic and extrinsic motivation, indicating a balance between their love for learning itself and their desire to achieve external goals. Students in Experimental Sciences and Management and Economics showed moderate intrinsic motivation with high extrinsic motivation, suggesting that most of their drive for learning comes from external sources such as the desire for success, family approval, or securing a specific career path. The student from the mathematics specialization displayed high levels of both intrinsic and extrinsic motivation, but this result cannot be generalized as it represents an individual case. In all specializations, amotivation was low, indicating that the sample as a whole had a desire to learn, even if the nature of their motivation differed from one specialization to another.

Comparison of the Study Results with Previous Research by Academic Specialization:

The current study's findings revealed differences in the type and level of motivation among students based on their academic specialization. It was observed that students in Literature *and* Philosophy had the highest levels of both intrinsic and extrinsic motivation, reflecting a balance between learning for its own sake and striving for external achievements. This aligns with the findings of **Gourari Nasser and Zahaf Abdelkader (2019)**, who confirmed that higher levels of motivation—whether intrinsic or extrinsic—are associated with improved academic performance, suggesting that students in this specialization possess greater awareness of the value of learning and the ability to direct their efforts toward success.

As for students in *Experimental Sciences* and Management and Economics, they exhibited moderate intrinsic motivation and high extrinsic motivation, indicating that their main motivational source stems from external factors such as seeking family approval, securing a future career, or achieving academic success. These findings can be linked to **Naglaa Ibrahim's (2017)** study, which showed that the absence of autonomy and competence leads to lower engagement in academic activities—an explanation for the reduced intrinsic motivation among some students despite the presence of strong external incentives.

Regarding the *Mathematics* student, high intrinsic and extrinsic motivation was recorded; however, this result cannot be generalized due to the student's individual representation in the sample. Nevertheless, this pattern reflects what was stated in **Izbal (2014)**, which emphasized the role of family and social support in enhancing student motivation, as encouragement can foster strong motivation even in individual cases.

Finally, it was observed that amotivation levels were low across all specializations, indicating at least a minimal willingness to learn among all participants. This aligns with the general trend highlighted in previous literature, which emphasized that feelings of belonging and social support help keep students engaged in the educational process.

Answer to the General Research Question:

Returning to the main question of our study, which stated: “*What is the level of learning motivation among second-year high school students at Abbas Moussa Secondary School in El-Bouni, Annaba?*”—and based on our answers to the sub-questions —

it can be concluded that the level of learning motivation among second-year high school students at Abbas Moussa Secondary School is relatively high, with a clear predominance of **extrinsic motivation** compared to the other types.

The results indicated that students tend to learn primarily due to **external factors** such as rewards, recognition, or social pressure — which may be attributed to environmental influences or the nature of the educational system. **Intrinsic motivation** ranked second, suggesting that a



considerable portion of students also possess self-driven motives, particularly those related to curiosity and self-fulfillment. **Amotivation** was present at a lower level, yet it still exists and requires intervention and deeper investigation into its causes.

The findings further revealed differences based on gender: Girls outperformed boys in both intrinsic and extrinsic motivation, while boys showed a higher rate of amotivation. This suggests that females are more engaged and driven to learn, whether by internal or external motives — highlighting the importance of considering such differences when designing curricula and learning content.

Regarding **academic specialization**, students in scientific streams (Mathematics, Sciences, Management & Economics) showed stronger tendencies toward extrinsic motivation, whereas students in literary streams demonstrated moderate levels of intrinsic motivation accompanied by relatively higher amotivation. The mathematics stream represented a **positive model of highly self-motivated learners**, which calls for the encouragement and reinforcement of such profiles to inspire other students.

Accordingly, the overall motivation profile of the sample can be summarized as follows: **high external motivation, followed by moderate internal motivation, with attention needed toward existing levels of amotivation**, which should be addressed through targeted educational interventions (such as psychological and pedagogical support, and increased family awareness) tailored to **gender and academic specialization**.

Recommendations:

Although this study was conducted on a relatively small sample, it nevertheless provides an important indicator of the motivational landscape among high school students. Therefore, we propose the following suggestions:

- **Enhancing intrinsic motivation**, especially in streams where it was relatively lower (such as Literature), by:
 - Integrating educational activities that foster **curiosity and critical thinking**.
 - Encouraging **self-directed learning** and helping students explore their **personal interests and talents**.
- **Focusing on Gender Differences in Motivation Levels:** Since female students showed a higher level of intrinsic motivation, it is recommended to provide *additional support for male students* by implementing teaching strategies that stimulate *internal motivation* rather than relying solely on rewards and punishments.
- **Adapting to the Specificity of Each Stream:** Given that students from the mathematics stream demonstrated high intrinsic motivation (although the sample was very small), it is advisable to adopt similar approaches in other streams, such as guiding students toward self-challenging goals. In the Literature stream, psychological and social support programs can be introduced to reduce feelings of amotivation and enhance school belonging.
- **Involving Parents in the Educational Process:** Through regular meetings and awareness sessions, parents should be informed about *their role in enhancing their children's motivation*, especially since several previous studies (such as Izbal, 2014) confirmed the importance of family support in improving academic achievement.
- **Training Teachers in Motivation Strategies:** Such as using *project-based learning, cooperative work, and self-assessment techniques*, which help develop a sense of autonomy and competence among students.

Conclusion:

Learning motivation is a prominent area of research within educational psychology and educational sciences. This study aimed to assess the level of learning motivation among second-year secondary school students, identify the most predominant motivation type, and examine its relationship with gender and academic stream. The 28-item Academic Motivation Scale (AMS) developed by Vallerand et al. (1992) was administered to a purposive stratified sample of 31 students at Abbas Moussa High School (El Bouni 2, Annaba).



Following data collection and statistical analysis, several key findings emerged: extrinsic motivation was predominant among the participants, specifically manifested in "identified regulation," followed by intrinsic motivation at a moderate level, while amotivation ranked lowest at a very low level. Furthermore, statistically significant gender differences were observed in favor of female students across both intrinsic and extrinsic motivation types, whereas male students exhibited a relatively higher degree of amotivation. Regarding academic stream, students in the Literature and Philosophy stream demonstrated the highest levels of both intrinsic and extrinsic motivation. In contrast, scientific streams (Management and Economics, Experimental Sciences) were characterized by high extrinsic motivation alongside moderate intrinsic motivation. The single-case observation in the mathematics stream (one student) serves merely as a preliminary indicator that cannot be generalized and requires broader investigation with a larger sample size.

Overall, these findings align with prior research confirming the positive association between high motivation levels and academic achievement, as well as the importance of autonomy, competence, and relatedness in fostering motivation, as posited by Self-Determination Theory. Nevertheless, these results remain limited and exploratory due to the small sample size (N = 31), necessitating methodological caution regarding the generalizability of the findings, particularly those concerning differences across academic streams.

Based on these outcomes, several pedagogical and psychological recommendations are proposed to enhance students' intrinsic motivation—the most autonomous form of motivation, closely linked to successful and sustainable learning outcomes. Ultimately, this study aims to contribute to the educational literature on motivation and pave the way for future research incorporating larger samples and additional variables, such as school climate, parental support, or teaching methodologies.

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