

**The People s' Republic Of Algeria**  
**Ministry Of Education And Scientific Research**  
**Abed Alhamid Ibn Badis University**  
**Faculty Of Arts And Literature**  
**Department Of English**  
**Master Student Dissertation**  
**Master 2 Psycholinguistic**



**The Cognitive Development During Adolescence**  
**Case Of Middle School Pupils Of chahri Bougrian School**  
**.Mostaganem**

**Written By :**

Boukezzoula fatima

**Supervised By :**

Ms .Benosmane

**Board Of jury :**

Ms.Adnani.....university of mostaganem

Ms.Kharoubi.....university of mostaganem

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## **Dedication**

**My first thanks goes to the members of my family especially my kind mother and my suite father .I swear without the help of them I could not study and succeed and get my master diploma .My family always make confidence at my capacities and encourage me to do all the best and do not accept failure because we learn things from our mistakes .I can not forget my best friends such as Bourdji Asmaa,Djelida Hanane,Mortet Mansouria,Laidi Fatima and Bouchouk Fouzia for their advices and encouragement.**

## **Acknowledgement**

**In this part I wish to thank my supervisor M.S Benosmane .Thank you so much for your patience with me and your helps .Iam very lucky to meet you and learn a lot from you .I wish all the best to you and your family. Also I can not forget the fourth year middle school pupils for their serious help in gathering answers for my questionnaire.My gratitude goes also to the members of the jury for accepting to read and evaluate my work and give me helpful advices that i need in the present day as well as in the future**

## **abstract**

**the cognitive development is related to the improvement of the specific components of the thinking processes. During the period of adolescence the processes get much more complex. The way I used to study the topic is using the questionnaire which is addresses to the fourth year middle school pupils of chahri bougrian school of mostaganem. the questionnaire were consist of 17 related questions which have relation the the general topic on the other side the participants were combination of males8 and famales12 exactly20 participants. the research questions which is raised is to know if the adolescents used the same cognitive skills to improve their way of thinking and how can teachers help their pupils and the ways adolescents differ than children. Manny suggestion were supposed like adolescents are more advanced than children and teachers may increased or decreased the level of thinking of adolescents. The aim of the study is to know the characteristics of the transition from childhood to adulthood and understanding the cognitive changes that happen during this period. the result show that adolescents will have an advanced level than children as a result they can create their point of views about the world and can create their own ethical values and they can make hypothesis and test them and make decissions and accept the responsibily for the consequences also they can decide solutions in systematic and logical way.**

### *The questionnaire*

The questionnaire is part of the master dissertation .so i would be very happy if you help me by answering the questions proposed by me concerning the cognitive development of adolescence in a serious way and by giving your point of views regarding certain concepts . iwish from you to pray for me to succeed in my studies and get my master diploma.

## Section one :personnel information

1-Gender : *male* *female*

2-Age :

### 3-Academic level

## Section two :the adolescent abilities

4-Do you think that your english level is :

Average                      excellent                      poor

5-To develop your level ,you prefer to :

Create prediction                      make hypothesis                      create possibilities

6-how do you prefer to learn ?

Individual groups

7-to describe your self,you express your :

Experiences	likes and dislikes	goals
<p>1. I have been a member of the school choir for three years. I have learned many new songs and have performed at several school events.</p> <p>2. I have been a member of the school sports team for two years. I have learned many new skills and have competed in several tournaments.</p> <p>3. I have been a member of the school debate team for one year. I have learned many new arguments and have competed in several tournaments.</p>	<p>1. I like to play sports and I like to be part of a team.</p> <p>2. I like to learn new things and I like to be challenged.</p> <p>3. I like to be part of a group and I like to help others.</p>	<p>1. I want to be a professional athlete.</p> <p>2. I want to be a professional debater.</p> <p>3. I want to be a professional singer.</p>

8-if you receive certain input,you choose to :

Accept it as it is      ask for more clarification      ask for arguments

9-to show your knowledge ,you prefer to :

Write it in the board      make oral presentation      bring pictures and articles

10-your thinking about certain situation is :

Multidimensional one dimension

11-the way you prefer to develop your thinking :

Try to comprehend metaphors    understanding proves    create new ideas

12-which topic can attract you ?

Religion      politics      justice

13-comprehension well require you to :

Pay more attention      have a lot of knowledge      be intelligent

14-which perception do you use more ?

Visual              auditory              tactile

15-to realize your dreams ,you :

Set goals              take risk              make challenge

16-to solve a problem :

Look from different perspective              take risk

17-to make effective decision :

Think about the result      ask experiment person      compare opinion and thoughts.

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## **Introduction**

this part is going to analyse findings of the questionnaire while is given to number of students to know their answers and their point of view regarding Certain points to reach the results .the questionnaire was choosen to use as data collection the participants. The participants Were combination of male and female from the same level and from the same School.

### **2-1 The methodology**

It refers to the way I used to conduct my research .it consist of three categories the instrument,the setting and the participants.

#### **2-1-1 the instrument**

There are many data collection and the one I was selected is the questionnaire which is set of questions which are organized and connected because It discuss the same topic which is cognitive development of adolescence. Those questions where adresse to number of students to find answers to the spefic issue it also help me to..know the different skills the students use to develop their Cognition to notice if they use the same skills and strategies.

#### **2-1-2-the setting :**

Each dissertation require place for the discovery of the answersof the questionnaire.I used the middle school as setting for conducting my research exactly the school of chahri bougrian which is situated in ben abed almalik ramadane.mostaganem.

#### **2-1-3 the participants**

The students i was selected for conducting this research were the fourth year middle school students of chohri bougrian school... they were 20 students who are combintion of male 8 and female 12 , they were asked to show their opinions by selecting the correct answer according to them which they receive through their learning or their experiences.

#### **2-1-4 the analyzes of the questionnaire :**

Answer 01 : it was about gender

Table2-1-the gender of the participants

Gender	Number	percentage
--------	--------	------------

Male	08	40 %
Female	12	60%

Figure 02-1-the gende of the participants

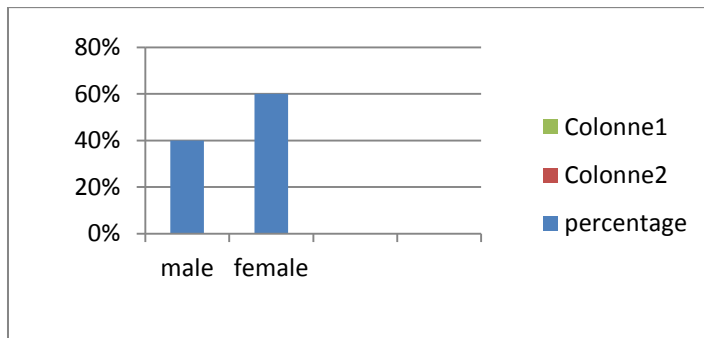


Table and figure 01 :

the gender of the participants we notice that the participants were combination of males and females but the number of female were more than number of male.

Answer 02 : it was about age

Table 2-2-the age of the participants

	Age 14	Age 15
Male	75 %	25 %
Female	66.66 %	33.33 %

Figure 2-2-the age of the participants

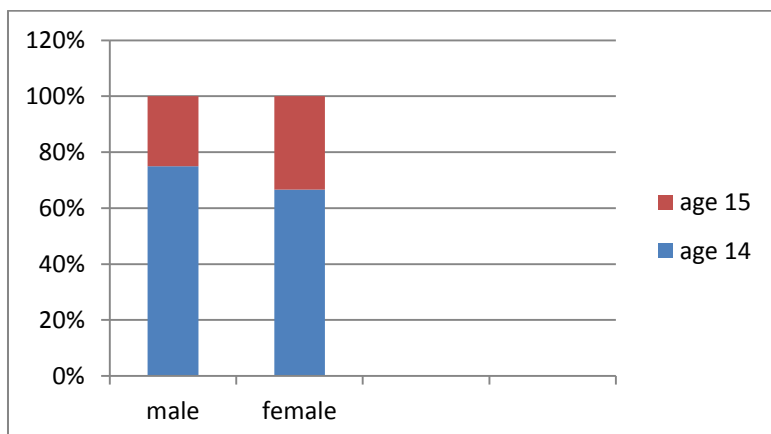


Table and figure 02 : the age of the participants

we saw that the age of the participants were between 14 and 15 years old. we notice that great number of both males end females have age 14 years but few munber of them have age 15 years old.

answer 03: it was about the academic level

Table 2-3-the academic level

	Fourth year middle school
Male	40 %
Female	60 %

Figure 2-3-the academic level

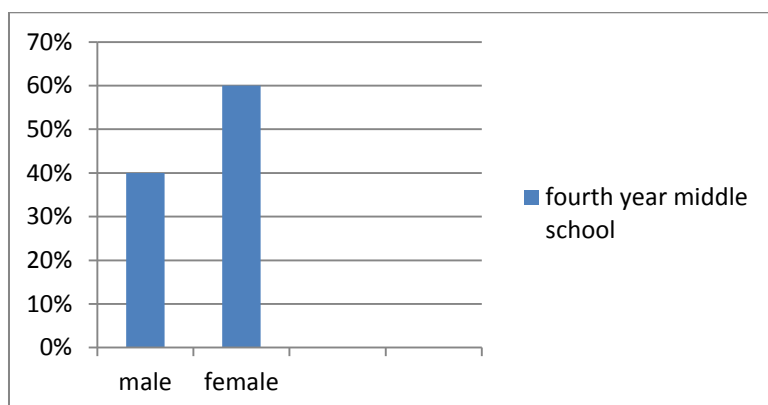


Table and figure 03 :The academic level

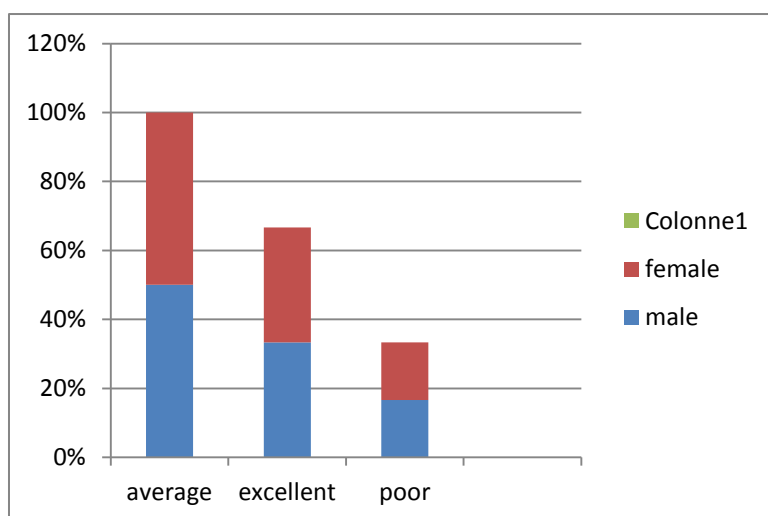
we notice that the participants all belong to the same academic level which is the fourth year middle school and belong also to the same school which is named chahri bougrian school.

Answer 04 : the participant english level :

Table 2-4-english level of the participants

	Male	Female
Average	50 %	50 %
Excellent	16.66 %	33.33 %
Poor	16.66 %	16.66 %

Figure 2-4-english level of the participants



## Table and figure 04:english level of the participants

We notice that the majority of both males and females their english level is average but the number of male who find english easy and their level is excellent were less than the number of female. on the other hand we notice that both of male and female have the same percentage regarding their level which is poor.

Answer 05: developing english level

Table 2-5-improving english level

	male	Female
Create predictions	50 %	58.33 %
Make by hupothesis	25 %	25 %
Create possibilities	25 %	16.66 %

Figure 2-5-improving english level

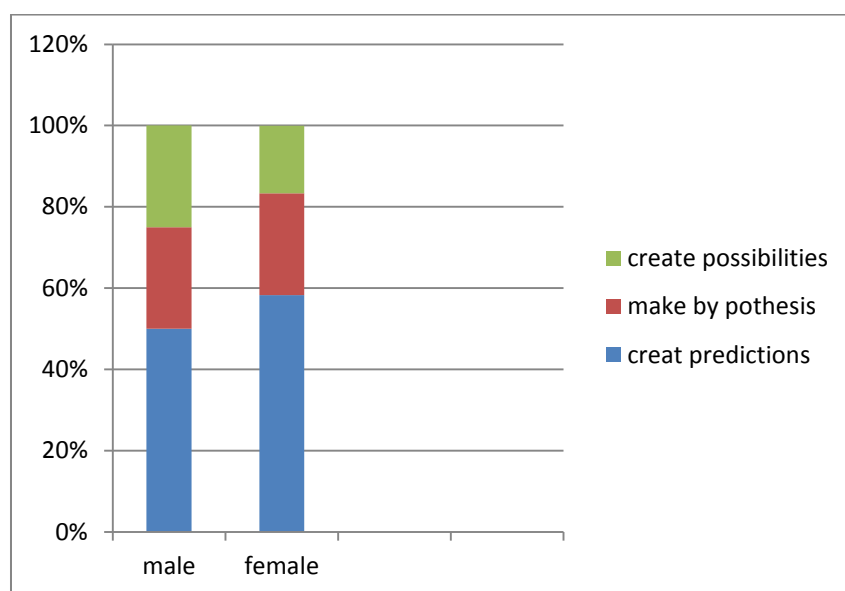


Table and figure 05 : improving english level

We saw that great number of both males and females prefer to create prediction for developing their english level. we notice 25% of botheof them select making hypothesis to do that improvement but 25% of male and 16.66% of female choose to create possibilities.

Answer 6 : the preferente way for leaeming

Table 2-6-the perfect way for learning :

	Male	female
Individual	25 %	66.66 %
Group	75 %	33.33 %

Figure 2-6-the perfect way for learning

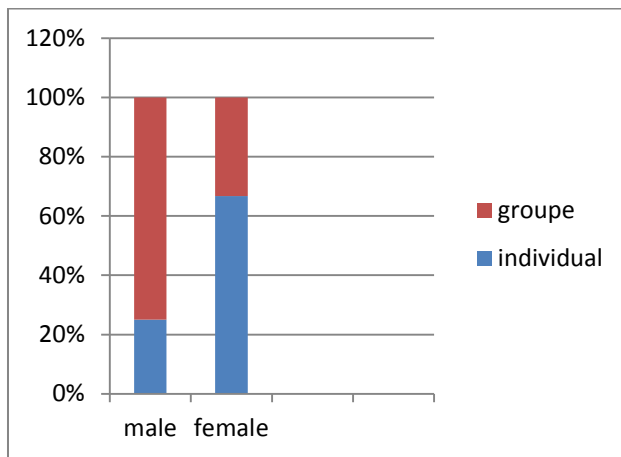


Table and figure 06 : the perfect way for learning

Table and figure 06 :we notice that great number of males choose to learn in group to exchange ideas but small number of them prefer lerning individual. on the other hand majority of females choose to learn individual unlike 33.33 % choose to learn in group.

Answer 07 : describing the self

Table 2-7-the suitable way for expressing the self

	Male	Female
Experience	25 %	41.66 %
Like and dislikes	37.5 %	41.66 %
Goals	37.5 %	16.66 %

Figure 2-7-the suitable way for expressing the self

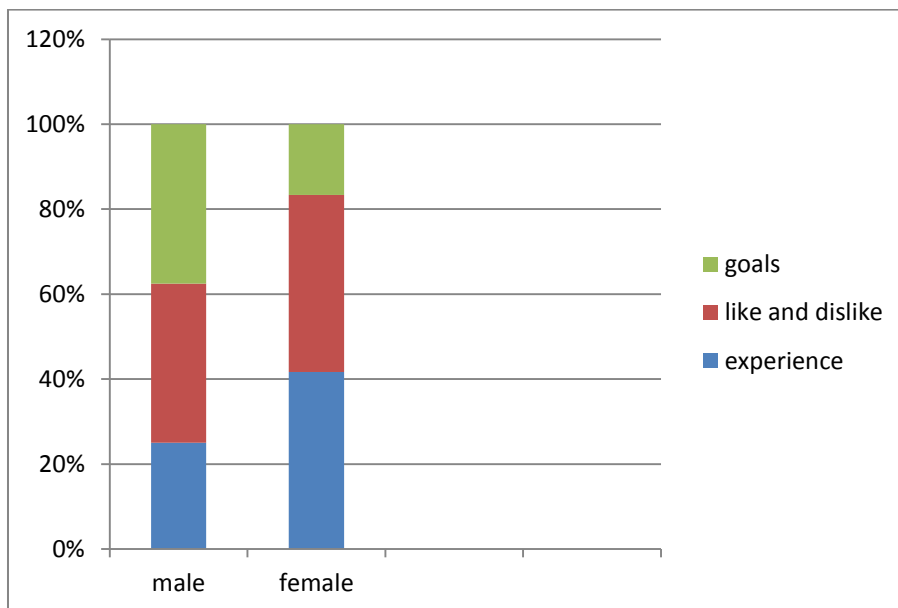


Table and figure 07 : the suitable way to express the self.

We notice that the majority of males prefer to express their likes and dislike and also their goals to define themselves but 25 % of them choose to narrow their experiences. On the other hand the most of females select to mention their experiences also their likes and dislikes to show themselves and 16.66 % of them prefer to set their goals

Answer 08 response to certain input :

Table 2-8-reaction for receiving particular input

	Male	Female
Accept it as it is	25 %	16.66 %
Ask for charification	50 %	58.33 %
Ask for argument	25 %	25 %

Figure2-8-reaction for receiving particular input

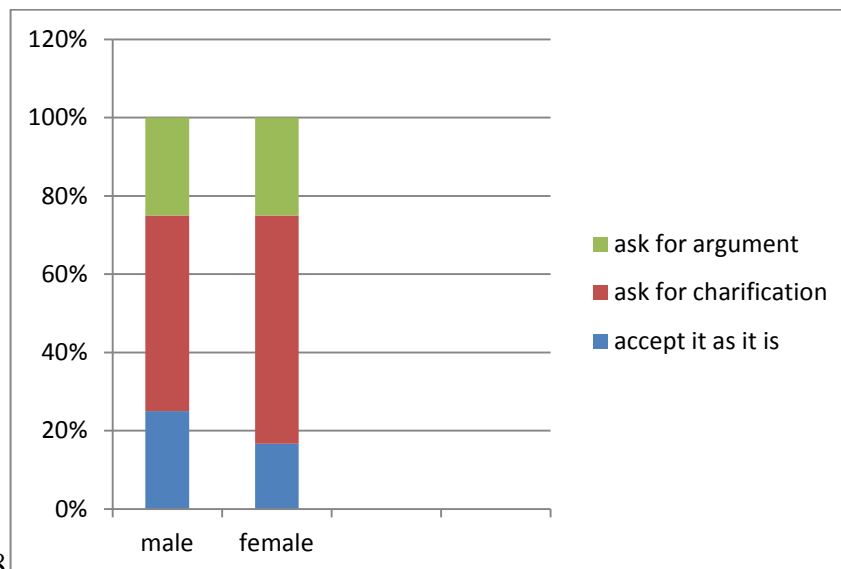


Figure 08

Table and figure 08 : reaction for receiving particular input

we notice that few number of both of the participants prefer to accept the information as it is but great number of them select asking for more clarification and justification in addition to 25 % of both of them prefer to ask for argument to be sure of the information.

Answer 09 showing certain knowledge

Table 2-9 –expressing certain knowledge

	Male	Female
Write in the board	50 %	41.68 %
Make oral presntation	18.5 %	50 %
Bring pictures or videos	37.5 %	8.33 %

Figure 2-9-expressing certain knowledge

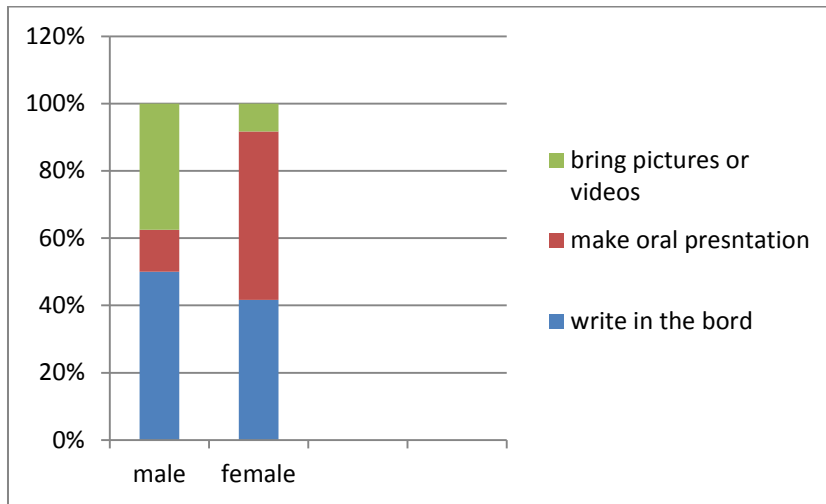


Table and figure 09 : expressing certain knowledge

We notice that majority of males choose to write their knowledge in the board but 37.5 % of them prefer to bring videos or photos to facilitate expressing their thoughts and 18.5 % of them need to make oral presentation on the other hand, great number of females prefer to express their knowledge orally and 41.68 %. Choose to write in the board their in input and 8.33 % prefer to bring picture or videos.

Answer 10 : the limit of student thinking

Table 2-10-students thinking limitation

	Male	Female
Multi dimensional	62.5 %	66.66 %
One dimension	37.5 %	33.33 %

Figure 2-10-students thinking limitation

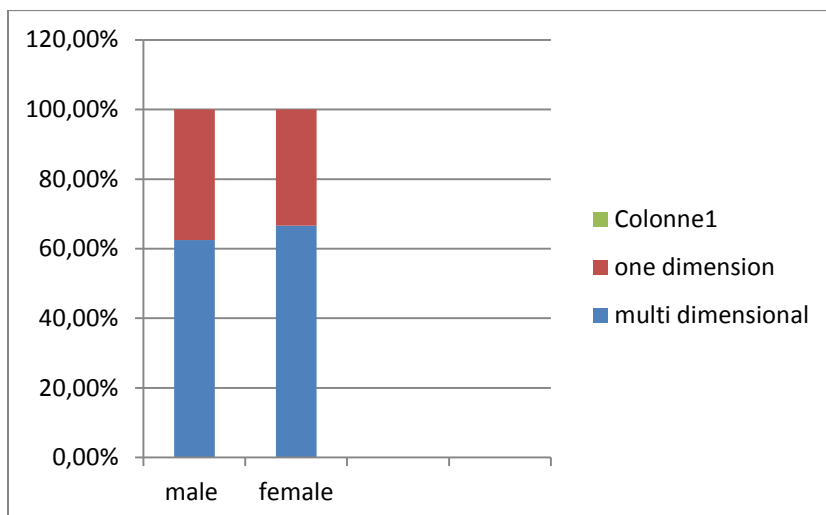


Table and figure 10 : student thinking limitation

we notice that the majority of both of the participants have multidimensional thinking that lead to think in multiple way but few number of them have one dimension for their thinking



Answer 11 : the way for developing thinking

Table 2-11- the methods for improving thinking

	Male	Female
Try to comprehend metaphore	37.5 %	33.33 %
Understanding proverbs	37.5 %	41.66 %
Creat new ideas	25 %	25 %

Figure 11

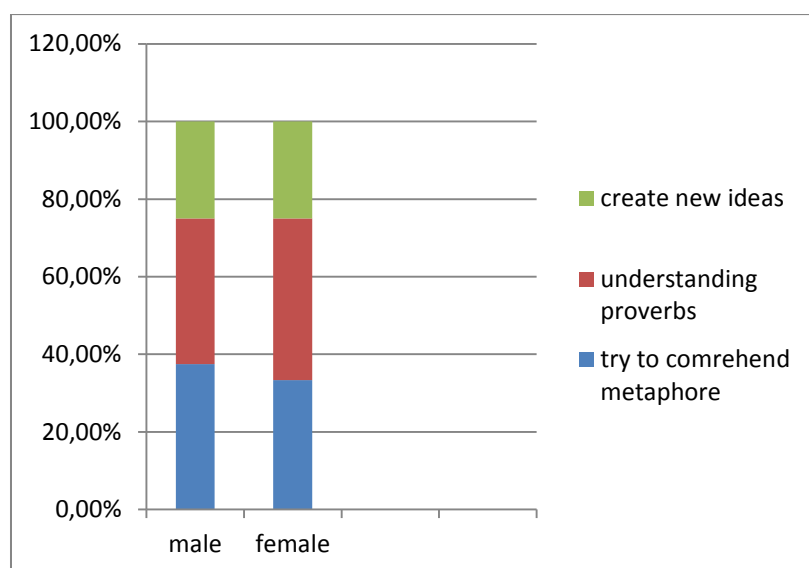


Table and figure 11 : the method for improving thinking

we notice that the majority of participants prefer to comprehend metaphor and understanding proverbs for developing their thinking but few number of them choose to create new ideas for improving their way of thinking

Answer 12 : the attrachive topic.

Table 2-12-the topic that attract more attention

	Male	Female
Religion	12.5 %	66.66 %
Politics	75 %	8.33 %
Justice	12.5 %	25 %

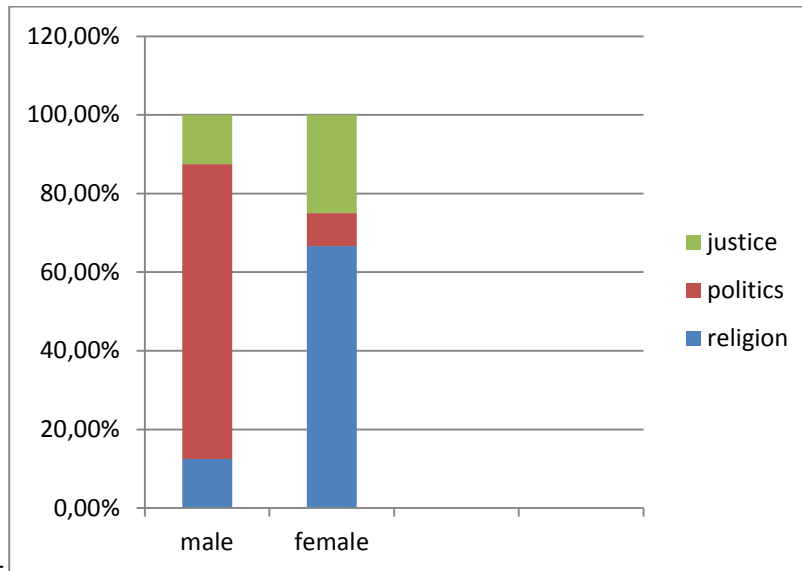


Figure 2-

Table and figure 12 : the topic that attract more attention

We notice that the majority of male learners choose to speak about politics but few of them prefer to discuss religion topic and justice topic on the other hand great number of female select to speak more about religion but few of them choosing speaking about politics and justice.

Answer 13 : the kind of perception which is used more

Table2-13-the kind of perception:

	Male	Female
Visual	37.5 %	58.33 %
Auditory	50 %	25 %
Tacticle	12.5 %	16.66 %

Figure 2-13-the kind of perception

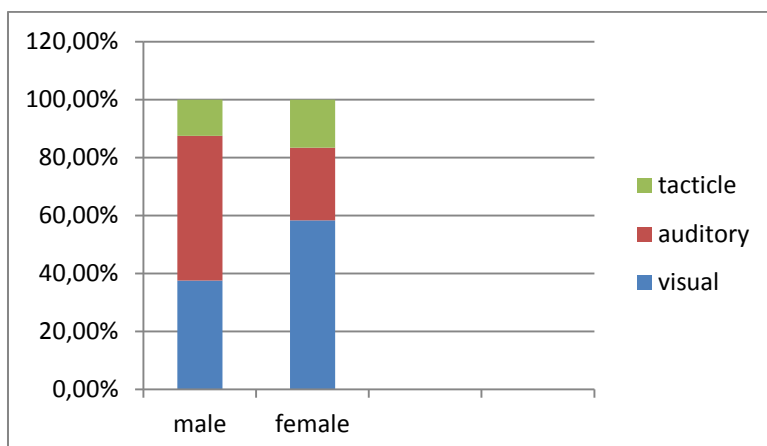


Table and figure 13 : the perception which is much used.

We notice that the majority of males learners use their more their auditory perception while 37.5 % of them prefer using visiol perception and few of them. Choose to utilize their tacticle

perception. On the other hand, great number of felames prefer to use their their visual perception unlike 25 % choose auditory one and 16.66 % use tacticle perception

Answer 14 comprehension well

Table 2-14-condition for comrehending well

	Male	Female
Pay more attention	37.5 %	58.33
Have lot of knowledge	50 %	25 %
Be intelligent	12.5 %	16.66 %

Figure 2-14-condition for comrehending well

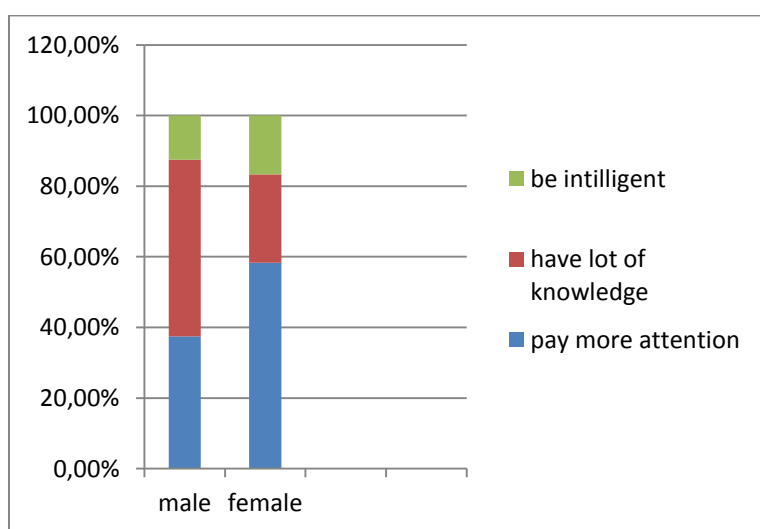


Table and figure 14 : condition for comprehending well

We notice that the majority of males learners prefer to have lot of knowledge to comprehend good the input while 37.5 % prefer to pay more attention and 12.5 % sow that they must be intelligent to understand well on the other hand , 58.33 % of females prefer to pay more attention to understand certain information while 25 % need to have more knowledge and 16.66 % notice that being intelligent is the best solution for comprehension well

Answer 15 : Realizing certain dream

Table 2-15-the methods for realizing certain dream

	Male	Female
Set goals	50 %	41.68 %
Take risk	25 %	8.33 %
Make challenges	25 %	50 %

Figure 2-15-the methods for realizing certain dreams

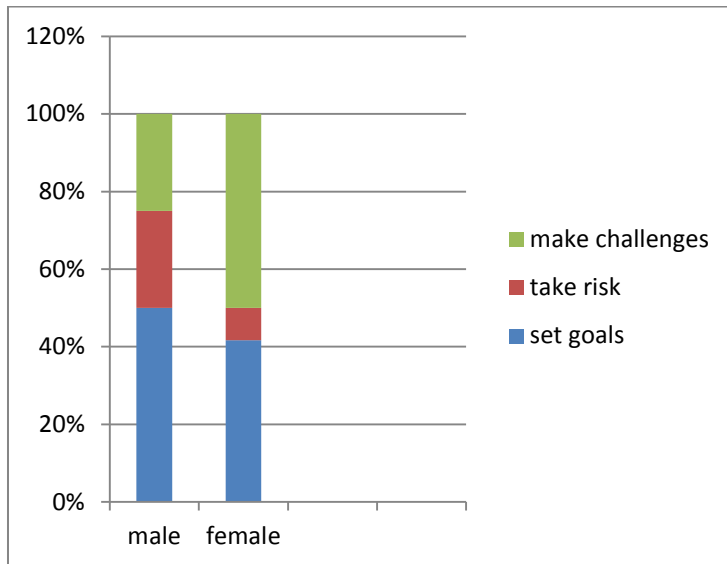


Table and figure 15 : the method fo realizing certain dream

we saw that the majority of both males and females prefer to set goals in order to realize certain dream but other select to take risk or make different challenges to realize the goal

Answer 16 : solving problem

Table 2-16-the way for solving problems

	Male	Female
Looking from different perspective	50 %	75 %
Take risk	50 %	25 %

Figure 2-16-the way for solving problems

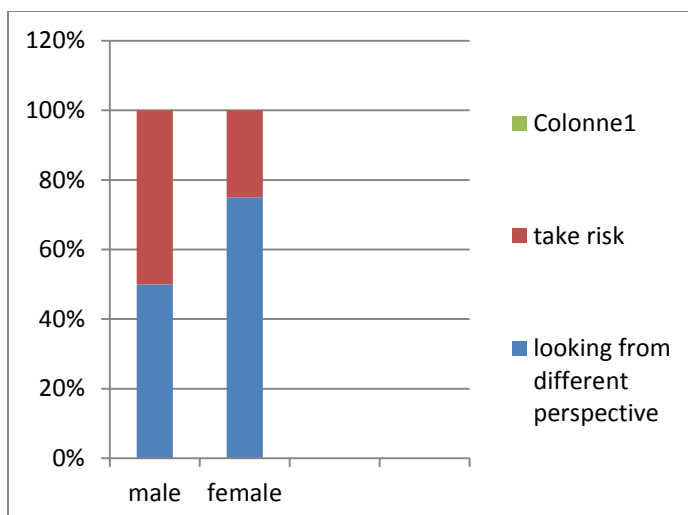


Table and figure 16 : the way for solving problem.

We saw that the majority of the participants prefer to look at the problem from different sides to solve it correctly and few of them choose to take risk to solve a certain issue or trouble.

Answer 17 : making effective decision

Table 2-17-the best way for deciding

	Male	Female
Compare opinions and thoughts	25 %	16.66 %
Think about results	37.5 %	33.33 %
Ask experiment person	37.5 %	25 %

Figure 2-17-the best way for deciding

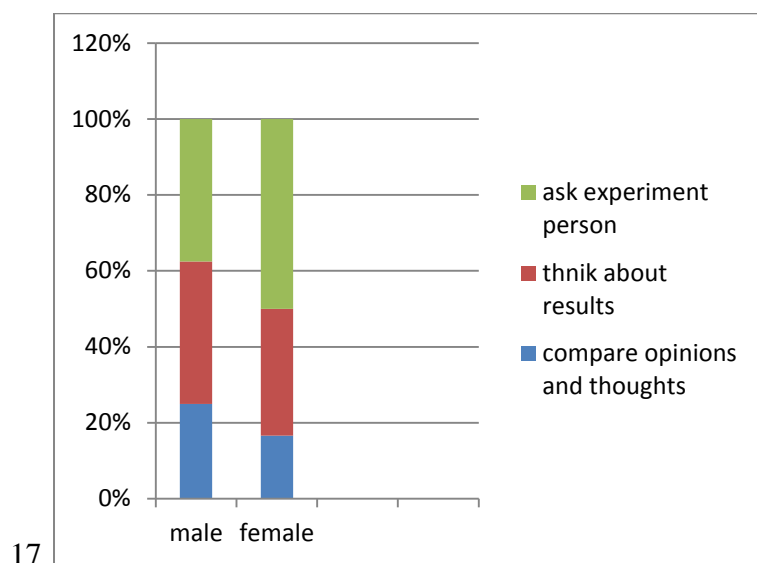


Table and figure: the best way for deciding

We notice that the majority of males prefer to think about the results of the problem before deciding or ask an experiment person while few of them prefer to compare opinions and thoughts to make effective decisions on the other hand 16.66 % of females select this final decision and 58.33 % choose to think about consequences of decision and ask experiment n person to make a good decision.

## 2-2 conclusion

Table and figures were designed to express the answer of the the participants. We notice that nearly the most of the participants have the same answer, opinion or the same idea about the questions. The finding show that the participants try to vary the cognitive skills and strategies in their learning to develop their level and they move from simple to complex skill and method. The more they grow up the more their thinking will develop and will be multidimension of and will make effective decisions and solve problem in systemic way.

**The  
Discussion  
of the  
finding**

### 3- Introduction

This is the final and the important part because it consist the results and answers for the research questions to slove the specific issue which is related to the main topic which is the cognitive devlopement of adolesence. It is going also to propose some suggestions and solution for both learners and teachers to make effective interaction between them and to complete the gap in education

#### 3-1 the discussion of the findings

After analyzing the questionnaire, we conclude that each adolescent have his specific skills and strategies to learn affectively. We notice that the participants were combination of male and female nearly 20 participants and they were answered 17 questions which have relation to the main topic which is the cognitive development of adolescence. The instrument which is used to treat the resarch issue is the questionnaire which is set of organized and related questions propose directly and indirectly to find answers to the issue . We saw that the age of the participants were between and 14 and 15 years old and the most of the participants have age 14 years old .

All the learners belong to the same school and the same academic level which is the fourth year middle school. The most of the participants have on average level but few of them have poor level and to develop their english level most of them prefer to create predictions and others choose to make different hypothesis but few of them soppose to create possibilities ,all that skills are effective for developing thinking each person have his specific condition for learning better ,so we saw the majority of the participants prefer to ,learn in groups and exchange the different ideas and learn from each other unlike few of them prefer to learn individually to concentrate more. In order to express the sell many of the participants prefer to express their experiences for showing themselves while others choose to explain their likes and dislikes to transmit their characteristics in correct way that mean facilitate to others understanding their character while others prefer to classify their future gools to make it clear for the listener to know the desire of certain person . As learners receive certain input , the most of the participants prefer to ask for more clarification and arguments to be clear of the information unlike few of them prefer to accept the input as it is whether it is correct or wrong . For expressing certain knowledge most of them prefer to write their out put in the board while others prefer to make oral presentation to make the input very clear and to use simple words to transmit effecfivelly the message while others learners prefer to bring pictures or

videos or records to make the knowledge more clear and to be sure of the information because there is an argument. Each adolescent has his thinking limit, so we can divide them into two categories as we notice from the data most of the learners can think in multiple dimension unlike few of them have just one dimension so their thinking is very limited. For developing their thinking, most of them prefer to make trying and challenging to understand the different kind of metaphor while others understand proverbs while of them choose to create new idea from the old knowledge all that indicate ways for improving thinking level. The adolescents choose to talk about abstract topics. So, the most of the male learners prefer to talk about politics and others justice and religion unlike female which prefer to talk more about religion and few for the other two topic. Our perception work effectively and help us in learning. So, we conclude that most of male use more their auditory to store it effectively in the brain while others prefer to use their vision touch things to know it very well unlike female who use more their vision and use less their auditory perception and while other use less their tactile perception. Comprehension is one condition for learning well so that most of learners prefer to pay more attention to understand more while others think that having more knowledge is effective key for better understanding while few of them suppose that being intelligent is one solution to comprehend in correct way and rapidly. Each learner have his specific dream that the ways for realizing that dream differ from learner to another as we saw many of the participants prefer to set goals because if you don't know your future goal you can not proceed and realize your dreams while others prefer to take risk what ever are the results but few of them prefer to make different challenges. Adolescents are more able to solve problem in systemic way as we saw that the most of the participants prefer to look at the problem from different perspective to make effective solutions while others prefer to take risk to solve certain problems for solving problem we must make effective decisions therefore most of the participants prefer to compare the different opinions and thoughts which are related to their problem to know the best decision while others prefer to think about the result of the decisions if it will lead to positive or negative results and the good learner is the one can make good decision which is beneficial for him and for others.

### **3\_2 cognitive development and adolescents :**

As we said before the cognitive development is related to the improvement of certain cognitive skills and improvement of ways of thinking that mean move from simple thinking to more complex thinking and move from thinking about concrete ideas and thoughts to think about abstract things which we can not see but feel about it like justice, freedom, religion, which require more advanced level of thinking and using consciousness and intelligence. So,



as adolescents grow up their way of thinking will improve also because adolescents will have brain like adults and can make good decisions and solve problem like adult that indicate that the period of adolescence is the preparation for adult role and good preparation result good adult . From the study we notice that adolescents will be able to think about different possibilities and will have the ability to make different hypothesis and test them to solve certain problem or case . They can think and understand proverbs and metaphors , they can describe them selves in more complex terms .Adolescent will be able to think in multidimensional ways and will improve their self consciousness and will be less egocentrism and will develop their metacognition . Adolescent will be able to make different hypothesis and test them and will be able to create new ideas from old knoweledge and will develop their own view of the world and will create their own dialect and become more independant . The important thing is that adolescent will not accept things as it is but they will make searches to be sure of the information ,so they will Question every things and that will help them to develop their language and their knowledge .Adolescents will develop the idea that what happen to others is not essentiel to happen to them and that will call personal fable.They will do things calmly because they improve the idea of the imaginary audience which means that others will judge and criticize theme.Adolescent will be more genious to know that situations may interpreted in many ways that will call adolescent relativism to conclude , Adolescence is voyage of discovery and better preparation result good adult with good future .

### **3\_3 recommandation**

Not all adolescents will reach the period of adolescence but there is some lacks and reduce. So that part may be helpful for both students and techers to solve various learning problems and complete the gap in education and may help teachers to make good relations and communication with their students.

#### **3\_3\_1 recommandation for students :**

Student is the first responsible for his learning,it may good or bad student .the conscienceness of the student is important in learning as well as the ambition because doing things without ambition is like doing nothing .the learners must be flexible and attractive and must have more attention to learn things every day as well as every moment.

### **\* Be self confidence**

Self confidence is very important in doing any thing whether it is in our every day life or in our learning or works ,Be self confidence of your abilities and knowledge because if you lack confidence how you want others to make confidence at your abilities .So don't be afraid but be more confidence and flexible to express your self in front of others and try to make audience very convince .

### **\* Contact with english speakers**

English is foreign language and to master it you need to know the culture of it whether it is small C culture or big C culture that mean the visual and the hidden culture to know that you need to make contact with native speakers to know every details about that language .

### **\* Think about abstract ideas**

Developing thinking level require moving from simple to very complex thinking that mean move from thinking about concrete ideas which we can see and easy to study to think about abstract ideas and thoughts like justice , freedom , religion ,morality topics thing which is abstract to develop your way of thinking

### **\* Make hypothesis and test them**

Developing your ideas and knowledge require the student to make or create new hypothesis and test them to solve for instance certain issue or to study certain case to be sure of the information .this processe lead the learners to think again and again to know if the hypothesis is correct or wrong and they will be discover new things during the research.

### **\* Make good decision**

Adolescent must be able to make correct decision that benefit him and others and must think from the beginning about the results of that decision to not be blame after from others and to not be refuse later . Bad decision is not the end of life but we learn from our mistakes to do well after.adolescent may also ask their families or friends or teachers to hrlp him take the right decisions. .

### **\*Solve problem**

Every human being face various problems , so it is the role of adolescents to solve them and don't let them affect negatively their life or their work . make challenges and have self confidence are better for solving problem .you must take into consideration that it is necessary to solve problems from the first time but try again and again and learn from your mistakes and to not repeat them in the future.

### **\* Think in multiple dimension**

Thinking in single way may not lead to correct result but being open minded is very beneficial to think in many dimension and ways . Seeing things in multiple dimension is key to improve the level of thinking .also that tinkering is beneficial to solve problems effectively and that will be helpful to develop the way of thinking.

### **\* Avoid the imaginary audience**

Do your presentation and your work in freedom and don't let the criticism affect your work . Speak calmly and freely like no one watch you that means make in your brain that you are alone and express your ideas and thoughts .put in your mind that all the learners are in the class to learn and there is no one superior than other but they are good in certain case and bad in other case .show your thought may be you are the perfect.

### **\* Be conscious**

Adolescent must be genius and conscious to avoid the idea that what happens to others will not happen to them but Allah is responsible to give you good or bad things .consciousness is essential in learning because if we learn something unconsciously we can not understand it well and we forget it rapidly.

### **\* Think about possibilities**

To solve problem or develop certain idea it is beneficial to think about various possibilities and suggestion and that will reach adolescent knowledge and will develop the way of thinking that idea requires thinking about if statement .

### **\* Create new ideas**

To develop your back ground you must read old knowledge and thoughts and create new one and be sure that the idea is correct and right.the essential goal of learning is to create new things and not just repeating what other generation said.

### **\* Develop your language**

Practicing every day and every time is key for developing certain language . Also communicating with native speaker can help learner of language is one of the principle to learn certain language..the theory of learning and developing the language is not enough to master certain language.

### **\* Question every idea**

D'ont accept thoughts and ideas as it is but make searches to be sure of the information search about the source of the input and ask experiment person and make different possibilities and suggestion to be ok of the information .

### **\* Set your future gool**

Every human being have his specific gool in the futur so , it is essential for the adolescent to set and design his future gool to make challenges to realize it eassy and correctly without letting others suffer from our works .

## **3-3-2 Recommondation for teachers :**

Teachers also is responsible for the cognitive development of adolescence .teachers can help the learners to love learning as well as get a good academic performance by improving the essential cognitive skills and knowing the basic strategies of learning well.the way the teacher treat his learners can affect also the learners performance that mean the appearance of encouragement,fairness,avoid verbal punishment and suitable instructions can enhance the learner to do well.

### **\* Know your students**

Knowing the name of your students is not enough to know them but you must know their language level , their learning styles their capacities , their cognitive skills , their preferences that mean every detail about the student .you must also know their famil situations and problems.you must help them if they have problems or if they are sad because the teacher is

like the mother or the father of the students. make your class as a happy and single family to receive the respect from your students.

### **\* Be clear about your instructions**

From the beginning you must design your instruction and don't change it later because that will affect you negatively later, ask student to respect your instruction otherwise they will face punishment. The teacher must not change the instruction after because he will lose the respect of his learners.

### **\* Be fair**

Fairness is fundamental key to create good environment. You must be fair to make student respect you and you respect them also. You must treat student according to their learning level and not according to their social classes.

### **Order student to make presentation :**

to know clear your student level, you must order them to make short class presentation. It is beneficial to learn new things in every presentation and exchange ideas and thoughts and learn from each other. presentation can help the learners to improve their level and without practice the learners can not memorize things for long period.

### **\*let student practice language**

Learning require practice to learn correctly how to write as well as how to pronounce certain word. Because knowing something without practice is not beneficial and affective. making students knowing the theory of learning certain language is not enough to learn and master it effectively but let student create stories and write poems and present it in front of his friends.

### **\*Ask student to take notes. :**

for developing student thinking, you must ask them to take notes during the lecture and present it at the end of the lecture to know if they understand well the ideas or not to clarify it to them again. This process is helpful for revising the lecture in the class and remember it for long time because every learner will present what he was understood and that the learner will organize the ideas and simplify it.

### **\* Attract your student attention :**

The best gift you can give to some one is your attention,So,it is essential to attract your student attention by using multiple ways like clapping or saying joke. Learning without attention is nothing.if you cannot attract your student attention you must not presente the lecture until they know their mistake or you can punish them for instance by memorizing the roles of the tenses.

**\* Dont punish verbally the student :**

every preson make mistake and we learn from that mistake. So teachers must not blame verbally the student but punish them by gave them long home work or difficult activities and obliged them to do it or they will have miness .

**\* Propose issue and ask student to solve it :**

developing student thinking require teacher to create on issue and ask them to find solutions or suggestions to solve it. This method help student to think more and more and ask multiple person to find effeective solutions to a particular problem

**\* Ask student to decide solutions :**

when there is an issue it is important to decide solutions when proposing a problem ask student to show their decisions and compare which one is the most effective.that process will help the learners to not get down when there is an issue because they wil have more experience and will practice various decisions.

**\* Propose hypothesis and ask student to test them :**

. write a hypothesis in the board and ask students to test and examine it know if the hypothesis is true or false and that require deeply research then learn from each other more detail about the information in the hypothesis.that operation will help the learners to develop their level of thinking because they will use their metacognition for multiple time.

**\*Order students to write in the board :**

. many students feel afraid to write or express an idea in the board because they think that others will criticize them.so,encourage them to stand each time in the board and express calmly their rhoughts for instance saying to them if they presente something in the board will have plus and any student who criticize this friend will be punished.

**\*Propose situation and ask students to show their point of view about it :**

. Create complex situation then ask student to take place in this situation to know their opinion about that case and their decision to solve that trouble. living the different situation may help the learners to have more experience and learn it during the necessity.

#### **\* Define abstract concepts. :**

Propose each time topic about abstract concepts then ask student to show the meaning of that concepts according to them like justice, freedom to know the main changes between them and their way of thinking. The answers will be different and that will help the point of view of each adolescence in the world they lived in.

#### **\* Ask student to propose possibilities. :**

You can ask your student to propose possibilities related to the curriculum that mean topics they want to learn or know about it or you can ask them about the way they prefer to learn that mean in groups, pairs, alone, the shape of the class.

### **3 – 4 conclusion :**

This part was discussed the main finding which is achieved from the questionnaire. We notice that each adolescent use specific cognitive skills to rise their learning and it is related to their learning styles and their strategies. The more the adolescents develop their skills, the more they will achieve better learning and performance. The study show that the adolescent move from simple to complex way of thinking and will have more advanced level and will his point of the world and it may different from his parent view . The brain of the adolescent will mark many changes like changes in the neurotransmitters and the prefrontal cortex. Then it move to show the relation between adolescent and the cognitive development. Finally set of suggestions and advices were adressed to both the learners and teacher maybe it will be beneficial to create a good environment for learning and solve the various learning problems.

### **- general conclusion :**

The cognitive development is related to the improvement of certain cognitive skills and the improvement of the specific components of the thinking process . It refers to more complex thinking and moving from thinking about concrete concept to think about abstract concept. On the other hand adolescence refer to the moving from childhood into adulthood and it is the period during which person prepare for the role of adult and it is a period and time of discovery because adolescents will make multiple challenges to achieve certain things or goals . So the topic of the dissertation is the cognitive development of adolescence. Each adolescents differ in selecting and mastering the various cognitive skills and that result changes in the level that mean good skills result good performance . Adolescents differ a lot from children because they have more advanced level and way of thinking because he will be able to make possibilities and make hypothesis and test them, solve problem , make decisions create new ideas , thinks in multiple dimensions , saw situation from different perspective , communicate with others as a result he is less egocentrism , he is aware that what happen to other will not happen to him and he will reduce the idea about the imaginary audience . So, each adolescence live the cognitive development and saw and notice different changes in the level of thinking . the last part is consist of set of solutions and suggestions for both the learners and the teachers to make effective interaction and create funny and suitable environment for learning . The family is also responsible for their children learning because the home environment and the way the parent treat their children may impact positively or negatively the learners performance. Finally , good preparation in the period of adolescence will result good adult for the future and realize multiple goals for them .



# Appendix

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