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MASTER IN

" Psycholinguistics Issues In English Language Teaching "

*The Individual Cognitive Differences and Their Impact on the
learners' Academic Achievement*

The case study : First year students at Ahmed Abdelghani High School -Mostaganem

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Dedication

To Allah who gave me the strength and patience to continue my career despite the obstacles that I faced. Hence, thank you Allah for this blessing.

To my beloved father and my precious mother, source of happiness and success in my life. May Allah bless them.

To my brother and my sisters for their patience and help to complete this dissertation.

To my extended family and the many friends, who have been so supportive and encouraged the fulfillment of this work.

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My final heartfelt and acknowledgment goes to my parents .Their encouragements and supports were important to me to carry on this milestone stem in my education .

To all those who believes in me and pried for my success.

Abstract

The most complex , as well as the most important task confronting the teacher is meeting every student's need .Thus , some of both teachers and students may not be aware of the existence of individual cognitive differences which affect academic achievement . This study aims to investigate the individual cognitive differences among first year learners of Ahmed Abdelghani High School in Mostaganem .In addition to raise the teachers' awareness about these differences and to convince them using different tools , methods , and strategies in their teaching process in order to make learners study and learn equally without any discrimination. This research based on two questionnaires addressed to both teachers and learners of Ahmed Abdelghani High School in Mostaganem . The data revealed that among the reasons leading to the success of some pupils and the failure of others is the individual cognitive differences among learners,and also the unawareness of some teachers about the existence of the cognitive differences .

Key words :

Cognitive Differences , teachers , learners ,academic achievement, methods , students' needs.

List of figures

Figure 1: Teacher's qualification.

Figure2: The awareness of the teachers about their learners' style.

Figure 3: The methods that the teachers use in their teaching process .

Figure 4: teachers attentiveness to learners' preferable method .

Figure 5: teachers interest to learners' problems

Figure 6: How often teachers ask their learners if they have understood

Figure 7: teachers' ways of making learners engaged.

Figure 8 : Teachers' responses if they deal with the weak learners as dealing with the good ones.

Figure 9: Teachers' opinions about if their learners are cognitively different.

Figure 10: teachers' strategies to manage the ICD among learners.

List of tables

Table 1: Learners' ages.

Table 2 : Learners' gender.

Table 3 : Years of Studying English.

Table 4: The pupils' perceptions for their level in learning .

Table 5 : pupils' responses of their achievements.

Table 6: Pupils responses if their teachers encourage them to learn and succeed .

Table 7: Learners' satisfaction of the teaching methodology.

Table 8: Pupils difficulties .

Table9: Pupil's preferences .

Table 10: Pupils' opinions about which activity they like most .

Table 11: Pupils' indications of the statements that suit their learning styles.

Table of Contents

Dedication.....	I
Acknowledgement.....	II
Abstract.....	III
List of Figure	IV
List of Tables.....	V
Table of Contents.....	VI
General introduction.....	1
<i>Chapter one: Overview of Individual Cognitive Differences In Learning</i>	
Introduction.....	5
I.1 Definition of individual cognitive differences.....	6
I.2 Psychological theories of ICD.....	7
I.2.1. Weiner Theory Of Attribution	7
I.2.2. Theory of multipide intelligence.....	7
I.1.1. Theory of learning styles.....	8
I.2.4. Oxford’s typology of learning strategies.....	9
I.3 Learner’s cognitive differences.....	10
I.3.1. Memory.....	10
I.1.2. Intelligence.....	10
I.3.3. Personality.....	10
I.4 Influential factors of ICD	11
I.4.1. Heredity(nature).....	11
I.4.2. Envirenment(nurture).....	12
I.5 The effects of individual cognitive diffrences	12
I.1.3. Positive effects.....	12
I.5.2. Negative effects.....	13
Conclusion.....	14
<i>Chapter Two: Field work of the study</i>	
Introduction.....	15
II.1 Teacher’s questionnaire.....	15
II.1.1. Description of Teacher’s Questionnaire.....	15
II.1.2. Administration of Teachers’ Questionnaire.....	15
II.1.3. Analysis of Teacher’s Questionnaire.....	16
Conclusion.....	23
II.2 Learner’s questionnaire.....	24
II.2.1. Description of Learner’s Questionnaire.....	24
II.2.2. Administration of Learner’ Questionnaire.....	24
II.3.3. Analysis of Learner’s Questionnaire.....	25
Conclusion.....	31
<i>Chapter three: Interpretation of data and Recommendations</i>	
Introduction.....	32
III.1 Discussion of The Findings.....	32
III.2 Educational and pedagogical implications.....	34
III.3. Recommendations to pupils.....	35
III.4. Suggested Tips and Activities to The Teachers.....	35
Conclusion.....	36
General conclusion.....	38
Bibliography.....	40
Appendices	42

General Introduction

General Introduction

Teaching and learning languages in Algeria attest a massive number of limitations. Many educational institutions struggle to meet the students' needs. This is a very common problem. Language classes contain students of mixed abilities. This happens for a number of reasons, but mainly because of cognitive differences among learners. Very often the teacher is faced with a class of two or more distinct levels of ability and has to solve the problem of how to meet the needs of everyone in one class (Bowen, n.d.). Naturally, this is not an easy issue to be solved. However it would be wrong to suggest that there are any simple solutions (Bowen, n.d.). Thus, we decided to make this research in order to answer the following questions:

Why are some learners more successful than others even if they are in the same classroom?

How can teachers manage the individual cognitive differences among learners in a classroom situation?

Hypotheses:

To answer the research questions formulated above, we hypothesize that the successful learners are more motivated while the others have a low self confidence what make them fail and avoid expressing their ideas in both written and oral form. Besides, humans are born with distinct characters and personalities, they are unique from each others. i.e., humans beings are not equal in term of cognitive abilities. So, in the learning process learners learn in different ways. Moreover; we may say that if all learners are aware their learning styles and strategies that suit them in their learning process, they may succeed without any exception. Finally, the teacher's reliance in using one method and not varied in the teaching ways and activities may make learners learn differently even if they are in the same environment.

General Introduction

Motivation:

Since cognitive science is my field of study and scope of my interest , I want to shed light on how can cognitive abilities make learners different .Thus , throughout my academic career , I noticed that after any exam many learners keep complaining and saying : " I revised and studied so hard for the exam , but I got bad marks ". Moreover, Some learners achieve on the academic process better than others although they are studying in the same classroom, with the same teachers and the same instructions.

Most learners are still struggling to get good marks without being aware of their learning styles and their learning strategies that fit their levels, abilities and capacities. Besides, there are some novice teachers who may be unaware of these cognitive differences, and they keep using the same teaching method during each lesson, that's what prompted us more to think about such topic .

Methodology :

1. Choice of the Method :

The most suitable method in my research is the descriptive method, because we want to investigate how students learn differently even if they are in the same classroom , and also the strategies and the methods that the teacher uses in order to cope with these differences.

2. Population of the Study :

The population of this study consists mainly of teachers and first year pupils of Ahmed Abd Elghani high school at Mostaganem . The reason behind choosing the high school and not the middle school is that the high school learners understand the english language better than the middle school learners , and also they are at a very critical period of time ,so they are going to help us in our research by improving their opinions and ideas.

3. Data Gathering Tools :

3-1 Questionnaires

The data are collected through teachers' and students' questionnaires .We used teachers' questionnaire as a research tool in order to probe the opinions of teachers about the nature of Individual differences inside the classroom and to investigate what methods and techniques are employed to make these students learn equally. We used the students ' questionnaire which are intended for first year students of high school in order to provide information about the students' different styles and strategies towards the learning process. The questionnaire is designed for 32 pupils and it includes 11questions ,and another questionnaire which include 10 questions and it is addressed to 07 teachers .

Aim of the study :

The objectives of the research are as follows:

- To help teachers solve the problem of the mixed abilities among learners.
- To identify the causes that lead to these individual differences in learning Process.
- To sensitize the teachers to use different strategies and being flexible .
- To make all the learners learn equally.
- To make both teachers and students aware of the existence of cognitive differences to avoid blaming the unsuccessful learners.
- To show that no two individuals are exactly alike, they differ from each other in some way or other.
- To help students trust their abilities and raise their self –confidence toward their capacities in learning and doing tasks or activities .

General Introduction

Limitation of the study :

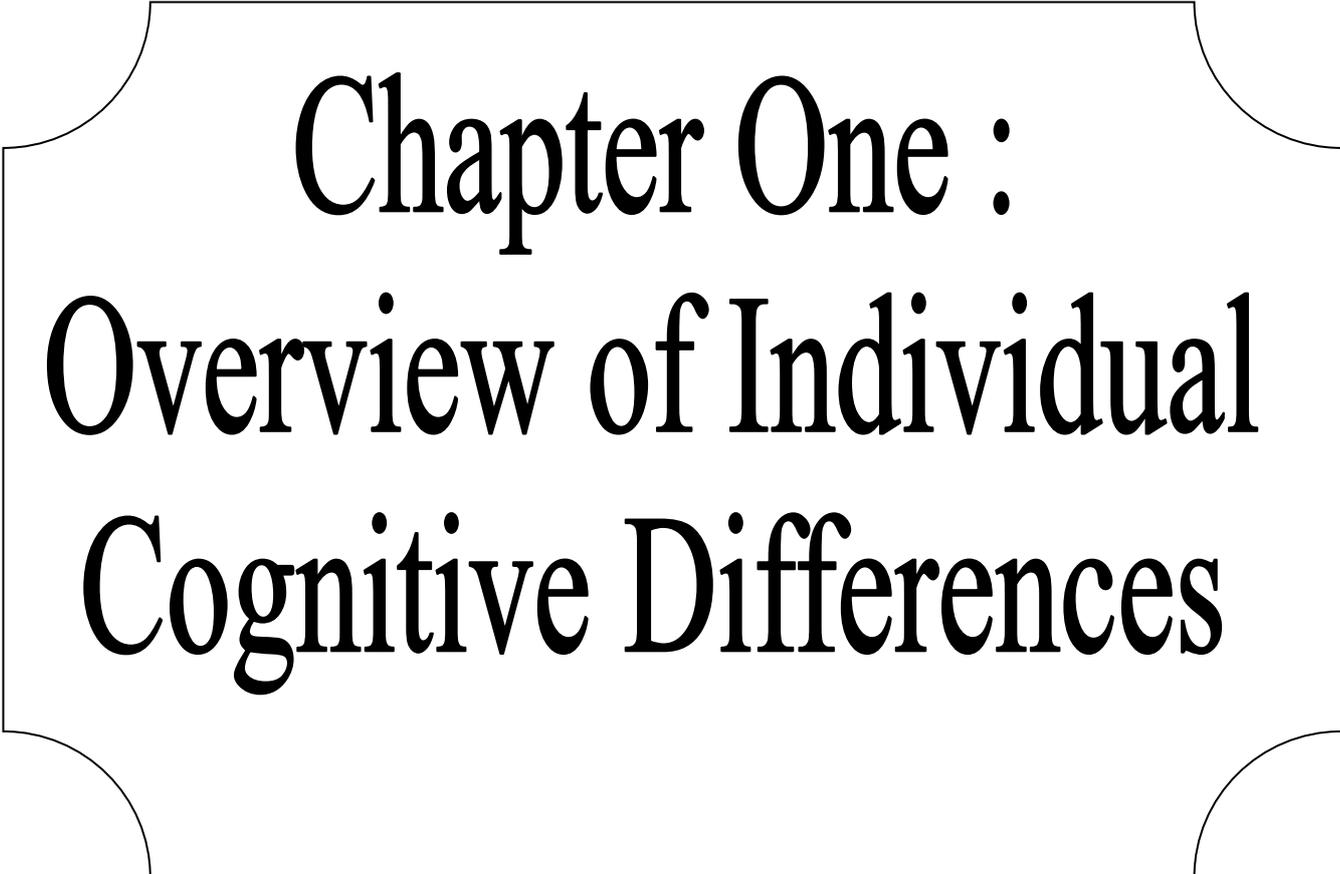
As in any research ,a researcher may face many difficulties in his / her path of research .

In our case we face the following main obstacles :

- The problem of time constraints .
- Some learners were not serious in answering our questions .
- The different versions of methodology confused us which one to follow .

Structure of the study :

Our research is divided into three main chapters . The first chapter dealt with all what is essential and substantial about the individual cognitive differences among learners , its definition , its psychological theories , its classifications , its influential factors ,and lastly its effects on the learners .The second chapter pertains to the field work of the study , it dealt with the data analysis of both teachers' and learners ' questionnaires to see the validity of our hypotheses . The third and the last chapter elatesattached to the discussion of the previous results .It also treat some educational implications and recommendations directed to both teachers and learners .



Chapter One : Overview of Individual Cognitive Differences

Overview Of Individual Cognitive Differences

Introduction

Among the significant topics emphasized by educational psychology ,yet ignored some algerian schools is the individual cognitive differences .Thus ,every public school system is faced with the challenge of educating large numbers of students efficiently while also meeting the needs of each student (Dumont ,2007). Cognitive psychologists have shown that each learner is unique from another; because no two brains are exactly the same even identical twins have distinct personalities. However, many educators, parents and students depend on comparison; they keep dealing with the successful learners and ignoring the others because unfortunately they are totally unaware of these cognitive differences which create the whole trouble.

This chapter tries to tackle many points to clarify the notion of individual cognitive differences by citing its most significance definitions and understandings. After that, it invokes the main psychological theories that contributed to it. This chapter also tries to mention the intended cognitive differences among learners. Besides, it sheds light on the factors and the causes that lead to the individual cognitive differences and its advantages and disadvantages. Finally, this chapter discusses some educational implications concerning the individual cognitive differences.

Overview Of Individual Cognitive Differences

I.1) Definition of individual cognitive differences :

As summarized by Dornyei(2005) , the field of psychology has been trying to achieve two different objectives which are understanding the general principles of the human mind and exploring the uniqueness of the individual mind (Dornyei,2009,p.181) . The concept of individual cognitive differences refers to the cognitive variations between learners. An understanding of individual cognitive differences provides the recognizing of normal variations and also for identifying learners who have special needs (Skehan ,1998,p.213). To understand the concept of the individual cognitive differences, it should first understand the meaning of the individual differences alone which stand for the variations and deviations among learners in regard to a single characteristic or a number of characteristics. Hence , each student is a unique individual but not better than others ,i.e. ,all learners are successful in different ways or different degrees. Again, the study of individual differences helps to understand not only how are learners different from each others ,but also what make them different by considering the cognitive differences which stand for the dissimilarity of learner's abilities and skills.

Neuroscientists have discovered in the brain an area that might gives the human mind its unique abilities and according to them everyone's brain is unique and different and the statistical probability of having the same exact brain structure as another person is very low (Scientific American ,n.d.) . It is highly impossible to find two brains who are exactly identical (Mowatt,2016). Even twins who are from the same parents ,grow up in the same environment and family , they have different behaviors and therefore different brains (Mckie,2013). To illustrate, many studies have confirmed that the individual cognitive differences do not concern only how men's and women's brains are different , but it is about human beings in general (Skehan,1998 ,p.217).

Overview Of Individual Cognitive Differences

I.2) Psychological Theories Of Individual Cognitive Differences:

There are many theories related to the individual cognitive differences, some of them have

emerged to show how human brain is unique , and others tried to seek these cognitive Differences and to belay that is something normal :

I.2.1) Weiner Theory Of Attribution :

Psychologists assumed that attribution theory refers to how people notice their successes or failures in a given task. Weiner and others (in Slavin, 2003, Dornyei, 2001, Williams and Burden, 1997) defined that theory by suggesting four explanations for success and failure in achieving a particular task: ability, effort, perceived difficulty of a task, and luck. Ability and effort are internal factors to the learner, However ,task difficulty and luck are external factors. The marks of learners are related to all four factors .Learners who affected by the two external tasks may make efforts and work to succeed while the other become demotivated.. Bernard Weiner claimed that when one succeeds, one attributes successes internally (“my own skill”).

I.2.2) Multiple Intelligence Theory :

When we say individual cognitive differences we are nearly referring to the theory of multiple intelligences which is developed by the psychologist Howard Gardner in 1983 .This theory describes eight forms of human competence that are relatively independent: linguistic, logical-mathematical, spatial, bodily-kinesthetic, musical, interpersonal, and intrapersonal intelligences. Some programs in use in schools today apply Gardner's theory(Fasko, Daniel, Jr . n,d). Gardner confirmed that all humans beings are intelligent but in different ways (New learning ,1993). and he introduces these eight types because he was often heard people saying ‘ that man is very intelligent than others...’.Moreover, the above theory shows that human’s abilities are totally different in term of cognition and it is wrong

Overview Of Individual Cognitive Differences

idea to compare between two learners or more according to their levels. However , each one has his/her unique ability to succeed in something that others don't.

According to Gardner (2009 : p.5) Multiple intelligences in the classroom :

'It is of the utmost importance that we recognize and nurture all of the varied human intelligences, and all of the combinations of intelligences. We are all so different largely because we all have different combinations of intelligences. If we recognize this, I think we will have at least a better chance of dealing appropriately with the many problems that we face in the world'(Gardner ,2009).

I.2.3) Theory Of Learning Styles :

Learning styles are the different ways people interpret, analyze and represent information and they contribute heavily in the existence of the individual cognitive differences (Hultzman,n.d). They are strongly connected to the American psychologist Howard Gardner's work around multiple intelligences, which proposed that people can be smart in different ways (Hultzman,n.d) .Over the years several types of learning style models have been developed and ,thus, there are uncountable numbers of models concerning the learning styles, the main famous and used frequently model in today's schools is the Felder and Soloman's model of learning styles which classifies students in four dimensions including: visual learners, verbal learners, auditory learners and kinesthetic learners (Wikipedia ,2007). learners have a natural preference for the way they prefer to receive ,process, and impart information (. Unfortunately, on one hand, not all learners are aware of their learning style, so they use a wrong learning strategy which may be the main cause of their failure. On the other hand some teachers also may contribute in this failure because they depend on one method in their teaching process and do not use the flexibility.

Overview Of Individual Cognitive Differences

I.2.4) Oxford's Typology Of Learning Strategies:

Actually, language learning forces learners to use some strategies. According to Oxford (1990: 7), strategies are: “specific actions taken by the learner to make learning easier ,Faster , more enjoyable, more self-directed, more effective, and more transferable to new situations .” Much ink tried to explain the meaning of learning strategies. She divided them into two types : “direct” and “indirect” strategies that are, in turn, divided into other subcategories. The direct strategies, on the one hand, overlap: “memory strategies” (learners create mental linkage, apply images and sounds, review things well, and employ them in action), “cognitive strategies” (learners try to practice; they send and receive messages, analyze and reason ,and then create structures for input and output), and “compensation strategies” (learners make guesses intelligently and overcome limitation in speaking and writing). On the other hand, the indirect strategies that lie on top of: “ metacognitive strategies” (students center, arrange, plan, and then evaluate their learning), “affective strategies”(learners try to encourage themselves and take the initiative), and “social strategies” (when students try to interact,cooperate with one another and try to understand each other). (Oxford, 1990; 17) .

I.3)Learner's Cognitive Differences :

I.3.1)Memory :

Memory can be defined as the ability to hold in mind information to guide behavior (Sternberg, 1999). Memory processes seem to be universal - all human beings have working memory, short term and long term memory, etc. However, the functions of memory differ from one brain to another , and that due to the uniqueness of each person .This means that what learners choose to remember and how they remember it will be affected by culture, age or experiences. Thus ,learners do not memories things in the same way(Matlin,

Overview Of Individual Cognitive Differences

2005).and the most suitable example is that in our daily life ,we meet people who tell us things about us that we totally forget them.

I.3.2) Intelligence :

As it was mentioned before , intelligence is a mental quality that consists of the abilities to learn from experience, adapt to new situations, , and use knowledge to manipulate one's environment (Sternberg ,1998). Thus, according to Gardner, human beings are all intelligent but in different ways .Specifically, learners are different from each other in linguistics and others who are good in mathematics. So, it's up of the learner's type of intelligence which may deals with the way of teaching or not.

I.3.3) Personality :

Personality also plays an important role in determining the cognitive differences among learners .In other words ,it is very clear that human's personalities are not the same, there are extroverts persons and there are introverts ones ,there are shy people and there are confident ones (Allport ,1937) .In learning ,types of personalities may affect the learners ,since the confident students are always participating and improving their ideas what make them advanced .However ,the shy and introvert learners are not able to face others and speak or to take a risk ,they are very silent and that may lead others to consider them as failures and most of the time they have a great abilities and ideas but unfortunately they hide them.

I.3.4)Attention :

Attention is often the beginning to other cognitive functions. Learners must first pay their attention to something in order to process it to meaning or understanding. It is the ability to keep the mind focuses on something through careful observing or listening. Attention it self may lead to the cognitive differences among learners since it has several types and in here

Overview Of Individual Cognitive Differences

each individual learner use his/her type unconsciously during the course or the daily activities (Pillsbury, 1906). The type the learners use will vary depending on their need and circumstances. These types can be summarized as the sustained attention, the selective attention, the alternating attention and the divided one. Increasingly, there is a related concept that has a great assistance in terms of cognitive differences which is the attention deficit disorder and it mainly refers to those learners who have a redundant energy in learning, interacting and discussing, and most of the time these people are certainly successful.

I.4) Influential Factors Of Individual Cognitive Differences :

There are various factors and causes which are responsible in bringing out the individual cognitive differences. Heredity and environment are among these factors, they interact together to produce the individual cognitive differences:

I.4.1) Heredity :

Heredity means the genetic inheritance by the individual at the time conception (Sharma, 2005). Thus, everyone has certain features that are present at birth (Cherry, 2018). However, heredity provides the human beings with certain biological needs which determine how they will meet these needs. It is what occurs naturally as a function of genes. i.e., there are sometimes some fathers or mothers who are very intelligent in a given task, at that they transmit this type of intelligence to their children; and that make them different from others who may acquire another type of intelligent from their parents. And there are other mental abilities that may transmit genetically like memory, perception, reasoning or thoughts.

I.4.2) Environment :

Like heredity, the environment plays an important role in determining the behavior and personality of an individual (Sharma, n.d). The environmental influences are those which work upon the organism at the first stages of development, i.e., before and also after birth

Overview Of Individual Cognitive Differences

(Sharma ,n.d). Unlike the heredity ,environment refers to what is learned and communicated in different cultures or other social groups which may include family, gender differences, ,previous knowledge and experience ,and through that the cognitive differences among learners occur. In other words, since learners are living in a society plenty of conditions and surroundings ,for sure they will influence the learner's abilities and that will make them unique and different from each others.

I.5)The Effects Of Individual Cognitive Differences :

The researches in this area provide extremely mixed results ,with many claiming that the individual cognitive differences impact the learners negatively ,and many others claiming that learners flourish in comparison to set classes. Substantially, while the ICD lead to many benefits, unfortunately, it also come with its own set of problems.

I.5.1) Positive effects :

On one hand , In a whole class approach , individual cognitive differences allow the learners the opportunity to accept, discuss and listen to other's diverse perspectives. With ICD ,the advanced learners can experience their satisfaction of helping others to understand the given lesson and modeling more complex ideas. It also helps students to understand each others better by increasing interaction among those students who may not otherwise get the opportunity to interact (Hemmons ,n.d.) . This can promote the tolerance and the understanding and the acceptance of differences (speeches ,2008) . In addition to that , due to Individual cognitive differences, teachers and educators will discover new methods and techniques to teach and to grasp the cognitive dissimilarities among learners and that to satisfy and meet their needs (Malm ,2009) .

Overview Of Individual Cognitive Differences

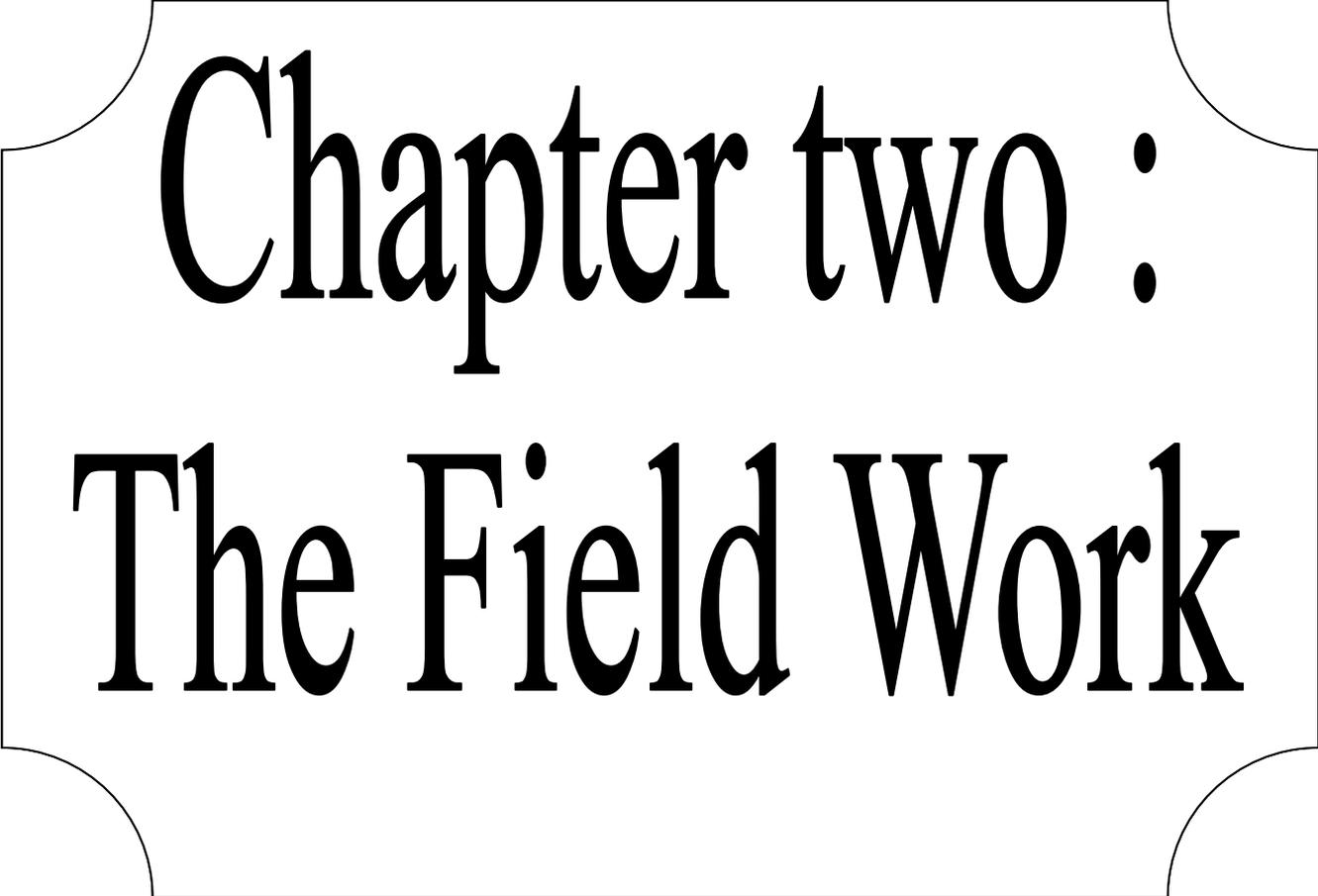
I.5.2) Negative effects :

On the other hand ,often the advanced students finish the task given before that others (Tomlinson ,1997). As a result ,they may misbehave while waiting for the others to finish (Naryanan ,2009) . The less competent students ,unfortunately cannot finish the task as quickly as the advanced ones (Costin ,2017), and most of the time they may lost their confidence and/or show ill disciplined behaviors for a variety of related reasons (Cooke,2004). Consequently ,the individual cognitive differences may result the classroom management problems (Seize ,2015) .i.e. ,many teachers keep dealing with the more successful learners, by telling their names ,motivating them and most of the time asking them to sit in the front (Razafi ,2014). While ignoring the others and punishing them without taking into consideration their psychological reactions (Mello ,2016). And that what creates the whole trouble and it may leads to psychological breakdowns and insanity for the ignored learners although they are victims (Wallace ,2017).

Overview Of Individual Cognitive Differences

Conclusion

This chapter presented a theoretical background of the individual cognitive differences .As it has been shown, its definition, its theories, its impact on the academic performance which may be positive or negative and its causes .In addition to that ,on the basis of the previous discussion of key terms in this chapter.



Chapter two : The Field Work

Field Work of he Study

Introduction

The second part of this dissertation is the field work of our research and we devote it to explain and analyze the data that we have collected via a suitable research instrument . In order to fulfill our objectives and validate our hypothesis, which assume that learners are cognitively different. Besides, some teachers are not aware of the existence of the individual cognitive differences what make them relying on one method which may affect learners 'academic achievement negatively. Furthermore, we have chosen two parts of questionnaire; teachers 'questionnaire and learners' questionnaire. Foremost, this chapter tackles the description of both questionnaires. Besides, their administrations and analysis .Likewise, this chapter provides the discussion of the main findings of our study.

1-Teacher's Questionnaire :

1.1. Description of the questionnaire :

The present questionnaire consists of ten (10) closed-ended questions .All the questions were the same for all the intended teachers , they were about how are teachers dealing with the individual cognitive differences among learners , and the impact of these differences on the academic achievement.

1.2. Administration of the questionnaire :

The teachers' questionnaire was administered to seven teachers of English language in Ahmed Abdelghani high school at Mostaganem .All the teachers were so helpful.

Field work of the study

1.3.The analysis of teacher's questionnaire:

Question one: Teacher's qualification

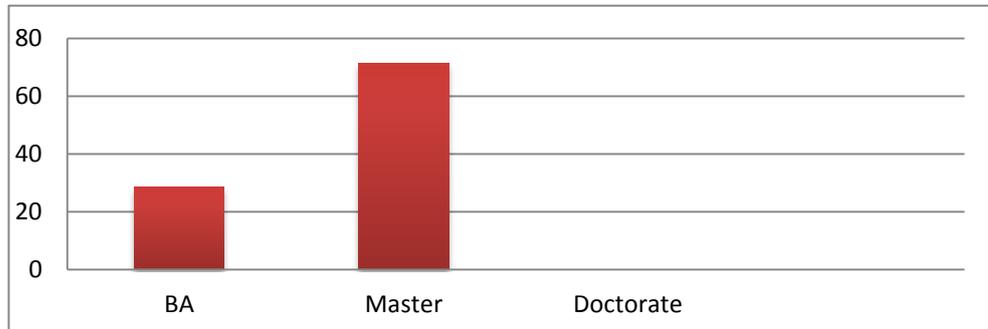


Figure 1: Teacher's qualification.

To know about the teacher's level we asked them about their degrees .The results showed that (71, 4%) of the teachers have a master degree and (28,5%)of teachers have a BA degree but no one of them has a doctorate degree. From the results, we notice that the majority of the teachers are highly experienced, they taught different modules and lectures for a long time , consequently ; they Will get enough background about the learners.

Question two: Which of the following is your learners 'styles ?

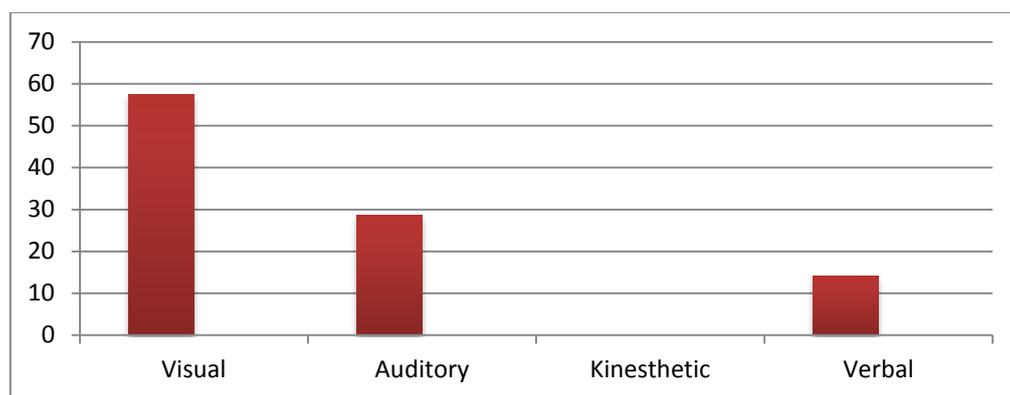


Figure2: The awareness of the teachers about their learners' styles .

Field work of the study

From the results obtained from the table above, we notice that the majority of the teachers (57.1%) said that their learners' style is visual, and others (28.5%) claimed that the auditory style is relate their learners, while a few number of teachers (14.2 %) answered by saying that their learners 'style is verbal ,but no one talk about the kinesthetic style.

Question three: Which method (s) do you use in your teaching process ?

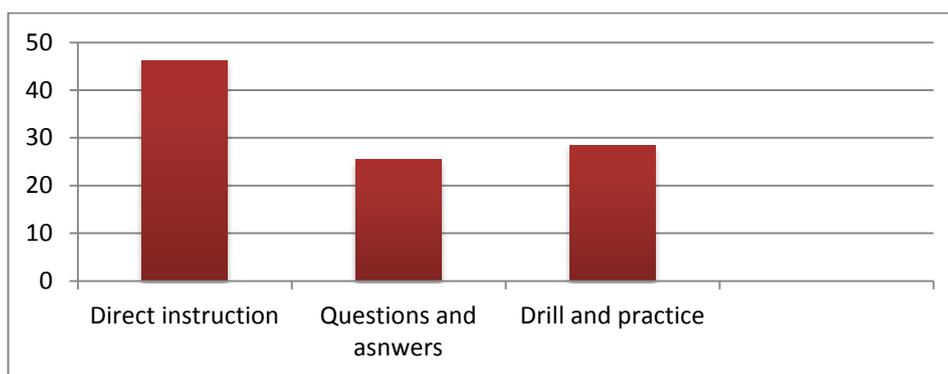


Figure 3: The methods that the teachers use in their teaching process .

As it was expected , the statistics revealed that the majority of the teachers (46.1%) use direct instruction method in their teaching process ,because according to them this method is the most appropriate one to deal with all the learners ,since it is direct and it gives clear and simple knowledge. Whereas (25.4%) of the teachers said that they prefer to use questions and answers method, in order to enhance their learners' creativity and to motivate them to participate and think. Finally, (28.5 %) of the teachers claimed that they give to their learners some drills and activities and ask them to practise is the best method that make them understand the whole lesson .

Field work of the study

Question four: Do you try to ask your learners about the method of teaching they prefer?

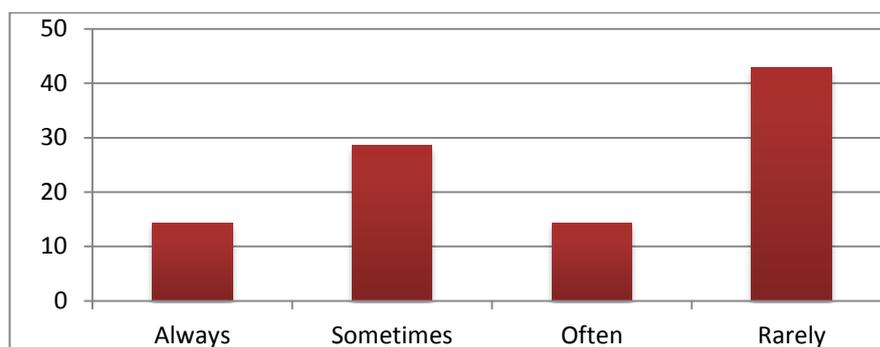


Figure 4: Teachers' attentiveness to learners' preferable methods

Unfortunately results show that the majority of the respondents (42.8%) claimed that they rarely ask their students about which teaching method they prefer, and that is the main problem. Whereas (28.5%) of the teachers asserted that sometimes they ask their learners about their needs. Finally, around (14.2%) of teachers demonstrated that they often and always ask their learners, and this is not enough.

Question five: Do you talk to your learners about their learning problems ?

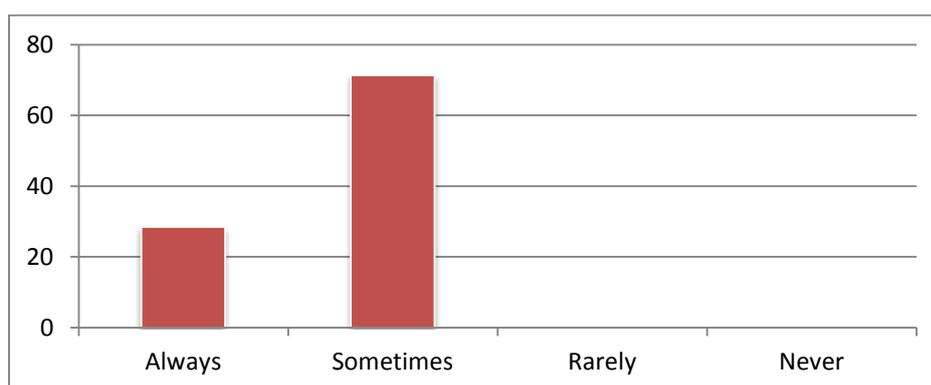


Figure 5: teachers' interest to their learners' problems

According to the statistics on the table above, the majority of the teachers (71.4%) claimed that they Sometimes talk to their pupils about their learning problems, because teachers need to be close to their students as more as they can to help them in the process of learning

Field work of the study

.However , only (28.5%) of the teachers said that they always talk to their learners about their learning problems .Finally; none of the teachers said that they never and rarely talk to their pupils about their obstacles that face them in The learning process.

Question six: After you finish the lesson explanation, do you ask your learners if they have understood?

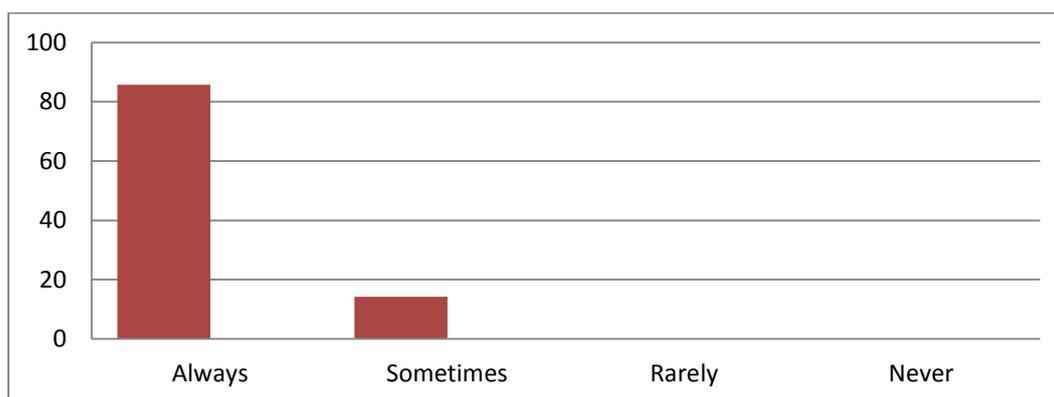


Figure 6: How often teachers ask their learners if they have understood

From the results obtained from the table above , we see that the majority of the teachers (85.7%) said that after each lesson , they always ask their learners if they have understood in order to evaluate their teaching process and to explain again when they said no .Whereas , around (14.2%) of the teachers claimed that they sometimes ask their learners if they have understand the lesson or not , because according to them if students do not understood ,they can ask the teacher to repeats. Finally, no one among the intended teachers said that they never and rarely ask the students if they have understand the lesson.

Field work of the study

Question seven: How do you encourage your learners to work more ?

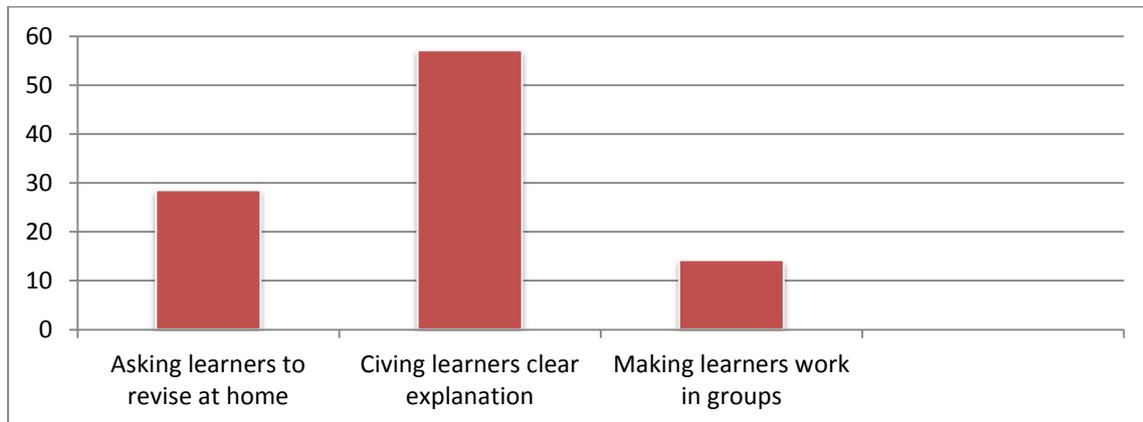


Figure 7: Teachers' ways of making learners engaged

The results of this question revealed that around (57.1%) of the teachers give their learners clear and direct explanation in order to help them to succeed and to work more. On the other hand, around (28.5 %) of the teachers prefer to ask their learners to revise at home Because according to them this is the best way to make them motivated and encouraged. Finally,(14.2%) make learners working in groups in order to push them to work more.

Field work of the study

Question eight: Do you deal with the average and the weak learners as the good ones?

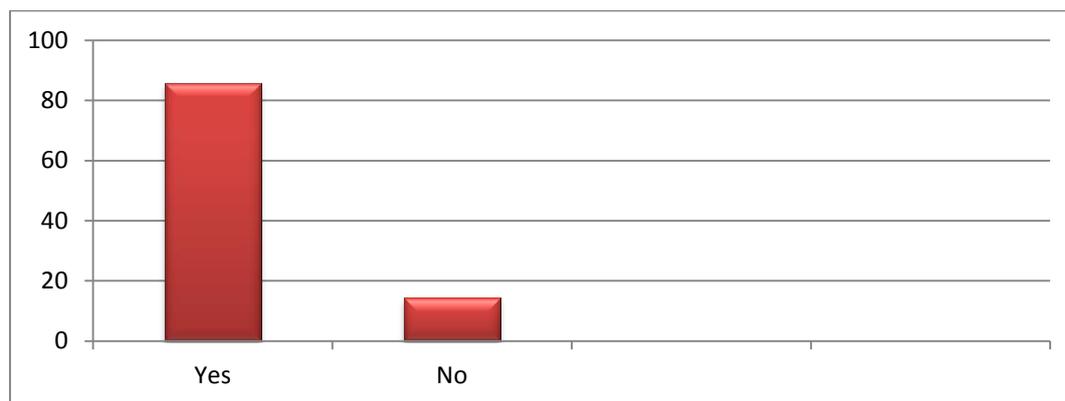


Figure 8 : Teachers' responses if they deal with the weak learners as they deal with the good ones.

The result of this question showed that the majority of the teachers (85.7%) deal with their less successful and weak students as they deal with the good students, in order to make them feel comfortable and equal with others .However, some teachers (14.2 %) were disagree in dealing with all the pupils in the same way , and that is wrong because it is a kind of racism and it prevents the less advances students to succeed rather than motivate them.

Question nine: Do you believe that learners are cognitively different?

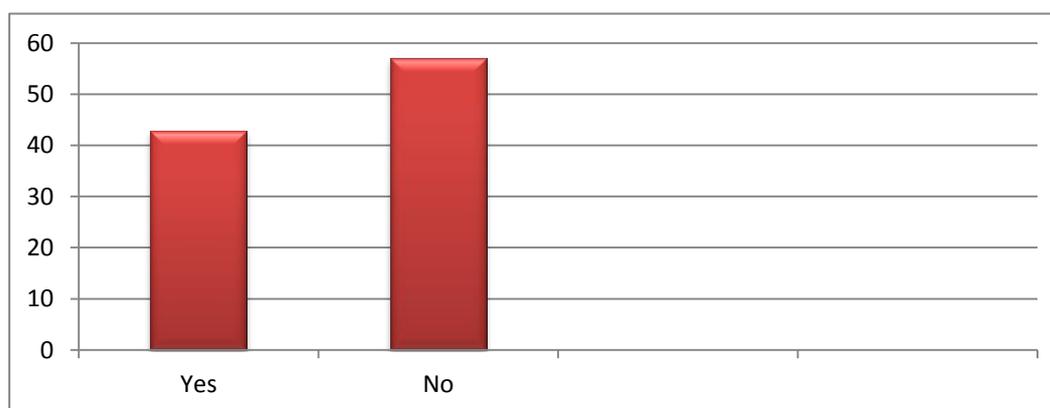


Figure 9: Teachers' responses if their learners are cognitively different.

Field work of the study

The statistics revealed that the majority of the teachers (57.1%) claimed that they don't believe that learners are cognitively different; they think that learners are the same since they study in the same environment with the same teachers. Whereas, others (42.8%) argued that learners are different in term of cognitive abilities, and it is impossible to learn in the same way.

Question ten: According to you , how can teachers manage the individual cognitive differences among learner?

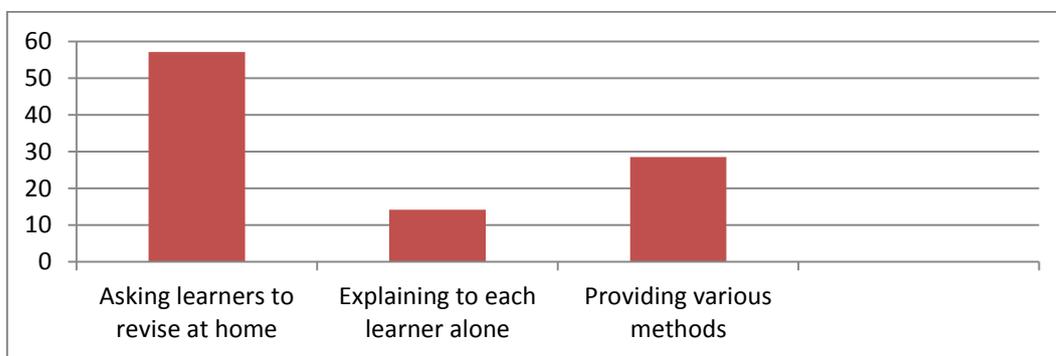


Figure 10: teachers' strategies to manage the ICD among learners

As it is visible here, more than half of the teachers (57.1%) prefer asking learners to revise at home in order to manage the cognitive differences among their learners . Then, (28.5%) opt to providing various methods in their teaching process and the rest (14.2%) see that explaining to each learner alone is the appropriate method to .This means that teachers of English have low awareness about the individual cognitive differences.

Field work of the study

Conclusion

The findings of the teachers' questionnaire demonstrate that the individual cognitive differences have a positive and a negative impact on the learners' academic achievement. Thus, when learners are cognitively different, some teachers are not aware of that and therefore they depend on using one method in their teaching process what create the whole problem. On the other hand and fortunately there are teachers who pay attentions on these cases , they are aware of the existence of the ICD , what make them using different methods when they teach and also dealing with all the learners 'needs.

2- Learners ' questionnaire :

2.1 Description of the questionnaire:

This questionnaire consists of eleven questions. They are divided into two sections :

Section one: It includes general information which consists on three main questions , it is about the age of the learners ,their sex , and also how long they have been studying EFL .

Section two: It includes eight questions, investigating how learners are cognitively different and the impact of these cognitive differences on their academic achievement.

2.2. Administration o the questionnaire:

The present questionnaire was given to one group of first year pupils of Ahmed Abdelghani high school in Mostaganem . The group contains 32 pupils and we received just 27 answers because 2 learners were absent and 3 didn't complete answering the questionnaire. The participants answered the questionnaire in their classroom with the presence of their teacher.

2.3. Analysis of learner's questionnaire:

Section one:

Question one: Learners 'ages:

Option	Number	Percentage
17	23	85.1
18	3	11.1
19	1	3.7

Table 1: Learners' ages

Field Work of the Study

A quick glimpse at this table will reveal that there are (3) age groups in our selected sample. All of them are teenage pupils whose ages vary between 17 years old and 19 years old. Out of the total number of the sample (27). We have 23 pupils (85.1%) and only one learner (3.7%) who are 17 year of age ,and 19 years old, who are believed to be older than others ,they either have repeated years or not having started their primary education early .

Question two: learners' gender

Option	Number	Percentage
Male	11	40.7
Female	16	59.2

Table 2 : Learners' gender

According to the result showed in the table above , it is remarkable that female pupils outnumber males. In actual fact , this is even the case with regard to the sample under study .We have recorded just 11 male subjects put of a total of 27 making up (40.7 %) . Whereas the rest is of a female gender , that is 16 (59.2%).This adds nothing except the question of motivation and seriousness .Girls are expected to be more interested in studying a foreign language more than boys

Question three : How long have you been studying English ?

Years	Number	Percentage
Five	23	85.1
Six	3	11.1
Seven	1	3.7

Table 3 : Years of Studying English

Field Work of the Study

According to the table above , it is obvious that the majority of the pupils (23) making up (85.1%) stated that they have been studying english for five years , this is believed to be the normal number to reach out their academic year .Those who stated that they have been studying English for eight years (11.1 %) , and those who declared that they have been studying English for ten years (3.7 %) are believed that they have repeated one or many years.

Section two:

Question one : How do you consider your level in learning ?

Option	Number	Percentage
Very good	3	11.1
Good	8	29.6
Averaged	15	55.5
Poor	1	3.7

Table 4: The pupils' perceptions for their level in learning

The table above indicates that (11.1%) of respondents consider that their level in learning is very good .However around (29.6 %) respondents state that their level in learning is good. The majority of the pupils (55.5 %) claim that they are average in learning .Finally , just (3.7%) say that their level is poor in term of learning .

Question Two : Do you blame yourself when get bad marks ?

Option	Number	Percentage
Yes	19	70.3
No	8	29.6

Table 5 : pupils' responses of their achievements

Field Work of the Study

The results of this question show that the majority of the learners (70.3 %) blame themselves if they get bad marks , and that refers to the fact that they are good pupils and they want to succeed in their learning process . Whereas , the rest (29.6 %) claim that they do not blame themselves when getting bad marks , which means that they do not care about their succeed .

Question three : Do your teachers encourage you to learn and succeed ?

Option	Number	Percentage
Always	14	51.8
Sometimes	10	37.1
Rarely	3	11.1
Never	0	0

Table 6: Pupils' responses if their teachers encourage them

According to the table above , the majority of the participants (51.8 %) claimed that their teachers always encourage and push them to learn and succeed . Then , (37 .1 %) of the learners said that their teachers sometimes motivate them to learn .Whereas just (11.1 %) of the pupils declared that their teachers encouraged them to learn rarely .Finally , none of the participants said that their teachers do not encourage them to learn at all

Question four: Do you feel satisfied with the way the teachers use in teaching you?

Option	Number	Percentage
Yes	20	74.1
No	7	25.9

Table 7: Learners' satisfaction of the teaching methodology

Field Work of the Study

The result of this question shows that the majority of the pupils (74.1 %) feel satisfied with the way that their teachers use in teaching them , they like the methods and the strategies that they use .However , unfortunately around (25.9 %) declared that they do not like the way that their teachers use , and that what make the trouble among learners.

Question five: Do you find difficulties to understand the teacher's explanation ?

Option	Number	Percentage
Always	1	3.7
Sometimes	3	11.1
Rarely	14	51.8
Never	9	33.3

Table 8 :Pupils' difficulties

The result revealed that a few number of pupils (3.7 %) claimed that they always find difficulties to understand the teacher's explanation , and around (11.1%) of the learners said that they sometimes find difficulties while the teacher explaining the lessons .However , the majority of the learners (51.8%) declared that they rarely find difficulties in understanding the teacher's explanation. Finally , the rest of the pupils (33.3%) never find difficulties to understand the explanation of the teachers

Question six: What do your prefer ?

Option	Number	Percentage
Working in groups	11	40.7
Working in pairs	9	33.3
Working individually	7	25.9

Table 9: Pupils' preferences

Field Work of the Study

The results show that the majority of the learners (40.7%) prefer to work in groups , because this motivates them to succeed and to express their ideas . Others (33.3 %) see that working in pairs is the best activity for them .Whereas, (25.9%) of the pupils prefer to work individually, they do not like to work with others and share their ideas .

Question seven: Which activity do you like most ?

Option	Number	Percentage
Discussion	13	48.1
Role playing	8	29.6
Language game	6	22.2

Table 10: Pupils' opinions about which activity they like most

The table shows that the majority of the pupils (48.1%) like discussion in the classroom, and (29.6%) of the pupils said that they prefer the role playing activity. The rest of the learners (22.2%) answered by saying that language game is their preferable activity.

Question eight: Here is a list of statements. Please indicate the most appropriate for you by placing a tick in the box

Option	Number	Percentage
a	6	22.2
b	3	11.1
c	8	29.6
d	10	37.1

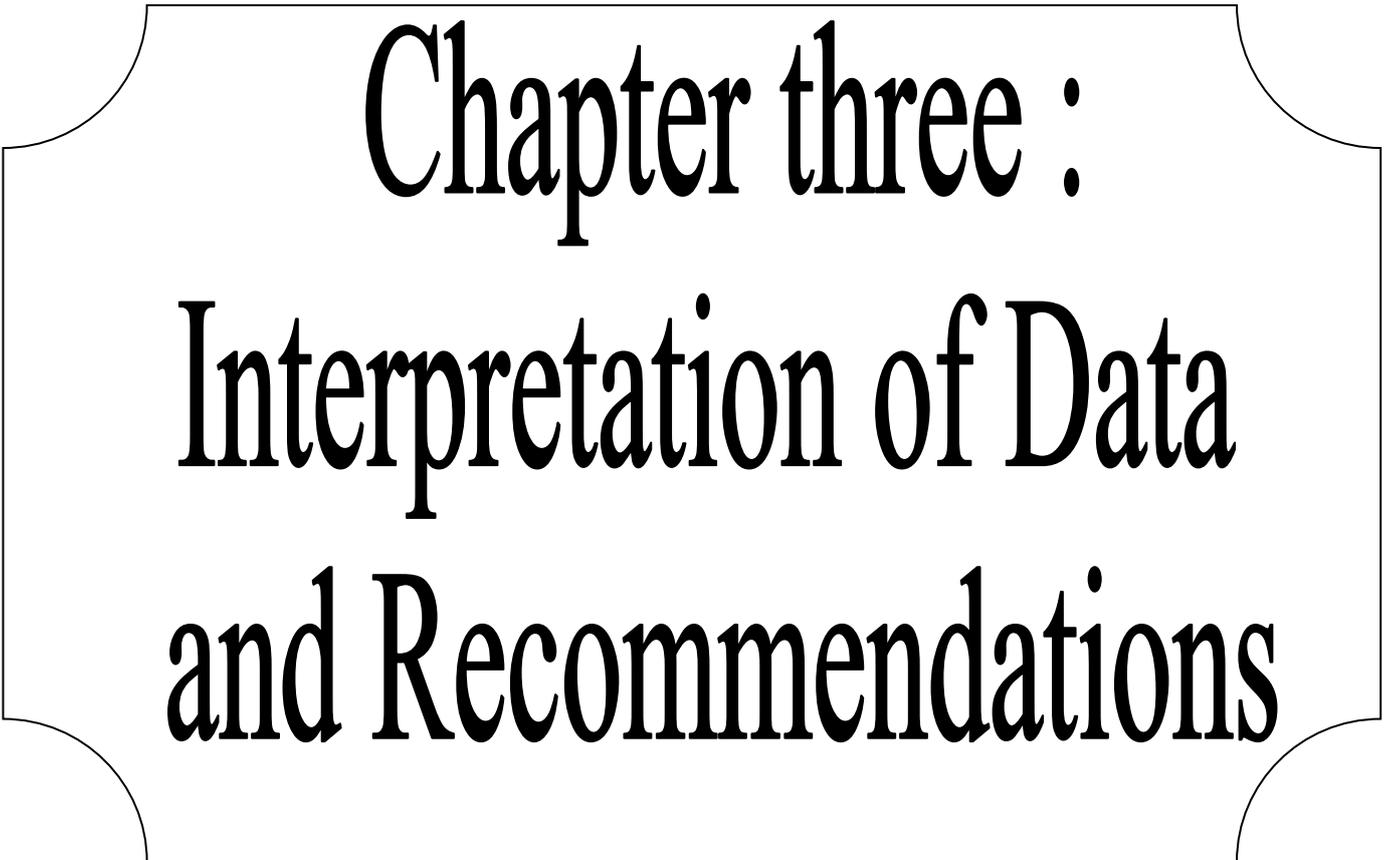
Table 11 : Pupils' indications of the statements that suit their learning styles.

Field Work of the Study

The result of this question revealed that (22.2%) of the participants chose the statement (a) which refers to the auditory style. Moreover, around (11.1%) of the pupils declared that they are belonging to the kinesthetic style (b). However, the majority of the learners (29.6%) placed a tick in the box (c) which deals with the verbal style. Finally, the rest of the participants (37.1%) choose the answer (d) which is about the visual style .

Conclusion

According to the results obtained from the learner's questionnaire , through which we tried to confirm our hypothesis , as it was expected the individual cognitive differences have a great impact on the learner's academic achievement . If the teachers rely in using one teaching method or one activity , this will make some learners more successful than others .So , using different tools ,strategies and ways in the teaching process plays an important role in making pupils learn equally and succeed .



Chapter three :
Interpretation of Data
and Recommendations

Introduction

At the end of our research , We want to discuss the findings of both teachers' and learners' questionnaires ,then we suggest some educational implications and strategies that should be used by the teachers to facilitate the process of learning , and mainly to solve the issue of learner's differences for better achievement on the academic career. Moreover , this chapter also tackles some recommendations offered to learners , to raise the awareness of the individual cognitive differences and to avoid all the obstacles that face them during the the learning processes . Lastly , we want to close our research by listing some games and activities offered to the teachers in order to recourse them during the teaching process .

1-Discussion of the Findings :

Based on the upshots which were obtained through the questionnaire of both teachers and learners ,the research comes to light with numerous evidences to prove the correctness of our hypotheses .

The analysis of learners' questionnaire reveals the principles of Individual Cognitive Differences really influence the learners' academic achievement . The learners 'answers , in section two demonstrated that learners are really different in term of cognitive abilities. Thus , each one has a unique ability which distinguishes her /him from the other .In this respect , the results of the learners' questionnaires showed that learners in the classroom in need to the differentiation in the teaching methods , activities and techniques in their learning process rather than following one method during the whole lesson or the whole academic year. Moreover , according to the findings , there are some pupils who do not know which learning style and which learning strategy that suits their levels . In here , teachers are responsible to make them aware of their learning styles and strategies by giving them some different activities divided to all the types , and therefore they can conclude which one is the most appropriate .

The teachers'questionnaire analysis , as the learners' one , confirmed our hypotheses which stated that some teachers are not aware of the existence of their pupils' cognitive differences, what make them relying on one or two teaching methods and avoid being flexible , because according to them learners are the same in term of cognitive abilities and they can learn in the same way . Unfortunately ,there are others who said that they deal with the good learners more than the less advanced ones , what creates the whole trouble . Because , within that strategy , they will make the less successful learners loss their studies and fail rather than encourage and motivate them .

Interpretation of Data and Recommendations

However , the teachers' responses indicated that there are a number of teachers who adore differentiation in their teaching process , and from time to time they bring something new by changing the activities.

To conclude , Our research is quite related to the multipide intelligences theory proposed by Howard Gardner . Thus , since learners are cognitively different , and they learn in different ways , Gardner through his famous theory confirmed that each one has a specific type of intelligence what makes her/him unique and different from the other one . i.e. , all learners are intelligent and successful , they just differ in the types of intelligence , learning styles , and learning strategies .So , teachers are responsible to use all the teaching methods that deal with these concepts in order to make learners learn equally .

2-Educational and pedagogical implications :

In order to manage the Individual Cognitive Differences among learners , the teachers need to take into consideration these implications :

- ❖ The teacher uses some teaching techniques which will attract her/his learners towards teaching with taking into consideration their interest and need (Maheshwari ,2016).
- ❖ The division of learners into groups including the advanced learners and the less Advanced ones .
- ❖ The teachers may provide various methods and activities to their learners such as playing method, project method, , story telling methods in order to give each one of them the opportunity to participate and interact (Maheshwari ,2016).
- ❖ Curriculum should be designed according to the interest, abilities and needs of different Students (Maheshwari ,2016).

Interpretation of Data and Recommendations

- ❖ It is not possible for learners to be benefited by one particular method of instruction and Thus ,the teacher has to adopt different types of methods of teaching considering individual difference related to interest, need, etc (Maheswari,2016).
- ❖ It is very necessary for the teachers to be aware of their learner's learning styles and learning strategies , because that is going to help in using the appropriate methods during the teaching process .
- ❖ It is unfair to compare between learners .To deal with the more successful ones and blame the other .Again, the equality between learners is the duty of teachers .

3-Recommendations to pupils:

- 1- Learners should be aware of their learning styles and learning strategies in order to avoid the difficulties when they revise and learn .
- 2- The individual cognitive differences among learners is not a problem .Each learner has a special ability and style of learning ,and when learners trust their abilities , they will obviously succeed in their studies .
- 3-Self esteem is very important; learners should evaluate themselves from time to time by enhancing their positive points in learning and avoiding the negatives ones .
- 4- The less successful learners are able to improve their levels by working with the advanced learners ,revising the lessons at home , and asking their teachers if they have not understand.

4-Suggested Tips and Activities to The Teachers :

While it can be frustrating for both teachers and students, individual-cognitive differences are an inevitable part of teaching. Since it is not possible to prevent them , we can at the same time suggest some strategies , activities , and tips for teaching mixed ability classes ,which are as following :

Interpretation of Data and Recommendations

- **Questioning Learners :** To manage the ICD in the classroom , teachers may do some consultations to their learners including all the types of learning styles and strategies , and therefore they ask each learner to write in a piece of paper which one of these consultations they like more , in order to take them into consideration in the teaching process .
- **Flipped Classroom :** Flipped classroom is a learning strategy in which teachers convert the lecture into videos and then learners to watch them at home , and collaborate in online discussion , or revise them. When they go to their classrooms , teachers check their understandings individually , by giving feedbacks , correcting , and communicating with each learner in order to better meet the needs of each individual and also to build a profile of learners' cognitive abilities (Wikipedia,n.d.) .
- **Open –Endednes Activities :**

This type of activity provides learners the opportunity to answer to tasks which have a variety of possible answers rather than one answer .This activity aims to make learners feel that they are equal and no one is better than the other (Simanove ,2010).
- **Whole Class- Mingle :**

This activity involves learners interaction and discussion among them in the class .Thus , teachers may gather learners in one side and give them a topic , then asking them to discuss and interact .That will help the levels of the learners meet and interfere with each other (British Council ,n.d.) .
- **Dealing with the less successful learners as dealing with the more advanced ones :**

It is unfair when dealing with the advanced learners , encouraging them , and calling their names, and at the same time ignoring the others . That has been proved in the teachers' responses , some teachers conceded that they do not deal with all learners in the same way , what reduces the less advanced learners' self confidence .As a result ; it

Interpretation of Data and Recommendations

is preferable to give that kind of learners the opportunity to succeed and progress in their levels .

➤ **Adapting materials :**

Teachers shouldn't depend all the time on using the course books because they do not offer much flexibility .Hence , they may bring different materials such as ; projectors , radios , or others tools , in order to facilitate the learning process and meet learners ' needs (Bremner,2008) .

Conclusion

This chapter offered more details about the findings of both teacher's and learner's questionnaires , it also tackles some educational implications and suggested tips addressed to the teachers in order to manage the individual cognitive differences among learners .On the other hand ,this chapter presented some recommendations to learners helping them o learn , succeed and avoid blaming themselves when getting bad marks .

General conclusion

The present study has dealt with the Individual Cognitive Differences among learners and how these differences may influence the learners' academic achievement. Its main concern was investigating whether both teachers and learners are aware of the existence of the ICD, and how they deal with this issue.

It is known that the Individual Cognitive Differences refer to the variances that exist amidst the learners concerning their cognitive abilities. The main objective of this research is to raise the awareness of both teachers and pupils of the existence of the ICD and their impact on the learning process and to show learners that most of the time the failure is not their fault.

Our work is divided into three main chapters. We devoted the first one to give a general review of the ICD, and some concepts related to them as; their definition, their psychological theories, their classifications, their influential factors, and their effects which can be positive or negative. Whereas, the second chapter concerned with the field work of our study, through which we analyzed the results of the teachers' and the learners' questionnaires. Finally, the last chapter attached to the discussion of our results, and also presented some educational implications to the teachers, recommendations to the learners, and lastly it finished by selecting some suggested games and activities to be used in the classrooms.

The results from this research confirm our hypotheses and demonstrated that learners are different in term of cognitive abilities, and for that reason, we see some learners more successful than others even if they study in the same classroom, with the same teachers, and the same instructions. Moreover, there is a small percentage of the teachers who are not aware of the cognitive differences among learners, what make them depend on the use of one teaching method.

Interpretation of Data and Recommendations

Finally , it is suggested that the teachers should use different teaching methods , activities , and strategies in order to satisfy all the learners' needs , and they should also motivate the less advanced learners to succeed in their studies by making them work with the more advanced learner . On the other hand , learners should be aware of their learning styles and strategies , because that will help them to engage in their learning process and to know which teaching method is the most appropriate for them in case teachers ask them .

Bibliography

Bibliography :

Books :

Andrew , D , C .& Ernesto ,M .(2007) .Language Learner Strategies . Oxford University Press .

Griff ,G .& Kathy , K.(2000).Personalizing Language Learning. Cambridge University Press .

Herbert ,W,S.& Elana ,S.(1989).Second Language Research Methods .Oxford University Press.

Jill ,H .(1992) .Classroom Dynamics. Oxford University Press .

Michael , O .& Anna , U .(1990) .Learning Strategies in Second Language Acquisition. Cambridge University Press.

Lyle ,F,B.& Adrian ,S,P .(1996).Language Testing in Practice .Oxford University Press

Peter ,S.(1998).A cognitive Approach To Language Learning. Oxford University Press.

Robert ,M,D .(2007) .Practice in a second Language. Cambridge University Press .

Rod ,E .& Carry , B .(2005) .Analyzing Learner Language. Oxford University Press .

Zoltan, D.(009).The Psychology of Second Language Acquisition. Oxford University Press .

Web Sites:

<http://www.wilderdom.com/personality/L1-1Introduction.html> .

<https://fr.scribd.com/presentation/22356932/Cognitive-Differences>.

<https://www.teachingenglish.org.uk/article/teaching-mixed-ability-classes-1>.

Bibliography

<https://www.teachingenglish.org.uk/article/adapting-materials-mixed-ability-classes>.

<https://www.learning-theories.com/weiners-attribution-theory.html>.

<http://www.publishyourarticles.net/knowledge-hub/education/what-is-the-causes-of-individual-differences/5305/>.

<http://www.vcaa.vic.edu.au/Documents/vce/psychology/heredityandenvirofactorsinflueneces.pdf>.

<http://www.witslanguageschool.com/NewsRoom/ArticleView/tabid/180/ArticleId/58/Teaching-Tips-Mixed-Ability-Classes.aspx>.

https://en.wikipedia.org/wiki/Theory_of_multiple_intelligences.

<https://www.edutopia.org/multiple-intelligences-research>.

<https://www.simplypsychology.org/memory.html>.

<https://www.verywellmind.com/personality-psychology-4157179>.

<https://www.ijres.net/index.php/ijres/article/view/299>.

<http://publicacoes.unifran.br/index.php/dialogospertinentes/article/viewFile/113/73>.

https://en.wikipedia.org/wiki/Flipped_classroom.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4129348/>.

<http://www.dtic.mil/dtic/tr/fulltext/u2/a202795.pdf>.

<https://betterlesson.com/lesson/604198/equal-parts>.

Appendices

Learner's Questionnaire

Dear learners, you are kindly invited to fill in this questionnaire giving your opinions in order to investigate the impact of the individual cognitive differences on the academic achievement. We will be very grateful if you provide us full answers. We deeply appreciate your collaboration.

Section one :

Q1)Age :

....Years old.

Q2) Sex :

a-Male b-Female

Q3)How long have you been studying ?

....years

Section two:

Q1) How do you consider your level in learning ?

a-Very good b-Good c-Averaged -Poor

Q2)Do you blame your self when getting bad marks and do you try to revise more again until you get good marks?

a-Yes b-No

Q3)Do your teachers encourage you to learn and succeed?

a-Always b-Sometimes c-Rarely d-Never

Appendices

Q4) Do you blame feel satisfied with the way the teachers use in teaching you ?

a-Yes b-No

Q5)Do you find difficulties to understand the teacher's explanation ?

a-Always b-Sometimes c-Rarely d-Never

Q6) What do your prefer ?

a-Working in groups.

b-Working in pairs.

c-Working individually.

Q7) Which activity do you like most ?

a-Discussion b-Role-playing c-Language games.

Q8) Here is a list of statements. Please indicate the most appropriate for you by placing a tick in the box

a-I learn better if someone reads a book to me and I listen to it than I read silently to myself

b-I like to do things like simple repairs or creative things with my hands

c-I would rather read things in a book than have the trainer tell me about them

d-I understand things better if I see them written down than if someone spells it out loud

Thank you for your time .

Appendices

Teacher's Questionnaire

Dear teachers , We would be very grateful if you accept answering the following questionnaire about the individual cognitive differences among learners and their impact on their academic achievement. Your answers are very important for the validity of the research I am undertaking; I really appreciate your help. Thank you in advance.

Q1) Teacher's qualification :

a-License b-Master c-Doctorate

Q2) Which of the following your learner's styles and strategies ?

a-Visual b-auditory
c- kinesthetic d-Verbal

Q3)Which method(s) do you use in your teaching process?

- a -Direct instruction
- b- Questions and answers
- c- Drill and practice

Q4) Do you try to ask your learners about the method of teaching they prefer ?

a-Always b-Sometimes c-Often d-Rarely

Q5) Do you talk to your learners about their learning problems ?

a-Always b-Sometimes c-Rarely d-Never

Appendices

Q6) After you finish the lesson explanation ,do you ask your learners if they have understand or not ?

a-Always b-Sometimes c-Rarely d-Never

Q7) How do you encourage the less successful learners to work more?

a-Asking them to revise at home

b-Giving them clear and useful explanations

c-Make them working in groups with the advanced learners

Q8) Do you deal with the weak students as the good and the advances ones ?

a-Yes b-No

Q9) Do you believe that learners are cognitively different ?

a-Yes b-No

Explain :

.....
.....

Q10) According to you ,how can teachers manage the individual cognitive diffrences among learners ?

a- By providing various methods.

b- By explain to each learner alone.

c- By asking learners to revise at home due to their needs.

Thank you for your time