Effectiveness of Sensory Cognitive Program for Learning New Words among Students of the Faculties of Education Hantoub and Alhasahisa, University of Gezira, Sudan

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Abstract: The problem of this study starts from the way in which learners deal when they learn new words, which had led to their suffering when they try to remember it, the present study aimed to find out whether a sensory cognitive program designed by the researcher has an impact on the learning of new words. The study followed the experimental method. The study sample consisted of students of faculties of education / Hantoub and Alhasahisa in the University of Gezira, which was selected by random stratified technique. The Department of English Language was representative of the language Departments, while Chemistry / Biology Department were representative of the scientific departments, and geography / history department was representative of the arts departments. The sample size was (216) students for the two experimental and control groups. The sensory cognitive program was checked for reliability and validity by specialists before the experiment was run. The data was analyzed through the (SPSS) program. The main findings of the study are: The designed Sensory cognitive program has a positive impact on learning new words. There are also significant differences in the impact of the program due to gender (Females have benefited from the application of the program more than males), while there are no statistically significant differences in the impact of the program on learning new words due to the different kind of specializations (science or art). The results of this study might assist in planning for more effective educational and language learning programs. The most prominent recommendations of this study include the establishment of units in the various ministries of education to help in evaluating and developing strategies for learning foreign languages and take advantage of various scientific research conducted in this area of practice.

Keywords: Sensory; Cognitive Program; New Words.

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Introduction

The most common linguistic categories assure that the world is somehow made of language. An anthropologist at University of Boston –Mesa Lando assures that "the revolutions in linguistic studies confess that language is not only a mere tool for communicating thoughts about the world, but it is also a tool for making the world exist at first. the reality simply is not existing or being in language, but actually is created by language. Language's rules –its internal codes have been carefully studied, but the researchers didn't devote their care to study how language creates reality and knows its limits. Conceivably, we can understand the language more and more when we think it as a magic since the implicit trend is made from language (ALAGAMY ,2007)

The researcher has noticed that the care of language has come from many directions, its structure, construction, semantics, and comparison between other different languages in many features. Also, the attention has been shed into linguistic expression and linguistic writing in a certain language in addition to language's issues and thought. But the current study deals with the core of the process of acquiring and learning different languages and even local accents and languages and any pronounced one,

so the research tries to discover how to learn languages by finding the cognitive strategies which assume that through designing a program depends on senses , intellectual processes ,and practicing for checking its efficiency in achieving the research objective , whereas the research centers on different utterances , and how to learn them , and how to restore them so as to return and used them easily. The study tries to produce a cognitive linguistic sample as an evidence and a map of way for those who are interested in languages and for those who seek knowing and learning languages of others to lead them to achieve that easily.

The Problem of the Study:

The study of (Algazafi,2008) assured that there is a clear decline at Arab university students in English language, and (ALMUHHAIB, 1998) demonstrated that English language students themselves have no necessary skills and no professional adequate sufficiency that qualify them to work in fields need wide knowledge of English language such as translation.

The researcher has perceived that learning foreign languages leaning on no scientific bases that rely on modern trained principles and theories lead to weak products that the country shouldn't depend on in development especially at

educational field which should be rich in distinct specialists taking in progress and development in all other fields, those who are trusted in achieving the required goals in the intended field.

This study has come to set solutions for the problems of learning languages and trying to set a new strategy for dealing with new linguistic expressions that help remove some obstacles and difficulties of learning languages so as to lead to openness ,caring , superiority in this field by producing these strategies and a cognitive sample that represents cognitive method facilitates the process of acquiring and learning languages and encourages students and who are interested in linguistic superiority and distinguishing.

The current study tries to answer the following main question: **Is there a statistical functional effect for the cognitive sensational program in learning new pronunciation?**

And from the main question, the following branched questions are divided:

- Are there functional statistic differences in the effect of the designed cognitive sensational program in learning new pronunciations attributed to sex (male, female)?
- Are there functional statistic differences in the effect of the designed cognitive sensational

program in learning new pronunciations attributed to proficiency of other language not Arabic in favour of those who master other language not Arabic?

Significance of the Study:

- The study represents an intellectual thesis in which the specialists of languages fields find various many facilitations for superiority and distinguishing in their fields by benefit from practical applications of the designed cognitive sensational program in learning new pronunciations.

- The results of the study may set a solution for some problems faced by the students at their different educational levels in learning languages, whereas the study shows an intellectual practicable strategy that is the designed cognitive sensational program in learning new pronunciations.

- The results of this study will represent an invented scientific base in the field of sciences, languages and translation in particular for producing new style for treating with new linguistic pronunciations.

- The results of this study help in caring and proceeding to studying languages by what is produced of results among which the interested students set and plan strategies for

learning languages in different scholastic stages.

Objectives of the Study:

The researcher seeks through doing this study achieving the following objectives:

- knowing an effect of a cognitive sensational program – designed by him- in learning new linguistic pronunciations.
- Reveal that there are differences in the effect of the cognitive sensational program in learning new linguistic pronunciations attributed to some variables.

Hypothesis of the Study:

- There is a statistic functional effect for the cognitive sensational program in learning new linguistic pronunciations.
- There is a statistic functional effect for the cognitive sensational program in learning new linguistic pronunciations attributed to gender (male/female)
- There is a statistic functional effect for the cognitive sensational program in learning new linguistic pronunciations attributed to mastering other language not Arabic for the benefit of those who are interested in mastering other language not Arabic.

Limits of the Study:

The topic of the research is limited to both faculty of education

–Hantoub and Alhasahisa-Gezira University Gezira Locality –Republic of the Sudan. The study was applied through the second semester (2013, March/April)

Procedural Definitions for the Study Terms:

A Cognitive Sensational Programme:

It is periodical methodical study – depends on using the five senses and the cognitive processes (representation, suitability , arranging and adaptation) simultaneously for treating sounds and the different linguistic vocabularies designed by the researcher depending based on originally meaningless linguistic sounds given meaning and semantics connecting each sound by special sense according to its linguistic semantics concentrating on sound and semantics only through the sense or the selected case.

The New Expressions:

They are the different pronounced expressions unfamiliar to the examined being under experience or doesn't hear it before.

The Theoretical Frame if the study:

Theories of Educational Applications and Acquiring Second Language
The Innate Theories:

The explanations of the behavioural theorists for acquiring the second language, and its inaccuracy, unclear led the researchers to hind alternative

sample in which the researchers directed their attentions towards the verbal factors that form learning, they haven't gone far, they witnessed a step-in thinking on the field of psychology and linguistics seeing that nature forms the environmental factors for learning. Concentrating not only on nature but also on innate factors that form learning, so this theory is called the intellectualism or the innate ones, focusing on nature that is to say who do the theoretical abilities that form the human brain form learning. this sample was called the innate theory. that means language is not a behaviour to acquire only by learning, training, and practice but there *are* intellectual facts behind every behavioural action, that is to say, is considered a complicated intellectual system since it is *a tool for expression and thinking at the same time (Chmsky,1981).*

Lennberg, (1967) demonstrates to the importance of biological sides in language growth, he contradicts the behaviourists denying the principle of consolidation that dominates the growth, witnessing by saying the ability to speak and understand at the child is not as a result of special consolidation the child received after speech, that is because whenever reaches maturity he can speak by consolidation or not.

(Ehrman, 1996) says supporters of this theories believe that some language's sides are innate matter. they are two parties: one is called General Nativism and the other is Special Nativism, the first part sees no tool for learning language but there are general principles not characteristic for a language but it can be used for other sides of learning. The second part assumes that there are special theories related to the language, and also there are specific principles or bases that govern learning language and which have no relation with any knowledge. Both parties see an innate issue in side us belongs to language but the question about the nature of this device (Gasem, 2000) concerning this theory:

- Human is the only creature able to learn language.
- Human brain is supplied with abilities for learning language, that called (Language Acquisition Device).
- These abilities are the first factors for language acquiring.
- These abilities are necessary but only for operating and moving the device of acquiring the language.

(Chomsky, 1965) sees language performance is practicing and training it and the aim of linguistic study is knowing language competence by real practice. that we cannot reach these rules and principles unless by sensed external speech. As for each linguistic structure there are two lower and

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upper structures that we can't reach the lower unless via the upper.

(Sampson,1987) comments on Chomsky's: distinction that was established between linguistic ability and language performance or practice, is the most affected characteristic method of Chomsky, that is to say reacquiring of distinction between ability and speech at Swuiser and Chomsky himself makes no difference between the ability of him and that of Swuiser. This theory answered some questions related to language acquisition, that are called (Native Approach) which is divided from a basic rule that acquiring language is an issue happens innately, in which we born having tendency for acquiring language surrounding us. (Brufit ,1994) says " children born with an innate for learning language, this natural ability is found at every human kind"

So, we notice the temporal speed in which the child acquires his mother language in remarkable way. In a short time, the child masters the mother tongue without effort in exposure to it. Often the child – any child- is acquainted with the basic structures of his language, and realizes the basic function relations between words in the sentences, and has the ability to speak at an age less than six that makes us submit that those children were born supplied with biological bases for mankind in

particular controls the process of acquiring language.

All the efforts that are done by linguists or those who re nonsense unless we sufficiently expose the child to target language. This what we really need in learning our standard Arabic language. We daily expose and at any moment to our local accents which is near or far from standard language related to the area where we live , so all our efforts in learning written or standard language at schools through years that efforts may not be of use for the learner to speak limited numbers of sentences from his standard language and that is because of his shortage auditory dictionary attributed to the domination of the local accent that has all his dictionary, this theory is supported by (Lenneberg 1967) who sees " language is specific species of restricted behavior and there are types of sensational notice that classifies abilities and other tools related to language and it is already existed inside us."

(Chomsky, 1965) sees" the central power that leads to language acquiring is a restricted device found inside the human brain " that is to say Chomsky sees the innate basic principles that found in the brain control all the human languages and declare what is taken at need, so Chomsky completely objects the behavioural theory stands for the principle of imitation, because this

theory in his view equalizes the animal behaviour with human one which is distinguished by having language.

Those of genealogical theory before being fame , (Piaget, Berko ,1968) has finished her experience that the child acquires the language as unlinked items but as wholly unit ,that means man naturally is supplied with ability to learn the language regardless the biological , linguistic, background, environmental and other factors , and this what was confirmed by the supporters of this theory that all people have the same ability to acquire the language and having the general grammar of language which is called " Universal Language".

Chomsky's Universal Grammar:

The process of acquiring the second language is deeply attributed to other branch of linguistics and is related strongly with Chomsky's theory "the General Rules " that Chomsky sees language is controlled by group of principles found in every language. Children learn their first language (L1) depending on knowledge which was at first forms this theory and is called Language Acquisition Device (LAD) which is now called (Universal Grammar) or (UG). Chomsky's debate concentrates on the inputs known by children and they were not sufficient for them to discover language rules that they want to learn.

The Generative Linguists who support Chomsky believe that acquiring first language is special ability and activity are opposite to all other kinds of other learning that depends on a certain element that is found in the brain as inherited that is Language Acquisition Device (LAD) which is in a restricted way is near Universal Grammar. According to that acquiring first language that achieved by all normal children without observation or systematic education, distinguished from leaning the second language, and from the deep studying the language at first that is an act done in a conscious way or at least an intended self-teaching (Robins,1997).

Lots of questions were aroused whether acquiring the second language is a result of environmental or mental factors that governs the inputs the insertions the learner exposed to, or as a result of internal mental factors which is to some extension controls that how the learner understands the grammatical structure. Discovering the sample that illustrates how the learner acquires language is one of the most important results that support the result of studying common errors of the learner, I mean, acquiring second language is marked by system and generalization that reflexes the way the internal cognitive tool controls acquiring process, aside from personal background for the learners

or the educational situation (Ellis,1995).

Neuro – Linguistics Techniques:

Research on the effectiveness of NLP states that individuals use their senses and primarily their five basic sense to encode unconscious information from their environment (Bhatt & Brandon, 2015; Sandoval & Adams, 2001). This type of encoding is referred to as internal preferred representational system (PRS) (Bhatt & Brandon, 2015). When applied to NLP interviewing techniques the officer uses the interviewee's language to identify which sensory mode the interviewee relied on during a crime (Bhatt & Brandon, 2015; Sandoval & Adams, 2001). The research suggested that the three most used senses in PRS are sight, sound, and touch (kinesthetic) (Bhatt & Brandon, 2015). When asking questioning in an interview the officer will use responses based on the sensory information that has been provided by the witness. One example is if the witness saw something of importance and is relaying that information the witness use terms such as "saw" or "seen" and their eyes will move in a distinctive manner (Bhatt & Brandon, 2015; Hollander & Malinowski, 2016; Sandoval & Adams, 2001). The officer will likely respond that they see what the witness is meaning or saying (Bhatt & Brandon, 2015; Sandoval &

Adams, 2001). By using this type of information, the officer is able to get the witness to open up about what they have experienced. This open communication also allows for the officer to understand the witness's emotions, which is thought to help them detect lies in the witness statements (Bhatt & Brandon, 2015; Sandoval & Adams, 2001). This form of questioning also allows the officer to watch the interviewee's eye movements for signs of deceit. Depending on the interviewee and their experience it is predicted that certain groups of individuals will move their eyes in a predictable manner (Bhatt & Brandon, 2015; Hollander & Malinowski, 2016; Sandoval & Adams, 2001). For example, English-speaking subjects have been observed to move their eyes to the left when they talk about emotion events, stressful and embarrassing events (Bhatt & Brandon, 2015). However, this has been a source of much criticism among scientists because they state there is not enough evidence to support these facts (Bhatt & Brandon, 2015; Hollander & Malinowski, 2016; Sandoval & Adams, 2001).

Problems Associated with Neuro-linguistic Interviewing Techniques:

The current theories with neurolinguistic programming are that an interviewer will be able to detect deceit through an interview by tracking the subjects eye movements

and reading specific body language (Bull, Valentine, & Williamson, 2009; Grimley, 2016; Hollander & Malinowski, 2016). NLP techniques in an interview setting have been criticized as being only slightly more successful than the level of chance (Wilson, n.d.; Wiseman, Watt, ten Brinke, Porter, Couper, & Rankin, 2012). There is also not enough evidence to support NLP techniques for detecting deception. It has been noted by many researchers have not been able to link left eye movement with truth-telling and right eye movement with lying (Wilson, n.d.; Wiseman, Watt, ten Brinke, Porter, Couper, & Rankin, 2012). Many advocates of NLP techniques when conducting police interrogation believe and are trained that left eye movement reflects the truth while right eye movement reflects deception. Much of the research suggests that individuals eye movements are unreliable and inconsistent with their speech cues (Wilson, n.d.; Wiseman, Watt, ten Brinke, Porter, Couper, & Rankin, 2012).

It is stated throughout the research that often the law enforcement officer will misinterpret the eye movement of a specific suspect (Wilson, n.d.). Depending upon the suspect's gender and ethnicity the officer may have feelings of mistrust and those feels will be reflected in the interview process (Haines, 2005; Wilson, n.d.).

The research also shows that an individual culture could produce behaviour in the suspect that would be reflected as cues for lying. Culture nonverbal behaviours have been studied by many scientists in the past but there is limited research as to how it is perceived in an interrogation (Haines, 2005; Wilson, n.d).

Other factors influence human behaviour are mental disorders such as Autism Spectrum disorder. Individuals suffering from this disorder will often avoid making eye contact with people (Oltmanns & Emery, 2010; Stuart, 2000). When these individuals are made to make eye contact with other individuals it can make the Autistic individual feel anxious and confused (Oltmanns & Emery, 2010; Stuart, 2000). If this occurs in interrogation and the officer is not aware of the disorder, it will appear to the officer that the suspect is lying. Other disorders that can affect the individual brain and cause the suspect to seem deceitful are anxiety, aphasia, bipolar disorder, depression, PTSD, schizophrenia, and stroke (Gray, 2010; Menn, 2012; Oltmanns & Emery, 2010). In some cases, individuals suffering from a personality disorder or mood disorders will be interrogated through the course of a criminal investigation. One mood disorder that is common throughout society and among individuals to be

interrogated is anxiety. Individuals suffering from anxiety may have panic attacks if they feel they are under too much pressure (Oltmanns & Emery, 2010). These individuals will become irritable easily, be restless or on edge, and their mind may go blank when put under pressure. Often being in an interrogation room with a law enforcement officer will generate some form of stress or anxiety, but for individuals with anxiety, it can amplify those emotions (Oltmanns & Emery, 2010; Putnam, 2013).

Previous Studies:

1- The study of (Musa, Ahmed Ibrahim and Habis, Ayman Abd Allah ,1427/2007) under the title Difficulties Faced by Arabs in General and Saudis in particular in their Trying to Acquire the Phonic System of English Language) the aim of the study was: to verify that stages of forming the second or foreign language harmonizes with that done at modern linguistic systems. Also, the study aims at supporting some suggested theories in phonic system and applied linguistics and language universal and historical linguistics. The most important results of the study: it is become clear that at analysing ,the strategies used by Saudis students for this system are the same that used by the child at acquiring phonic system of the mother

tongue (regardless the first language), rather they are the same strategies used by adults (regardless the first language) in acquiring phonic system of different foreign languages which means acquiring the second or foreign language has the same stages of acquiring the mother tongue and both applied strategies are the same.

2- The study of Naif Mohammed Yahya Alghuzaifi (2008) under the title: Effect of Using Cognitive Educational Strategies on Acquiring and Recalling Vocabularies of First Level Students at the Department of English Language-faculty of Educational –Haggah –Sana'a University. The study aimed at knowing the effect of the strategies of learning cognitive vocabularies on acquiring and recalling vocabularies. The sample is of (60) students of first level at the Department of English Language-faculty of Educational –Haggah – Sana'a University that were divided randomly into two groups, empirical and controller. The results showed differences of statistic function among the two groups in the dimensional test of acquiring vocabularies to the benefit of the empirical group (27.43) in contrast with (24) for the controller one. And it is observed that the difference in the

average of the postponed dimensional test of recalling vocabularies among the empirical group (30) and (27.13) for the controller, is of no statistic function.

3- The of (Cenoz 2002) under the title: Level of Children Mastering English Language at the Elementary Educational Stage, the study aimed at knowing whether any child is better mastering English language, the younger or the elder according to historical studying English language. The researcher applied the study on (60) students of secondary stage whom their first language is Basc or Spanish language, the Basc is the language of courses excepting Spanish and English languages. All the students learnt English language for six years but half of them had started it at the third elementary class while the other half started learning it at class six. At the of the period the results showed the level that elder students mastering English language is better than the younger ones

4- The study of (Franklen,2004) under the title: Impact of Learning English Language on Academic Attainments on other Courses among Students of Elementary Level. The aim of the study was to investigate the performance among two groups of

the students of third , fourth and fifth classes, the first group had education with foreign language for thirty minutes per day , while the others hadn't the same education , the result is as followed : the students who had learnt foreign language excelled in the test of math and social sciences those who hadn't, and at the special part of English language components found that 84% of this group had passed the test in compare with 74% of the group that didn't learn foreign language.

Comment on Previous Studies:

The researcher has noticed that all the previous studies (related to this study) concerned with language and what is related to acquiring it, and this is the spine of all studies, but all the previous studies had concentrated on acquiring second language in terms of affected factors in all directions or facing some difficulties or so on.

Benefits from Previous Studies:
- Benefit from methodology upon which some previous studies depended on building hypotheses, techniques, language accuracy
- Some linguistic and scientific terms that used in those previous studies have benefited the researcher on his study that through which he separated between the current study and

many other studies the thing that led to enhance many conceptions related to this study.

- some of the results of previous studies have much benefited the researcher in predicting the results of some hypotheses of this study and according to that the hypotheses have been set in accurate method.

Methodology of the study:

Experimental Design:

The process of accuracy is still partial in such researches whether the procedures are done due to controlling difficulties in all variables in the educational phenomenon (David 1990). For this the researcher has followed an experimental design of partial accuracy that is suitable for the current research circumstances ,the design is of random groups for two controller experimental one related to both post and pre-test because it suits both procedures, the researcher uses the pre-test after applying a program designed for meaningless the effect of the program, then using the post test for measuring the extent of recalling vocabularies which were kept , for this the researcher used the pre-test at first and the post test for the second one

Table 1: *shows the experimental design used by the researcher in the study*

Group	Pretest	Independent variable	Posttest
Experimental	Words learning test	Application of sensory cognitive program	Words remember test
Control	Words learning test	Save words	Words remember test

Methodology:

The researcher followed the experimental method that depends on field experiment and on testing the effect of the followed independent variable which is the method that suits the nature of the research and achieves its hypotheses and answers its questions that the cognitive sensational program represents the independent variable that will be inserted as a main component in experimental group while the appurtenant variable represents the best performance for the experimental group at the post test that shows the efficiency of the designed program in achieving the main objectives of the study.

Subject of the study:

All the individuals of the same observable characteristics are the subjects of the study in which there is only one common feature among the individuals that can be observable, so the concept of the

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sample can be wide or narrow according to the definition of the research (Abu ala 2004).

The sample of the study consists of the department of: Chemistry, Biology, Geography, history and English Language of both Faculty of education, Hantoub and Hasahisa-Gezira University.

Batch (31) is excluded as the students were in practical training -1 and graduation requirements. There are lists of students taken from register office of faculty of Hantoub and Hasahisa in which the research two groups were chosen from the final register list (2011.2012).

Table (2): *The study population*

Faculty of Education- Hantoub					Faculty of Education- Alhasahisa				
Department	32	33	34	Total	Department	32	33	34	Total
Chem-Bio	115	123	130	368	Chem-Bio	36	57	65	158
English	145	158	157	460	English	52	69	101	222
Geog- History	106	139	144	389	Geog- History	112	118	136	366
Total	366	420	431	1217	Total	200	244	302	746

The sample:

The researcher has chosen a random sample of (10%) experimental group and (15%) for controller group of the subject and has chosen the department of Chemistry and Biology as a

representative for scientific department, and geography, History and education for Art department, and both departments of English Language for Language Department for batches (32,33, 34).

Table 3: *Number of experimental sample and the control sample of the study*

Faculty of Education- Hantoub		Faculty of Education- Alhasahisa		
Department	Number of Sample	**Department**	Number of Male Student	Number of Female Student
Chem-Bio	48	Chem-Bio	12	12
English	48	English	12	12
Geog- History	48	Geog- History	12	12
Total	144	**Total**	36	36

Observation:

The controller sample is (50%) of the sum of the two groups from the two faculties Hantoub and Hasahisa, and the male students (50%) and the female ones are (50%) of both

controller and experimental samples for the subject of faculty of Hasahisa.

Equality of the Two Groups:

The researcher has done the equality for the two groups although the random distribution is one of the ways for controlling variables, so the

researcher has done the following statistic variables:

1- The place (urban/rural)
2- Mastering language other than Arabic
3- The level of learning phonetics in the first test

The researcher has come to the following information about the previous mentioned variables from the primary data which had been done by the researcher at first. The following is statistic show for the result of the equality between the two groups.

Mastering language other than Arabic:

From table for (4) it is clear that the two groups are statistically equal in mastering other language the result showed data by using (t. test), that the counted (t) is (.,330) which is less than tabulated (t) (3.291) with free degree (214) that indicates the equality of the two groups in this variable.

Table 4: *shows proficiency in a language other than Arabic for the students of the two sets of research and the value of (t) calculated and tabular*

Group	N	SMA	Variance	standard deviation	DF	T. value
Exp G	108	14.894	31.699	4.87	214	0.330
Cont G	108	13.787	45.234	6.26		

The level of learning words at first test:

For verifying the equality of the two groups in learning words at first test, the researcher used the primary data for the test counted degrees using (t.test) for two independent sample, it is clear that the difference is not with statistic function, the counted value is (,181) less than tabulated value (3.291) at free degree of (214). Table (5) demonstrates that. This result statistically confirmed the equality at the two groups in the level of learning words in the first test.

Table (5): *the arithmetic mean, variance, standard deviation, and the value of T calculated and Driven to scores of the experimental and control groups in the first test to learn words*

Group	N	SMA	Variance	standard deviation	DF	T. value
Exp G	108	13.15	74.713	8.643	214	0.0181
Cont G	108	12.12	80.088	8.949		

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The Tools of the Field Study:

Tools of experimental Group:

The study depends on main tools that is the program designed by the researcher which consists of successive serial stages that will be applied on the experimental group, in which the main element is meaningless sounds already the researcher has set suitable meaning matching with the sense or their cognitive situations, that will be done through restricted stages in the program (see appendix 1). This program is introduced to the experimental group chosen after applying the program according to the set plan.

Directives of cognitive sensational program designed for learning new words:

The researcher has coined numbers of directives given to the individuals of the two groups before applying the program to help stick to applying the experience and carrying out the program as it is.

The cognitive sensational program designed by the researcher consists of five main units, every unit represents one of the of the five senses, under which every sense is included. Every situation of a sense includes a meaningless word through which a meaning can be sensed.

Table (6): *The Main Tool of the Study (Meaningless Words and it's Sense Cases)*

Sense	State	Meaningless Sounds
Hearing	high tone	Karna
	Low tone	Soja
Sight	Mass	Semenda
	Colour	Brtembat
	Temporary Case	Bila
	Permanent Case	Bodo
Taste	Sweetness	Banir
	Bitterness	Tinggi
	Acidity	Pergi
	Salinity	Tega
Touch	Temperature	Rimbun
	Cold	Menerima
	Roughness	Kena
	Smoothness	Daun
Smelling	Pleasant smell	Buta
	UnPleasant smell	Bedil

Steps of designing a cognitive sensational program done for learning new words:

The cognitive sensational program has been designed for learning new words in numbers of steps as the following:

- The researcher has coined new meaningless words that cover all the senses even their different situations (table 6), these words are written in English in order to be treated in the program as foreign language and words.

- The researcher has introduced the specific words for the specialists in English language to make sure these words are irrelevant with any meaning in English language to define the suitable sound for every word, it is agreed by the specialists for all words as meaningless in English language. So, they are approval for designing the program as meaningless words with English orthography

- The researcher has defined a specific meaning in Arabic language for every meaningless word.

- The researcher has inserted every meaningless word connected with its defined meaning in Arabic language – in a particular situation of the five senses to be connected and through which to be sensed during applying the program for the experimental group, knowing that words are introduced connected with their meaning in Arabic language only for the controller to be kept as so.

- The researcher has set cognitive steps through which the meaningless words are being sensed connected with their specific Arabic meaning depending on listening to the sound. The researcher in arranging these steps depends on (Piaget, theory) in cognitive growth through which it is clear that a piece of information inserted in human brain in accordance with steps begin by the stages of representation, suitability, arranging, and adaptation that demonstrate to the stability of the information and its ability to recall it easily, (Piaget,1986).

- The researcher defined the first stage for sensing the mentioned words for listening to the word sound, then listening to the meaning in Arabic language for the representation process whereas the researcher helps the trainer understand the word connecting with its meaning through concentrating on its sound to pass through storing among first right cognitive procedure for learning according to (Piaget Theory). The third stage in the process of sensing the mew word in the cognitive

sensational program designed for learning word is the stage of focusing new sound (the mentioned new sound) and considering its meaning through its sound and then immediately to the stage of choosing the suitable sense (it is the fourth stage due to the sequence of cognitive sensational program designed for learning word) for sensing the word and knowing its meaning in Arabic language in which the trainer thinks of the word , sound and meaning to have an organized idea about the learned word ,this demonstrates the process of suitability in Piaget cognitive theory , and the fifth stage is followed and complete this one , it is trainer having certainty to choose the suitable sense to connect the word which is complete by helping from the researcher during the training. At the sixth stage for sensing the word in cognitive sensational program, the trainer uses the sound demonstrating its meaning to insure storing it in memory to be recall easily and this represents the stage of arranging and adaptation at (Piaget). The researcher set the seven stage as simultaneous to transfer to the second word in the program. Applying the program (doing an experiment).

- Experimenting on experimental group by applying the program on the sample then fixing the time and the place

- The researcher processes every individual of the experimental group the program as a module read in details offered to them as style of debate and discussion while they continue by serial way the stage of the program included sound in English language and their meaning in Arabic language accompanied with their cognitive sensation.

- On the other hand, the researcher offers the program to the controller group in simultaneous with introducing it to the experimental group by offering them the program as sounds freed from their cognitive sensational details.

- The two groups are chosen according to the setting plan to measure and compare the result of the two groups and to choose the effect of the training of the program.

Evaluating Performance on Cognitive Sensational Program Designed for Learning words:

The program is evaluated by subjective test that set by the researcher for measuring learning words (appendix 3) the evaluation is done choosing per-test applied after implementing the program for measuring words for both groups while the post test is applied after 10 days (according to the setting plan)

to measure the degree of remembering words and comparing the result of the two groups and the resulting differences is considered as indication to the effect of the independent variable –shown in the program in its result.

Special Tools for the Controller Group:
- The program of controller group is adapted on controller sample by introducing linguistic sounds (meaningless words) written in English language and translated into their defined meaning in a module that includes required directives for implementing the program.
- The same test (post measurement) that applied on experimental group to measure its learning the meaning of their sounds which has been set in a subjective way from the content of the program to measure the learning of the individuals of the controller group for the meaning of specific sounds in the program.
- Applying the test is turning back on the controller group simultaneously with its application (post measurement) on experimental group to measure the differences between the two groups in learning.

Controlling the Incidental variables:
   The researcher has done many procedures to control the effect

done by the individual variables which are:
- The individuals of the controller group are chosen form out the experimental sample to ensure the disconnection between the samples of the two groups in order to have no discussion about the program and the controller group doesn't know the strategies of treating sounds which is the special procedure for the experimental group only.
- All the individuals of the two groups are stimulated that they should focus on sounds and knowing then in accuracy and will be tested later on by official way and reminding them for the service of the scientific research goals, this procedure is confirmed by the researcher for the guarantee of seriousness among the individuals in treating and implementing the program in its different stages, and that has been done through two ways:
   The first stage depends on stimulating the group to the written version of the program and this will be among the program directives, the second is verbal stimulating during the program implementation.
- The individuals of the controller sample are chosen in all stages at the same time that the experimental one and the same test, for the guarantee of equality of chances which is offered for

each sample as temporal period for learning, considerations and recalling

- The procedure of the post test is done after implementing the program immediately for both groups, the aim of this stage is to verify the normal marking for the test and recording the results in which implementing the post test was done to test the real effect of the designed program to compare the two results.
- The second lists are drawn from all samples after pre-test to the guarantee of performing the posttest from the memory of the first training.
- The samples of the two groups were not informed with the time of the posttest to insure them not being prepared for the test, the researcher does this procedure because of the real criterion of for the program effect, it measures the learning degree for each group and confirms the training effect on the program on remembering with comparing the two groups results, the period between the two tests will be 10 days according to the setting program.

Controlling the Cognitive Sensational Program Designed for Learning New Words:

After designing, the researcher introduced the program to the specialists as controllers in related psychological fields, most of them ask about some stages of implementing the program and the researcher answered them. The controllers produced numbers of observations and suggestions about the program from which the researcher has made use of and put into consideration before having the final version of the program whereas the researcher satisfied with the apparent validity. The controllers agreed with the ability of implementing the program after doing the modifications.

Presenting the Results:

The First Hypothesis: the cognitive sensational designed program has statistic indicatives in learning new words:

The researcher used arithmetic mean and normal decline through the statistical program for social sample (SPSS) to compare the average of the two groups in their performance in the post test which measure the differences in learning which means the effect of the independent variable on leaning, the individual of the experimental group has excelled on the controller in the post test that reflects the efficiency of program in establishing learning new words and ability to recall them succeeding

Table (7): *Differences between the experimental group and the control group in post-test (the difference in the Learn new words between the two groups)*

Group	Mean	Standard deviation	DF	(t)	The level of Statistical Significance
Experimental G	14.11	0.77	214	2.729	0.01
Control G	10.1	0.89			

Regarding table (7) it is clear that experimental group has got higher degree of arithmetic mean than the controller which got less, and with regard to (t) value (2,729) it is statistic indication at functional level (.,.1) that confirms the distinction of experimental group on the controller, so the hypothesis is achieved and then the usefulness of the implementing the program on learning new words.

The Result of Second Hypothesis:

Hypothesis 2: there are differences statistic indicatives in the effect of the program attributed to sex (male, female).

Table (8): *Differences in the performance of the experimental group on the post-test (The difference in learning new words) based on the type of a variable (male / female)*

Gender	Male Student			Female Student			DF	(t)
The performance of the	Number	Mean	Standard Deviation	Number	Mean	Standard Deviation	106	3.87
experimental group	18	12.04	1.01	90	12.18	0.88		

With regard to table (8) the male student's group has got less degree of arithmetic mean than the female student's group, and the counted value of (t)in comparing with tabulated one is under (0,01), this result demonstrates that there are differences between male and female students in making use of implementing the program and for knowing the directions of the differences declined is for the female is (12,18) while that for the male is (12,04)

Presenting the Third Hypothesis Result:

Hypothesis 3: there are differences with statistic indicatives on the effect of the program attributed to mastering language other than Arabic for the benefit of those who master language other than Arabic.

Table (9): *Differences in the performance of the experimental group on the post test (The difference in learning words) based on the knowledge of a second language variable*

State	Speaking a second language			Not peaking a second language			DF	(t)
The performance of the experimental group	Number	Mean	Standard Deviation	Number	Mean	Standard Deviation	106	3.74
	18	14.07	0.91	90	13.10	1.71		

With regarding table (9) the students who maser second language have got arithmetic mean higher than those who don't master the second language and the (t) demonstrates differences between students of second language who make use of the program and to know the directions of the differences, the average is for those who master second language is (14.7) to (13.10) to those who do not master second language successively.

Explaining and Discussing Results:

The result of the first hypothesis:
Hypothesis 1: (there is a statistic indicative for the program)

The result of this hypothesis shows an effect of statistic indicatives for the program and with regard to table (7) the arithmetic mean got by the experimental group in the post test was higher than the same of the controller , and value (t) points at abstract differences between the two groups , the hypothesis is achieved and the differences in the performance of them is presented statistically which attributed to the effect of the program which gave the positive performance for the individuals of the experimental group in which the independent variable was inserted that is to say the degree of remembering at controller group was better than that at the post test that indicates the unpracticed way at the controller group to learning the word by the way in which the experimental group learned which indicates differences in ability to remember words. The controller group in learning words depends on their special way while the experimental group depends on the program in their thinking. That indicates the efficiency of the program.

The result of this hypothesis agreed with the study of Mohammad Yahya Al Huzayfi (2008) which showed differences with statistic indicatives between the arithmetic mean of the two groups in the post test to gain words for the benefit of the experimental group (27.43) with (24) to the controller.

This result is agreed with Chomsky about language performance: the language performance is practicing and

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training language and the linguistic study's aim is knowing language competence practically, we cannot these roles or bases except by external sensed speech. Also, for each linguistic structure there are two structures, one is lower and the other is upper, there is no way to reach the lower unless by the upper (Chomsky, N, 1965)

The Result of the Second Hypothesis

Hypothesis 2: (there are differences of statistic indicatives in the effect of the program attributed to sex, male \female)

The result of this hypothesis led to the distinction of female students on male ones in the post test, with regard to table (8) the average of performance in the test for female is higher than that of males and the value (t) is (0.01) which confirms differences between both sex in the effect of the program, which the female students have made use of applying it more than the male ones with statistic indicatives

The researcher attributes these differences to the female students caring about implementing the program and adapting all its paragraphs and stages , the researcher from the first stage of the treatment of the experimental sample in the stage of the test and program enlightenment and procedure of the implementation, he observed the attention of the female students and their seriousness that

was much than the males , which attributed to some personal characteristics for the female students such as their tendency to help and love for volunteer work while the male students prefer departure to work and missions of clear immediate benefits and spending time social matters of life , may be policy and complete embodiment or partial in electronic and local society. So they did not give enough time to studying words by the way the females did , moreover the female students surpass the male ones when the test is a measurement in linguistic sides because female are closer to the language source than the males at the stage of the importance of the learning the language , this source is the (mother) or who acts for her , while the males at that stage were so busy with different games and discovering the surrounding environment the reason makes them away from mothers' chatters hence they have shortage in linguistic benefits comparing with the females who spend most of their time with mothers or with whom acts for them since these nature makes them near mothers , the females surpass the males in verbal ability such as knowing the meaning of words and understanding reading and fluency in expressing

And fluency in understanding meaning of words. This surpassing appears in early age in younger much

than for males, and the females bind themselves on studying surpass in all subjects to the stage before adolescence. http://www.jackson.stark.k12.oh.u.

The Result of the Third   Hypothesis

Hypothesis 3:(there are differences of statistical indicatives in the effect of the program attributed to mastering language other than Arabic for the benefit of those who master it)

The result of this hypothesis shows abstract differences in learning new words between students who master second language and those who do not with great statistic indicatives when (t) at table (10) is (0.05). the researcher considered this result as scientific fats on relation between language and thought , language is indicatives codes (samples) the thought increases whenever language increases , so to expand language is to expand the ability to think, and knowing more than one language means knowing mire indicatives codes and discovering styles of linguistic syntax for the new language (the second) and may be doing some comparison in conscious or unconscious way to have speculation related to treating words in the specific language in particular and having strategies for treating different linguistic words in general. Based on this result that confirm the

superiority of those master language other than Arabic , the researcher sees the strategies set for treating these words , have found their right intellectual way that required in the minds of those who master knowing languages other than Arabic since they already treat more than one language , the thing facilitates treating the program , and may be making use of their experience in treating different linguistic words and expressions of different grammar as happens the phenomenon of (transferring the training effect). The result of this hypothesis by (Ausubel,D, 1968): learning first language improves the new conception in the second language through previous experience in first language , since the learner tries subsuming the new knowledge under classifications already found in the first language , that is to say , who already knows a language , uses the same skills and intellectual strategies and the way organizing words in which already he trained , using them as they are for dealing with information of new language namely words related to the mentioned language .

Conclusion, Recommendation, and Suggestion:

The most important results:
- There is an effect of statistic indicatives for the program.

- There are differences between male and female students in the effect of the program, the females have benefited much than males in the program with statistic indicatives
- There are abstract differences in learning new words between those who aster language other than Arabic and those who do not.
- There are no differences between rural and urban students in learning new words.

Recommendation:
on the base of this results, the researcher recommends the following:

- Making use of the strategies that scientific and practical studied which help in learning language set solutions for spreading different linguistic problems among students (such as this program)
- Establishing units at different ministries of education specializing in studying, evaluating and setting strategies to develop learning foreign languages and to benefit from different scientific researches being done on this fields particularly, and benefit from scientific results which achieved by the research in this field.
- Requesting the interests to establish specializing experimental educational fields

in which the linguistic strategies that come out from this study, are tested and evaluating its results at summer holidays.
- The necessity of inserting cognitive strategies for learning words in the courses of teaching and learning foreign languages, to make the process of as a scientific systemic way in accordance with studied principles to give felt results

Suggestion:
- Experimenting the program on the level of the general education (primary and secondary) to make the specialists know the ability of making use of this practical program among the students.
- Experimenting the program on groups of non-Arabic language learners to know the effect of the program.
- Experimenting the program on the students of high education in comparing with the results of those on the general education to know what group has got more effect by the program academically and what is more responded to these programs.
- Adjusting and testing the program to suit the preschool pupils.
- Comparative studies between the students of English language and those of other specializations in the effect of the program to know whether the knowledge of

English language is of an effect in learning which supports the result of the hypothesis that supports the effect of language other than Arabic on learning other new languages.

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