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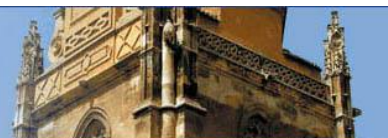
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## **The metacognitive skills and their relation with the motivational orientations in the light of the level of the academic performance: field study on a sample of students who will take up the Bac exam**

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### **ABSTRACT**

This study aims at knowing the nature of the relation between the metacognitive skills and the motivation orientations in the light of the level of the academic performance for the students who will sit for the Bac exam. To achieve the objective, we used the correlation descriptive method. We chose a sample of 150 male and female students of 3<sup>rd</sup> year who had been chosen at random from different secondary schools. Findings of the statistical procession showed the absence of a relation between the metacognitive skills with their three dimensions. and the motivation orientation

**Keywords:** metacognitive skills; motivation orientations; learning goals; performance goals; academic achievement.

### **1. INTRODUCTION**

The concept of metacognition is one of the modern concepts in psychopedagogy. It appeared in the 1970s by the psychologist Flavell. This concept refers to the complex mental abilities that make up the intelligent behavior that allows data procession. The classroom atmosphere, with all its components that include the positive orientations and learning strategies, aims at teaching the thinking abilities because they are skills that grow with age and experience to provide what we can call the infrastructure that contributes to forming the achievement goals of the students and how they perceive the facilitations and obstacles they may face during the process of learning. The theory of the goal orientations identified a number of factors that trigger the students' motivation to learn such as their beliefs about their own competencies, the aims they head to, and their educational values through interpretations that are based on the motivation to the academic achievement. This theory provides that it is possible to understand the motivation of the learners through looking at it as attempts to achieve academic goals; related to either learning or performance.

Due to the importance of this topic and in order to show its related concepts, this paper that aims at knowing the nature of the relation between the metacognitive skills and the motivation orientations in the light of the level of the academic performance for the students who will sit for the Bac exam.

### **2. Problematic and questions of the study**

The world is witnessing giant changes in various fields. In this context, it became more complex due to the challenges imposed by the information and communication technologies ICTs. The success in facing these challenges no more lies within the cognitive amount as much as it is in the way of using the knowledge and its application. In addition, the knowledge and skills the individual acquires from schools are no more sufficient to guarantee the desired quality. Thus, in front of this reality, the importance of learning the thinking skills and processes emerges. These skills and processes are always innovating regarding their use in the procession of information regardless their type. Furthermore, the era of changes and knowledge imposes on the educators to deal with education and teaching as a process that is not limited by time and space because it is a continuous need that facilitates the human adaptation with the new changes in his environment. Besides, these changes require learning new skills and using the knowledge (Jarouan, 2007, p. 125). The epistemology theories focused on showing the role of comprehension and focus on the skills in general, and the research skills in particular. In addition, they tackled the main sides that help developing the knowledge through the focus on the metacognitive process, the disclosure of the abilities and skills involved with these processes, and how to employ, develop, and take advantage of them in the processes of learning and teaching. Metacognition is one of the important cognitive make ups. It appeared in the 1970s by Flavell who deduced it from the research about the memory processes. He pointed that the metacognitive skills are based on the individual's awareness about his own cognitive processes and any production that is related to them such as the characteristics and potentials

related to information procession (Badran, 2008, p. 14). Besides, the concept includes three basic skills that are the planning, monitoring, and evaluation (Hailat, 2007, pp. 127-140).

In the educational literature, some studies shed light on the relation between the metacognitive skills and some variables such as the study of Bahri & Fares (2014), al Jarah & Abidat (2001), Najat Adli Toufik (2006), Majed Aissa (2005), Nadia Samaan (2002), Iffat Tantawi (2001), Ozey Harris (2000), Maksoud (1998), Schraw (1997), and O'Neil & Abdi (1996).

The metacognitive skills are related to many motivational structures. Due to this premise, active movements appeared calling to stop looking at the contents of the educational programs as undiscussable truths and to turn towards developing the mental and cognitive abilities of the learners through teaching with a style that triggers the mind, motivates it, and trains it to think. These movements relied on some results of educational researches that found out that teaching thinking may lead to the cognitive and mental stimulation, and that the learners may become more attracted to the educational subject and more motivated for achievement (Habib, 2003, p. 50). In this line, the concept of motivational orientations got much interest by psychologists since a long time. In addition, it was a main part of the writings of William James (1980). Then, researchers went on in this field until now. The motivational orientations are among the basic requirements of the goal of the learning process in any field either in learning the thinking styles and ways, building orientations and values, altering some of them, acquiring information and knowledge, solving problems, and the other behavior styles that are subject to the factors of training and practice (Chahta, & Abdul Hafidh, 2017, p. 134). The motivational orientations provide the spiritual, cognitive, and psycho-motor behavior with the energy needed to move and orient it towards achieving tasks and jobs with excellence. The curve of the achievement goals is one of the most important and affecting in the field of the motivation for achievement and the related studies in psychology with all its fields. It is the basis on which many field studies in the school circumstances are built (Zaghloul, 2006, pp. 115-117).

The achievement goals of the students determine their ways and affect their cognitive and spiritual behaviors when making academic tasks. They make them choose among the available behavioral alternatives leading them to choose goals that determine the nature of their academic performance. In this vein, the determined goal the student adopts is looked at as a frame that organizes his interpretations to the achievement circumstances and his experiences (Dewek, 1986, p. 78). Theorists in the field of the motivation orientations distinguish two types of goals namely performance goals and learning goals (Deweck, 1986). The performance goals are related to a negative set of processes and outcomes such as stopping the effort when facing difficulties, the superficial procession of the educational subjects, and the low level of work enjoyment (Nicholls, 1984, pp. 328-346). In this context, Deweck & Leggt (1998) pointed that the performance goals are negatively related to the perception of the value of the activity (Boujemline, 2013) while the learning goals are related to a positive set of processes and outcomes such as working to develop the performance level, perseverance in facing the difficulties, and the in-depth procession of the educational subjects to build a self-learning that is among the most important metacognitive strategies. In this context, some studies related to the learning goals have been made such as that of Ames & Archer (1988), Ford (1998), Abu Hicham (1999), and Rym Slimoun (2014).

In the same vein, Yang (2005) points that the motivation orientation is one of the important aspects of self-learning because it contributes to the students' achievement in the academic contexts and to their direct control on their behaviors and thinking to affect their efforts and perseverance in the school tasks. Based on what has been said, this study examines the nature of the relation between the metacognitive skills and the motivational orientations in the light of the level of the academic performance for the students who will sit for the Bac exam through answering the following questions:

Is there a correlation between the planning skill and the motivation for the academic achievement for the students who will sit for the Bac exam?

Is there a correlation between the monitoring skill and the motivation for the academic achievement for the students who will sit for the Bac exam?

Is there a correlation between the evaluation skill and the motivation for the academic achievement for the students who will sit for the Bac exam?

### **3. Hypotheses of the study**

There is a correlation between the planning skill and the motivation for the academic achievement for the students who will sit for the Bac exam.

There is a correlation between the monitoring skill and the motivation for the academic achievement for the students who will sit for the Bac exam.

There is a correlation between the evaluation skill and the motivation for the academic achievement for the students who will sit for the Bac exam.

### **4. Importance of the study**

This study lies within the contemporary international orientations that call for the importance of the metacognitive skills as one of the important and necessary outcomes that must be focused on in the learning

process. Because the goal of teaching and school work is the investment of the learners' energies, it is necessary to provide them with strategies that teach them the thinking strategies and raise their awareness about the importance of what they study and how to study. Romero (2013) showed that the motivation orientations towards achieving tasks are among the most important and beneficial types of the human behavior. In addition, knowing the motivation orientations of the students by the educational bodies is important because it contributes to investing in this orientation, taking advantage of it in achieving a qualitative educational achievement, increasing the cognitive level of the students, and decreasing the depression and anxiety levels and school failure.

## **5. Aims of the study**

This study aims at:

Examining the nature of the relation between the planning skill and the motivation for the academic achievement of the students who will sit for the Bac exam.

Revealing the relation between the monitoring skill and the motivation for the academic achievement of the students who will sit for the Bac exam.

Knowing the relation between the evaluation skill and the motivation for the academic achievement of the students who will sit for the Bac exam.

Remeasuring the consistency coefficient of the study tools that are the metacognitive skills scale and the scale of the educational goals orientations that were applied in previous studies in the Jordanian context, and readapting them to the Algerian environment.

## **6. Identifying the study concepts**

### **6.1 The concept of the metacognitive skills**

Chahata & Nadjar (2003) defines them as skills that control the thinking activities that are directed to each problem.

The cognitive abilities and resources of the individual are efficiently used to face the thinking requirements (Chahata & Nadjar, 2003, p. 60).

### **Procedurally speaking, we can define the metacognitive skills as**

the ability of the learner to set a defined strategy to choose his goals, monitor himself and his cognitive activities, and continuously evaluate them to solve problems that face him. These skills are measured with the degree the student gets on the metacognitive skills scale of Mona Sayad Ibrahim (2012) that includes the planning, monitoring, and evaluation dimensions.

### **6.2 The concept of the motivation orientations**

It refers to the intrinsic or extrinsic state of the learner that moves his behaviors and performance continuously and guides him towards the achievement of the goal. Besides, the motivation is the engine that pushes the individual's energies to work to the maximum to improve the performance and achieve the success (Hannache & Fares, 2014, p. 71).

### **Procedurally speaking, we can define the orientations of the motivation of achievement as**

how the learner's performance interprets the learning process and his response to the educational situation in the light of the self basic aims that determine their motives to learning. The motivation is expressed through the students' responses on the scale of the motivation orientations of Elliot & Church (1997) that was translated into Arabic by Zaghloul (2006).

## **7. Filed procedures of the study**

### **7.1 Pilot study**

It attempts to cover the problem in general and look for the variables that have a relation with a specific variable. The pilot studies are very beneficial in the first phases of the scientific study of a specific problem because some important variables of the problem may be relatively unknown to the researcher (al Melidji, 20012, p. 95).

### **7.2 Testing the sample of the pilot study**

The researcher carried out the pilot study in the secondary schools concerned with the study to know the field where the study will take place and stimulate the experts and those who have interest in the study topic to take advantage of their views and guidance, know the extent of the availability of the necessary potentials that intervene in the good conduct of the study, collect the primary information that enable us to make sure of the existence of the premise that our study tackles in the practical side, and test the validity and consistency of the study tools. Indeed, we managed to make this study in good circumstances thanks to the facilitation we found

from the stakeholders of the secondary schools and the students. The size of the sample of the pilot study reached (150) students, males and females, who had been chosen at random from different specialties. The pilot study allowed us to:

Discover the field of the study in general and get close to the study population that are students from third year classes of the secondary education.

Making a primary application of the scale of the metacognitive skills of Mona Sayad Ibrahim (2012) and the scale of the motivation orientations of Elliot & Church (1997) that was translated into Arabic by Dr. Rafaa Zaghloul (2006) and checking their suitability to the level of the sample students, their understanding of its statements, and the clarity of the terms for them.

Remeasuring the consistency coefficients of the two scales in the Algerian environment and adapting them to it.

Finding the main problems that shall face the final study and getting ready for them according to the data of the pilot study.

## **8. Method, population, sample of the study**

### **8.1. Method of the study**

The methods of the scientific research differ according to the topic of the study. Each method has its function and characteristics that help the researcher in his field (Zayat, 1996, p. 45). In this study, we relied on the correlation descriptive method because it is the most suitable to our study. It is based on studying the relation between the metacognitive skills and the motivation orientations in the light of the academic performance of the 3<sup>rd</sup> year secondary school students from one side, and on answering the questions that had been raised, checking the study hypotheses, and achieving its goals.

### **8.2 Population of the study**

It is a methodological scientific concept that refers to a group of people or elements the writer focuses on in a specific study willing to generalize the results he reaches from the sample on the population (Merabti & Nahwi, 2009, pp. 95-96). The population of our study includes the students of the 3<sup>rd</sup> year secondary education from "Ahmed Serir" school in Bir Touta, "Hassiba Ben Bouali" school in Chebli, and "Ahmed Tata" school in Bourouba during 2021/2022.

### **8.3 Sample of the study**

The sample is a set of specific elements that represent the original population and give results that are close to those resulting from the comprehensive inventory (Al Aissaoui, 1984, p. 125). The random sample refers to the equality of the chances for each individual. The random selection is necessary in the deductive statistics because we cannot generalize the characteristics of the sample of the population if the choice was not at random (Karru, 2007, p. 32). The sample of the pilot study was chosen at random through draw. It reached 150 students, 60 males and 90 females, aged 17 to 19 from the 3<sup>rd</sup> year classes of the secondary education as shown in table 01 :

**Table 1: Distribution of the study sample according to the secondary schools**

Members of the sample	Bir Touta secondary school	Ahmed secondary school Tata	Hassiba Ben Bouali secondary school
150	68	12	70

Source: prepared by the author based on the results of the Questionnaire 2022

**Table 2: Distribution of the study sample according to the gender**

Gender	Number	Percentage
Males	60	10%
Females	90	60%
Total	150	100%

Source: prepared by the author based on the results of the Questionnaire 2022

The sample had been chosen from the exam classes due to the following considerations that go with the nature of our study:

- The students of the secondary school develop the ability for self learning because it coincides with the development of the ability of comprehension and perception. This reflects on the will to acquire self knowledge through research and reading.

- The students of Bac classes use the metacognitive skills when facing difficulties in the subject because such skills suit their levels because they can monitor and control their learning performance.
- The adult learners, mainly the successful ones, reached a phase of cognitive, psychological, and physical awareness that allows them to guide their motives to shape clear landmarks of their achievements and future goals.

## 9. Study tools and their psychometric characteristics

To collect data for this study, we relied on the following

### 9.1 The metacognitive skills scale

It was made by Mona Sayad Ibrahim in (2012) It is made up of 31 statements. In this line, 14 measure the skill of planning, 7 measure the monitoring, and 09 measure the evaluation.

#### 9.1.1 The way of grading the scale

The student chooses among (always, sometimes, and rarely). The 1<sup>st</sup> answer gets 03 degrees, the 2<sup>nd</sup> gets 2, and the 3<sup>rd</sup> gets 1. Table 03 shows the numbers of the statements and the skills under them

**Table 3: Dimensions of the metacognitive skills scale and their numbers**

Skills	Planning	Monitoring	Evaluation
No° of Statement	13-1	14-23	24-31

Source: prepared by the author based on the results of the Questionnaire 2022

### 9.2 The scale of the motivation orientations

It was made by Elliot & Church (1997) and translated into Arabic by Rafaa Zaghloul in 2006. It is made up of 03 dimensions that are

- The 1<sup>st</sup> is the orientation towards the learning goals. It includes statements(2, 5, 8, 16, 11, 18, 21)
- The 2<sup>nd</sup> is the orientation towards the performance goals/approach. It includes statements (1, 4, 7, 10, 13, 15, 19, 22)
- The 3<sup>rd</sup> is the orientation towards the learning goals/ avoidance. It includes statements (3, 6, 12, 14, 17, 20, 23, 24)

#### 9.2.1 The way of grading the scale

The scale includes 24 statements. Each one has 05 choices that are strongly agree, agree, neutral, disagree, and strongly disagree. The answers are graded according to Lickert's five points scale (5, 4, 3, 2, 1) The answers are collected to know the degree of the motivation orientation

### 9.3 The psychometric characteristics of the study tools

#### 9.3.1 The psychometric characteristics of the metacognitive skills scale

##### 9.3.1.1 Consistency

To examine the consistency and adapt the scale to the Algerian environment and the students of the 3<sup>rd</sup> year secondary school, we collected the data of the pilot study and input and processed them with SPSS. Findings are as follows:

- Consistency coefficient was calculated with Cronbach's Alpha. It is estimated at 0.706 which is statistically significant at significance level 0.01. This shows we can trust the results of the study.

**Table 4: The consistency of the metacognitive skills scale using Cronbach's Alpha**

Sample	Statements	Cronbach's Alpha	Significance level
150	31	0.706	0.01

Source: researcher based on SPSS 2022

##### 9.3.1.2 Validity

Validity was calculated with Cronbach's Alpha. It is estimated at 0.853. This confirms the scale has an acceptable degree of validity and that we can trust the results of the study.

### 9.3.2 The psychometric characteristics of the motivation orientations scale

#### 9.3.2.1 Consistency

Consistency coefficient was calculated with Cronbach's Alpha. It is estimated at 0.802 which is statistically

significant at significance level 0.01. Thus, the scale has an acceptable degree of avidity. Results are show in table 05:

**Table 5: The consistency of the orientations of the learning goals scale using Cronbach's Alpha**

Sample	Statements	Cronbach's Alpha	Significance level
150	24	0.802	0.01

Source: researcher based on SPSS 2022

### 9.3.2.2 Factorial validity

After the application of the scale on the members of the sample, their degrees were analyzed using the Principal Axis Factoring and the oblique rotation to check the validity. Findings show that the scale has 3 factors with a latent root for each. In total, they were 1.45% of the total variance of the scale degrees. The 1<sup>st</sup> factor explains 89.23% of the total variance, the 2<sup>nd</sup> explains 11.13%, and the 3<sup>rd</sup> explains 1.8%. To identify the factor to which each statement belongs, we used the following criteria:

1. The statement belongs to the factor that has the highest degree of saturation.
2. The coefficient of saturation of the statement on the factor must be 30.0 or more than 3.
3. The correspondence between the content of the statement and the contents of the statements that belong to the same factor must be made.

All these conditions are found in all the analyzed statements. In addition, findings show that : Statements (1,3, 12, 6, 9, 21, 18 ,14) that belong to the 2<sup>nd</sup> factor and revolve around the approach-performance goals have saturation coefficients as follows 0.25, 0.59, 0.65, 0.66, 0.69, 0.73, and 0.73, respectively Statements (10, 2, 7, 17, 4, 20, 15) that belong to the 2<sup>nd</sup> factor and revolve around the mastery goals have saturation coefficients as follows (0.51, 0.58, 0.66, 0.69, 0.75) respectively. The statements (19, 22, 16, 8, 11, 23, 5, 13) that belong to the 3<sup>rd</sup> factor and revolve around the performance-avoidance goals have saturation coefficients as follows (0.32, 0.37, 0.43, 0.54, 0.56, 0.59, 0.62, 0.63) respectively.

We notice that the factorial structure of the scale corresponds to the original one of the scale because the statements maintained their belonging to the factors as in the original scale. Moreover, all the statements are classified according to the theoretical structure of the scale.

## 10. The statistical tools used in analyzing the results

We relied on the suitable tools to the topic of the study and the nature of the hypotheses. Thus, we used:

Cronbach's Alpha to measure the consistency and validity.

The arithmetic means and the standard deviations.

Pearson correlation coefficients to measure the relation between the variables of the study.

## 11. Presentation, analysis, and discussion of the results of the study hypotheses

### 11.1 Presentation, analysis, and discussion of the results of the 1<sup>st</sup> hypothesis

It states that there is a correlation between the planning skill and the motivation orientations for the students who will sit for the Bac exam. After statistical analysis, we found results that are shown in table 06:

**Table 6: The relation between the planning skill and the motivation orientations**

Sample	Arithmetic mean	Standard deviation	Correlation coefficient	Significance level
150	36.4	2	0.096	0.01

Source: researcher based on SPSS 2022

Results show that the value of the correlation between the planning skill and the motivation orientations is 0.096 which is very low and insignificant at significance level 0.01. This shows that there is no correlation between the planning skill and the

motivation orientations for the students who will sit for the Bac exam. Thus, the 1<sup>st</sup> hypothesis is disconfirmed. Results of the 1<sup>st</sup> hypothesis agree with those of Blumenfeld & Pokey (1990) and Sayad Abu Hicham (1999) that found no correlation between the planning skill and the level of the academic performance. We can interpret this result in the light of the premise of Gagne (1991) that says that the student most of the time finds himself obliged to adopt an educational goal despite his refusal to it.

In the same context, Schiefele (1991) sees that the educational goals the student refuses may create a gap between the goal he adopts, whose main axis is planning to participate in its activities, and what is imposed on him as educational goals. Moreover, the achievement goals are one of the components of motivation and one of

the main pillars through which the student achieves himself and shows his will to do well in academic tasks and activities

Such beliefs related to the causes of success of the student contradict with the educational goals identified with criteria that neither meet his expectations and motives to learn nor satisfy his scientific curiosity. Thus, they hinder his activity and vitality and put him in a tight situation. In front of such educational goals, we cannot speak about the student's motivation for the academic achievement and the use of the cognitive and metacognitive skills (Sayad, 1999, p. 30). On the other hand, the results of the 1<sup>st</sup> hypothesis contradict with those of Deweck & Legett (1988) and Nolen & Haladina (1990) which showed a strong relation between planning and the motivation towards learning goals. In this context, the correspondence or difference with the results of the previous studies regarding the 1<sup>st</sup> hypothesis reveals the existence of other intrinsic factors that may intervene in the dis/confirmation of the relation between the variables of this study.

### 11.2 Presentation, analysis, and discussion of the results of the 2<sup>nd</sup> hypothesis

It states that there is a correlation between the monitoring skill and the motivation orientations for the students who will sit for the Bac exam. After statistical analysis, we found results that are shown in table 07:

**Table 7: The relation between the monitoring skill and the motivation orientations**

Sample	Arithmetic mean	Standard deviation	Correlation coefficient	Significance level
150	32.5	2	0.008	0.01

**Source:** researcher based on SPSS 2022

Results show that the value of the correlation between the monitoring skill and the motivation orientations is 0.008 which is very low and insignificant at significance level 0.01. This shows that there is no correlation between the monitoring skill and the motivation orientations for the students who will sit for the Bac exam. Thus, the 2<sup>nd</sup> hypothesis is disconfirmed. These results agree with those of Sinha & Kumari (2000) that found a statistically significant relation between the motivation orientation towards the performance goals, the use of the superficial learning strategies, and the existence of a negative statistically significant relation between the orientation towards the learning goal and the use of the deep learning strategies.

Based on the outcomes of the educational heritage that studied the deep learning strategies that include monitoring, we learn that the monitoring skill regulates the thinking process and self monitoring which means that the learner is conscious about what he thinks and the performances he makes. In this line, the monitoring skill allows the students to reconsider the strategies they use in learning. Thus, they can substitute a certain strategy if it does not work with new efficient ones that help achieve the goals. Based on this, the disconfirmation of the 2<sup>nd</sup> hypothesis may imply that the students who have the performance orientation in learning are not aware about the monitoring skill as one of the metacognitive skills that push them to improving their academic performance. Besides, we can interpret this result in the light of the findings of Zaghloul (2006) that confirm that the performance goals are related to the use of the superficial study strategy and that the students with the performance motivation orientation follow the superficial processing style of the subjects due to their weakness in using the self-monitoring skill. In the same context, the theory of the referential goals confirm that the performance goals, avoidance or approach, negatively affect the motivation and the academic performance because the student does not focus his efforts on investing his energies and mastering the subject; rather, he compares himself to the others. Furthermore, he always expects failure which leads him to avoid integration in the activity and, thus, fails to orient his motives towards developing his educational abilities.

Furthermore, Midgley & Middleton (1997) confirm that the performance goals are not positively related to the monitoring skill; rather, they are related to a high level of anxiety, low self-esteem, and the feeling of shyness. Therefore, the students with the performance motivation orientations generally choose the easy tasks to avoid the risk and the negative judgments about their abilities. Hence, they focus on the achievement of higher grades than their colleagues in the light of a referential comparison between their performance and that of their colleagues. In the same vein, Mecee & Al (1988) see that the increase of the performance motives of the students decreases the self criteria in making judgments about problem solving and their competencies (Jarouan, 2007, p. 189). In more clear words, the student with the performance motivation orientation does not use metacognitive skills including the monitoring.

### 11.3 Presentation, analysis, and discussion of the results of the 3<sup>rd</sup> hypothesis

It states that there is a correlation between the evaluation skill and the motivation orientations for the students who will sit for the Bac exam. After statistical analysis, we found results that are shown in table 08:

**Table 8: The relation between the evaluation skill and the motivation orientations**

Sample	Arithmetic mean	Standard deviation	Correlation coefficient	Significance level
150	33.2	2	0.055	0.01

Source: researcher based on SPSS 2022

Results show that the value of the correlation between the evaluation skill and the motivation orientations is 0.055 which is very low and insignificant at significance level 0.01. This shows that there is no correlation between the evaluation skill and the motivation orientations for the students who will sit for the Bac exam. Thus, the 3<sup>rd</sup> hypothesis is disconfirmed. The results of this hypothesis partially agree with those of Akil Ben Sassi (2012) that found out that the educational curricula in Algeria do not target teaching thinking to the students with a clear strategy regardless the metacognitive thinking where evaluation is one of the basic skills. In this line, evaluation is a starting and end point in any work whose exactitude of results can be judged (Ben Sassi, 2012, p. 242).

Besides, we can interpret the results of the 3<sup>rd</sup> hypothesis in the light of the results of Ben Bia Ahmed (2016) after studying the quality of the teaching performance of the secondary school teachers using the competency-based approach. Results showed that the teachers' practice of the planning, the execution, and the evaluation did not meet the required quality level. This result agrees with the study of Bouaicha (2008) who found out that the teachers in the fundamental schools do not plan, execute, and evaluate the lessons according to the required practice using the competency-based approach according to the views of the inspectors (Ben Bia, 2016, pp. 144-145).

Based on this, Slavin (2003) points that the teacher can orient the motives of his students towards developing their competencies if he manages to promote the metacognitive skills in his teaching to convince them that the goal of the academic achievement corresponds with the educational goal in order to confirm the practical value of the subject taught.

## 12. CONCLUSION

Upon this study that aimed at knowing the nature of the relation between the metacognitive skills (planning, monitoring, and evaluation) and the motivation orientations in the light of the academic performance of the students who will sit for the Bac exam, we found results that show the absence of relation between the metacognitive skills and the motivation orientations. We had previously pointed that the metacognitive skills are among the important outcomes in psychopedagogy because they refer to the awareness about the thinking processes and provide that teaching the learners these skills contributes to improving their school performance through developing their mental and cognitive abilities to cope with the technological development and the changes of the modern era.

Furthermore, the motivation orientations are among the main conditions on which the goal of the learning process.

depends because they determine the behavioral choices and the level of the students' academic activity in which we can predict the academic achievement, failure, or success, and take the necessary measures. After the analysis and discussion of the results, we found out that there are studies that agree with ours due to many criteria such as the deterioration of the academic performance results that may be attributed to a contradiction between the contents of the educational programs and the self learning goals the student sets. In this line, some educational

programs impose what the student does not want to learn and, thus, limit his aspirations and decrease the level of his motives to learn. Based on what has been said, and in the light of the results, we provide the following recommendations:

It is necessary to focus on developing the thinking skills of the students in all the educational phases through building curricula by experts supervised by the Ministry of Education.

It is necessary to make training sessions for teachers about the metacognitive skills and to consider them as one of the main topics in training and qualifying the teachers.

It is important to make pilot studies where learners are subjected to programs that encourage learning the thinking skills and stimulate the motivation for achievement.

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