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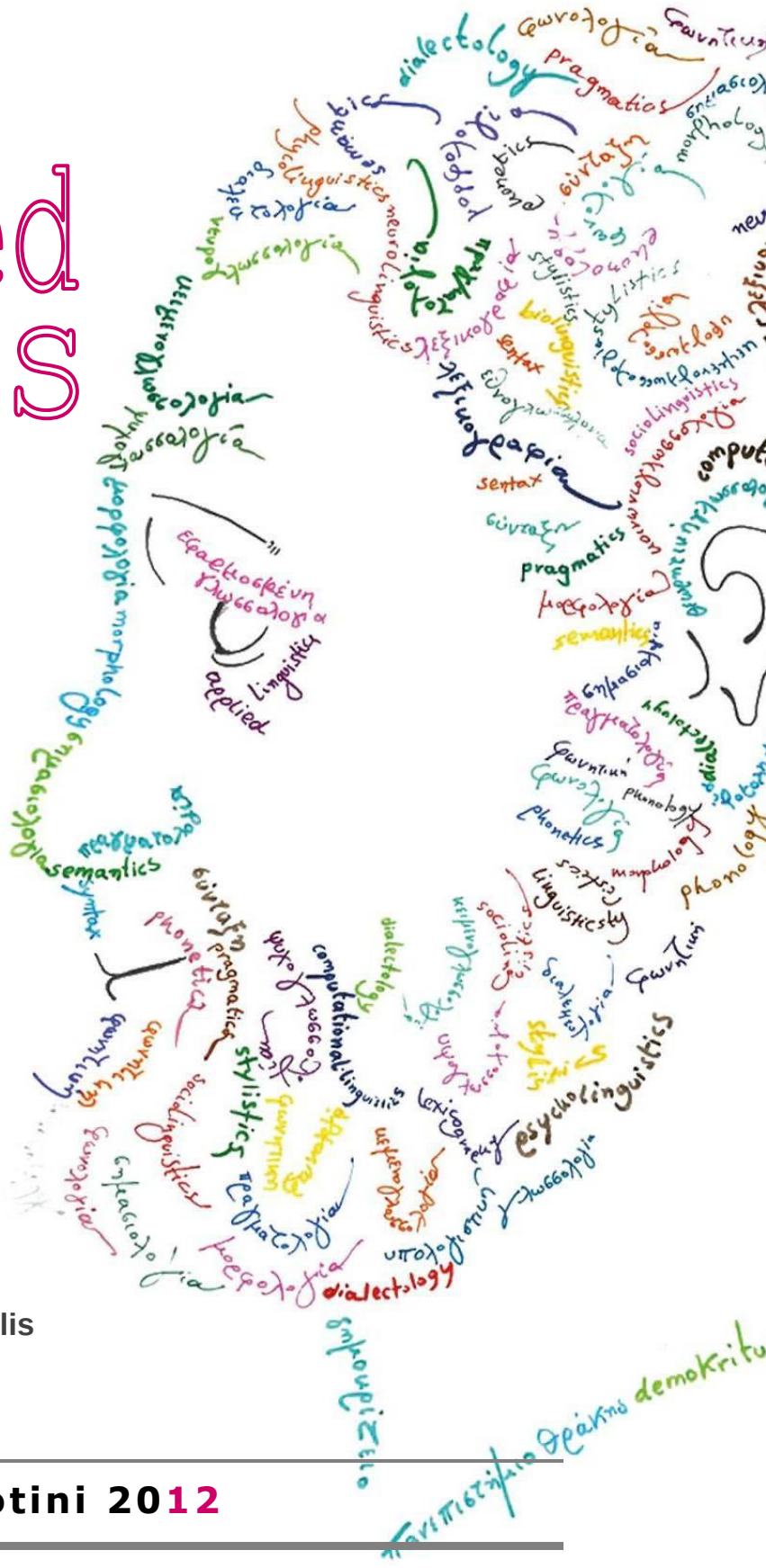

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SILL REVISITED: CONFIDENCE IN STRATEGY EFFECTIVENESS AND USE OF THE *BAR* IN DATACOLLECTING AND PROCESSING

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ABSTRACT

SILL questionnaire is taken by 110 first year students of Greek in an attempt to reveal and activate potential SILL might have but not identified and investigated so far. The two issues introduced concern (a) users' confidence whether their choice of a specific strategy is effective, and (b) an alternative statistical tool, the bar [01], inspired from the fuzzy theory, instead of Likert scales. The advantages of the bar on the part of the subjects is that they do not need to try to elaborate fine differences between different subdivisions; moreover, they have a completely free choice among infinite points on a line rather than a limited 3…5…9… etc of a Likert scale. The researchers, on the other hand, are given the initiative to decide how many divisions to use in each case and, even more so, to apply a follow-up processing with different subdivisions. Confidence indications reveal that our subjects seem to realise how strategies might but they do not make often use of some they consider important because of lack of instruction and time devoted to the actual application of strategies in classroom environment.

Keywords: strategy, SILL, bar, fuzzy, confidence, alternative, effectiveness

0. Introduction

Language learning strategies have created a great deal of controversy over the years since Rubin and Stern first introduced the concept to the second language literature in 1975, followed closely by Naiman et al. (1978). All those early researchers mainly focused on identifying lists of strategies; however, research on language learning strategies really flowered in the 1980's and early 1990's, the, so to say, 'golden period', during which focus was completely on the good learner's choice of language learning strategy and the factors that affect that choice, moving in this way emphasis to classification. It is then that Rubin (1981) classified strategies according to whether they are direct or indirect and O'Malley et al. (1985) divided them into cognitive, metacognitive or socioaffective categories. In 1990, Rebecca Oxford published her landmark book "Language Learning Strategies: What Every Teacher Should Know" which included the "Strategy Inventory for Language Learning" or "SILL", a questionnaire which has been used continually ever since. Then towards the end of the 90s, Andrew Cohen (1998) produced his book on strategies for learning and using a second language. Nevertheless, not much on strategy instruction was introduced, apart from O'Malley and Chamot's handbook (1990) as well as certain sporadic hints, leaving this important issue suspended and in the discretion of individual teachers, or, even worse, of individual learners.

In the years to follow, there was a loss of interest in language learning strategies, perhaps due to the lack of instruction methodology; however, as it happens with every idea or scientific method, recently an important number of new studies has started to appear and, more interestingly, there is a tendency identified among them concerning a prolific teaching orientation.

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1. Research background

1.1 Definitions of learning strategies

O'Malley & Chamot (1990:1) define learning strategies as "the special thoughts or behaviors that individuals use to help them comprehend, learn or retain new information" while Oxford (1999: 518) as "specific actions, behaviours, steps or techniques that students use to improve their own progress in developing skills in a second or foreign language. These strategies can facilitate the internalization, storage, retrieval or use of the new language". Cohen (1998: 4) maintains that "language learning and language use strategies can be defined as those processes which are consciously selected by learners and which may result in action taken to enhance the learning or use of a second or foreign language, through the storage, retention, recall, and application of information about that language". More recently, Chamot (2005: 112) claims that "strategies are most often conscious and goal-driven especially in the beginning stages of tackling an unfamiliar language task. Once a learning strategy becomes familiar through repeated use, it may be used with some automaticity".

The development of those definitions reveals researchers' attitudes towards strategy use instruction and the necessity of its incorporation in school curriculum.

1.2 Methods for identifying learning strategies: collecting and processing the data

Collecting and processing data is a rather tedious however extremely important stage of every scientific research. Chamot (2005: 113) and O'Malley & Chamot (1990: 85) give an exhaustive review on methods and research, including self-report procedures such as interviews, questionnaires, diaries and journals or think-aloud protocols, as well as advantages and drawbacks of each method. Such methods include *interviews, diaries* and *journals* where learners write personal observations about experiences they have had during the learning procedure, problems they have encountered and the way(s) they have solved them, or *think-aloud protocols* where learners are asked to perform a language task and then describe the way they completed it. Of course all of the above mentioned methods have their limitations, since learners do not always report truthfully either because they can't recall their thinking or they can't describe it in detail. It is, therefore, advisable to use more than one of the above methods when collecting data for strategy research.

However, the most frequently used method of data collection is through *questionnaires*, that is, by asking students to reflect and report on how they approach certain tasks on how they complete them. Questionnaires may be widely and often used nowadays in every piece of research, however qualities such as versatility, responsibility and simplicity of a questionnaire are crucial. Making full use of all previous research and observations, Oxford (1990) has developed her famous *Strategy Inventory of Language Learning (SILL)* which has ever since been widely used in relevant research worldwide.

Moreover, it is important to consider how the second important stage following that of collecting, namely that of data processing is dealt with. *Strategy Inventory of Language Learning (SILL)* as introduced by Oxford in 1990 has kept its reliability, validity, utility and, consequently, popularity among researchers for more than two decades. What the SILL questionnaire measures is the frequency with which a learner uses *memory, cognitive, comprehension, metacognitive, affective* and *socioaffective* language learning strategies, as described by Oxford (1990). More specifically, SILL is used to identify the level of strategy use (low, medium, high) for each strategy class and the statistical tool used to measure this frequency is the 5-grades Likert scale. Over the years almost every research all over the world uses this process in order to achieve comparable results. Nevertheless, I have the feeling that SILL has a lot more potential not yet investigated and identified and the same feeling must have other researchers, too. Hence, with present research I will try to introduce some new issues in my attempt to reveal some of the hidden potential SILL has.

1.3 Factors affecting choice of language learning strategies

Such factors include the *language being learned* (Chamot et al 1987, Politzer 1983), the relation of *language proficiency* with the selection of strategies and frequency of use (Griffiths 2003, Lan & Oxford 2003, Kantaridou 2004, Kazamia 2003), a*ge* (Peacock & Ho, 2003) and *motivation* (Gardner 1985, Kantaridou 2004, Oxford & Nyikos 1989 and Psaltou-Joycey 2003). There are also other factors such as *learning style, culture, language teaching methods, field of study/career orientation,*

beliefs and *task requirements* in instructional settings (Oxford & Nyikos 1989, Rubin 1975, Psaltou-Joycey 2008, Gavriilidou & Papanis 2010a & b, Gavriilidou & Psaltou-Joycey 2010).

Gender

As for *gender*, research evidence shows clearly a superiority of females who seem to use overall more strategies than males (Ehrman & Oxford 1989, Lan & Oxford 2003, Lee 2003, Oxford & Nyikos 1989, Peacock & Ho 2003, Politzer 1983, Sheorey 1999). Few studies (Tercanlioglu 2004, Tran 1988) have reported opposite results, while no significant differences in strategy use between the two genders is reported by Griffiths (2003) and Psaltou-Joycey (2008), when examining multinational and multicultural groups.

2. Purpose and rationale

2.1 Confidence

In SILL what the learners are asked to indicate is how often they use a strategy, i.e. frequency. However, I have the feeling that there is another important issue, not normally addressed in linguistic research, which concerns the learners' attitudes towards the specific strategy they claim they use, namely their confidence about the *effectiveness* of each specific strategy and to which extent. This parameter might prove to be very important in the language learning process as confidence is a basic ingredient of learners' strategic competence.

Confidence in association with communication strategies has been investigated by Kambakis-Vougiouklis (1990, 1992, 1995, 2001, 2002), by Intze (2011), Intze and Kambaki-Vougioukl (2009), Intze & Mathioudakis (2009), Mathioudakis (2009), and Mathioudakis & Kambaki Vougioukli (2010). More specifically, Kambakis Vougiouklis (1990, 1992a, 1992b) asks from her subjects not only to guess pseudowords of Latin and/or Greek origin but also to specify how confident they have guessed right. She claims that successful reading does not simply involve use of processing strategies (in reading) but it might need to be reinforced by readers' *confidence* in the results of their strategy use. She continues emphasizing that confidence in one's strategic competence should play an important role, first in the guessing process, which is instant communication with the author (or the speaker) and then, in the long run, in actual learning from his/her own guesses and experience. The results showed a lot of inconsistencies between accuracy and confidence as well as differences concerning gender, with males overconfident and females more balanced in most cases, yet not in every case. She concludes that learners cannot make the best out of their guessing and continue to learn from guessing because they simply do not trust their guessing; consequently strategies must be taught. Similar results she gets (1995, 2001, 2002) with young learners of Greek from the ex-USSR. Intze (2010) in her work with second language learners' accuracy and confidence of guessing, associates the term with self concept (Shavelson, Hubner & Stanton,1976) and her work concerns young high school Muslim, Turkish speaking pupils. Again she finds inconsistencies between the two factors and she also concludes that teaching strategy use is very important. Muti (2011) prefers to associate confidence with self-assessment and self-monitoring. Finally, in Mathioudakis (2009), Intze & Mathioudakis (2009) and Mathioudakis & Kambaki Vougioukli (2010), it is investigated the correlation of accuracy and confidence in guessing words from Kazantzakis' 'Odyssey', a very interesting approach of the difficult process of reading literature. The fact is that one cannot find enough references in international bibliography that uses the term confidence in any of the above mentioned perspectives. Nevertheless, as confidence might prove to be very important in every aspect of language learning process, I think that it is worth investigating it together with frequency in SILL questionnaire.

2.1.1 Confidence in SILL questionnaire

When a SILL questionnaire, as well as many other questionnaires, is used there develop some questions normally not tackled, at least to my knowledge. How familiar are the subjects of any research with certain strategies mentioned in the questionnaire? Are they sure they really employ a strategy they claim they do because they think it is effective or do they do so because they have heard the teacher or the peers mentioning it? Although one would assume that when they claim they use a strategy, they most possibly consider it effective, I have many reasons to believe, after a series of applications at different levels, that claiming they use a strategy does not necessarily mean that they

also consider it effective. However, as this has not yet been investigated, I think it is ethical to include it as a parameter and find out. Moreover, asking our subjects to express themselves in an extra, complementary parameter in each question, gives more time to the actual time of procession they have to devote to each question-choice of strategy in SILL and even some of them may finally modify their decision.

2.2 The bar [01]

The second issue introduced in this piece of research is anew statistical tool, that is *the bar [01]*, inspired from the fuzzy theory, instead of Likert scales normally and almost catholically used in questionnaires and certainly in SILL.

More specifically, a bar [01], is suggested, where 0 represents the completely negative answer/attitude and 1 the completely positive answer/attitude:

0_____1,

The issue of the bar has been investigated in a monograph by Π. Καμπάκη-Βουγιουκλή (2009) as well as in a number of papers (Kambaki Vougioukli P. and Vougiouklis Th., 2008; Kambaki Vougioukli et al, 2011 and Vougiouklis Th. and Kambaki Vougioukli P., 2011) in association with both the main stages identified in every piece of research, namely *the filling in of a questionnaire* and *the results processing.*

2.2.1 The filling in process

It concerns both the researcher(s) and the subjects; the former has to be as precise and expressive in what s/he expects from the subjects and the latter have to be able to come up to the researchers' expectations.

In order to elaborate our point let us take the following example from SILL questionnaire using the Likert scale.

How often do you use dictionaries?
Possible answers may be
0 = never, 1= almost never, 2=sometimes, 3=often, 4=always

The steps to be taken by every subject, consciously or unconsciously, while filling in the questionnaire using the above mentioned Likert scale could be as follows:

(i) Make sure s/he understands the usually fine difference between grades; this process becomes really difficult in a foreign/second language environment where the researcher could be encountered with the issue of insufficient linguistic knowledge, especially with the least sophisticated subjects. Moreover, we may be dealing with subjects who

And

(ii) Make up his/her mind which choice to go for. Not an easy job at all. If the scale has a medium the majority of the subjects will probably go for it. Let alone the fact that quite a few possible choices such as 'quite often' are not included in this specific scale.

Now, let us take *the bar* [01] suggested

0**_____1**

This time the subject can cut the bar at any point -actually infinite- s/he thinks expresses his/her attitude towards any item, at the specific moment without spending valuable time as to what each different rating means in order to decide.

0//**1**

At this point it is important to clarify that the length of the bar should be kept standard for comparisons. After a lot of applications and a lot of thought, we decided to replace the 10cm long line we had initially chosen and applied quite a few times, with the Golden Ratio of 10, i.e. 6.2. This was

done completely consciously as we found out that subjects are not familiar with this length as they were with 10 and consequently their responses were more spontaneous.

Advantages of the bar as compared to Likert scales in the filling in stage
The main advantage of the bar as compared to the classic scale on the part of the subjects is that they do not need to try and make distinction between different subdivisions, not always clear such as *good*, *quite good* and *good enough*, removing in this way a burden from the researchers who will not spend time and effort to explain fine linguistic differences to their subjects, especially the less sophisticated ones. Even more so such explanations are not necessarily objective and widely accepted. Moreover, the subject is given the initiative to make a completely free choice rather than the pre-decided ones. Actually his/her choices are infinite as any point on the continuum may represent his/her option the specific moment.

2.2.2 Results processing

The processing of the data stage mainly concerns the researcher(s). It is very important for them to have the ability to derive as much information as possible. Collecting data is a demanding process and sometimes it is wasted in only one processing. I strongly believe that there is more valuable information hidden and should be revealed and fully exploited rather left aside.

Advantages of the bar as compared to Likert scales in the results processing
The use of the bar might release some of hidden abilities/possibilities not yet being identified in SILL. More specifically, when using a Likert scale, you must decide in advance how many divisions you will use. By contrast, when using the bar, you do not have to decide from the beginning. Moreover, the same data can be processed using different subdivisions, for a number of reasons including that of comparability with different researches.

To recap, versatility of the bar gives the researchers the initiative to decide how many subdivisions will be finally used rather than the non-flexible pre-decided ones: three, four, five etc of the usual Likert scales. Subsequently, a questionnaire filled-in using a bar could be processed more than once in case the researcher may wish to make it comparable with some other researcher's work where different subdivisions have been used saving in this way time and effort.

2.3 Purpose of present research

With present research an attempt is made to reveal and activate potential a tool like SILL might have and not identified and investigated so far. If the presence of such potential is considerable, perhaps a new series of applications of SILL might follow.

In present research it is investigated:
(1) How frequently our subjects use learning strategies, (2) how confident they feel with each choice/how effective they consider each strategy, (3) what is the correlation between *frequency* and *confidence / effectiveness*, (4) what are gender differences, if any, in both variables as well as their correlations.

3. Method

3.1 Subjects

110 first year students of the Department of Greek in Komotini , equal numbers of males and females, participated. They were all volunteers and they were offered some kind of bonus for participating and filling in the questionnaire carefully and consciously.

3.2 Task(s) / Procedure

Our subjects were instructed to fill in the SILL questionnaire in Greek as well as using the bar instead of the Likert scale. Although the use of the bar was something completely new to them they seemed to understand it straight away. Their attention was also drawn to the fact that not only did they have to

indicate how often they use a strategy but also how confident they feel with each of them, or, in other words, how effective they thought each strategy is. It was this specific moment that students reacted claiming that often use implies effectiveness. They were told that this might be true or not true and anyway it was an issue to be investigated as there are cases when we may use a strategy often but we are not very confident about its value. However, we go on using it either because we are used to it or because there is not another alternative at our disposal. On the other hand, there might be cases when students might wish they knew how to make a better use of a specific strategy they realise might be effective under specific circumstances but they do not know how. They seemed to be satisfied with explanations.

All subjects filled in the complete questionnaires (an example with the two tasks required from the subjects can be found in appendix II).

4. Analysis

As it is one of the first applications of the bar with SILL and in order to make results comparable to previous research, after the test was completed the bar indications were converted into the 5/grade Likert scale normally used in SILL for all those years all over the world. However, one should keep in mind that a lot of more analyses with different degradation can be and will be done in order to observe differences occurring from different conventions.

The statistical analysis was on the SPSS computing package by a professional statistician.

5. Results

5.1 Reliability

The general Cronbach's Alpha was .917 for frequency and .913 for confidence; however, item 3, namely the compensation strategies, appears too low and this affects the total reliability of the test.

Cronbach's Alpha

	Frequency	Confidence
General	.917	.913
Memory	.654	.677
Cognitive	.821	.799
Compensation	.456*	.714
Metacognitive	.733	.714
Affective	.662	.625
Social	.791	.764

It is difficult to assign it to any reason such as problematic translation, or learners' fatigue at this stage as it needs extra investigation, even more so as confidence for compensation strategies is .714, i.e. it does not seem to have the weakness of frequency.

5.2 Results /discussion

In the appendix I at the end, there is a complete exhibition of the results of this research.

As for our research questions as posed in 2.3 above, let us start with Tables 1 and 2 as in the Appendix, which tackle the first three questions namely (1) *how frequently our subjects use learning strategies,* (2) *how confident they feel with each choice*, and (3) *what is the correlation between frequency and confidence / effectiveness.* In tables 1 and 2 there are presented the values of the correlation between the variables, different strategies, which cross among themselves horizontally and vertically. Both single asterisk $p<0.05$ and double asterisk $p<0.01$ imply quite safely that the

experimental findings could be valid for the general population-double asterisk indicating higher possibility. Now, let us attempt an interpretation of the results trying to see the correlations between different strategies. For example, let us take memory and cognitive strategies. Do subjects who report high –or low- frequency in one do the same for the other? Here, the answer cannot simply be a 'yes' or a 'no' but how strong this correlation is. Generally, the correlation indicator takes values from +1 to -1. When it is exactly +1 or -1, then we can call it the perfect correlation between the strategies examined. In our case of memory and cognitive strategies is +67**, i.e. highly positive and away from +1. This might possibly mean that subjects who report high frequency of use of memory strategies also report high use of cognitive ones. Moreover, this correlation was p=0.01, which allows us to generalize quite safely, too. Similar are the results in most cases apart from the correlation between compensation and metacognitive strategies .15, i.e. there not an asterisk and the value indicator is very close to 0, i.e. complete absence of correlation. This inconsistency with compensation strategies, which was also identified in Cronbach's Alpha and in the rest of our results, needs further investigation. Question (3), now, namely *what is the correlation between frequency and confidence / effectiveness*, as shown in Table 3 (here the correlations are difference rather than analogy): let us take for example males and females with memory strategies. Here there is a statistically significant difference p=.043, the Frequency Mean is 2.02 and the Confidence Mean 2.16. This could be interpreted as a tendency among subjects to consider this strategy effective and feel confident with it; nevertheless their use of it is less frequent than their confidence in absolute numbers. Fairly enough, one might comment that still the difference between 2.02 and 2.16 is too small. However, as this result occurs in every strategy, it needs further investigation as it might imply that learners cannot make the best out of each strategy. The only inconsistency is identified with the compensation strategies, as expected from the Cronbach alpha. Furthermore, as this is only a pilot study, it will take some more applications to reach clearer conclusions.

With the final question (4) now, *what are gender differences, if any, in both variables as well as their correlations*, similar observations could be made. In table 6, about frequency, there are some statistically significant differences between males and females in memory, p=.247, compensation, p=.141, and affective, p=228, with females' means higher than those of the males. Similarly, in table 7, about confidence, we have memory, p=.066, compensation.190 and effective, p=.113; again females' means are higher than those of the males, which implies that females are more aware of the effectiveness of a strategy. Females seem to be more skilful with strategy use than males as found in previous research (e.g. Ehrman & Oxford 1989, Green & Oxford 1995, see 1.3); moreover, they also seem to be more confident than males or at least, they seem to be confident when frequent. This result is compatible with our results with female students (see Kambaki 1992a) but not compatible with ex-USSR children or Muslim, Turkish speaking ones, where males seem to be more confident than females. However, only an indicating rather than a direct comparison can be made as not all variables coincide.

There are a lot of interesting findings one could easily locate by looking at he tables. However, as four were the main points to be addressed here and, anyway, space is limited, the rest must be left for future elaboration.

Apparently, the main conclusion derived from this experiment might be that learners seem to have realised how important the use of strategy in the process of language learning might prove to be –and this is proved by their confidence – but they do not make frequent use for a number of reasons the most important being lack of instruction and lack of time devoted to the actual application of strategies in classroom environment. Other reasons may be unwillingness and lack of time again on the part of the learners. Nevertheless, it is only a pilot study and it will take more applications and more elaboration as it is suggested in 6 below.

6. Teaching implications/ further research

As for the main teaching implication, this might be once again that strategies can and must be taught. This is implied by our subjects' indication of higher confidence than frequency in memory and cognitive strategies, which, as interpreted above, might be due to the fact that they do not know how to use these strategies, although they seem to be aware of their effectiveness, or at least, to suspect they might be effective. Something that could be done about it, in the future, could be either to have oral or written interviews with our subjects, asking them to elaborate on their choice. Such a procedure requires quick processing of the data, so that the subjects still have the picture of their answers which anyway are spontaneous and due to change; and anyway this type of problems is tackled in every research and cannot have a radical solution as it concerns human attitudes. All in all strategy

instruction, as mentioned in 1.4 above, has not been widely researched, the main reason probably being the longitudinal nature of such research which involves a lot of factors to be controlled.

Moreover, as present research is the first conducted with the specific design, actually a pilot study, the results are not and cannot be completely reliable; however they show a tendency which has to be further investigated with more subjects from different levels and ages. Moreover, it is interesting to apply follow up processing, with different subdivisions and see if there are statistically significant differences of any kind not identified in the original 5/point choice. This is the potential offered by the bar and it has to be exploited thoroughly. Finally and once again, present attempt is not to question the importance and validity of the actual questionnaire, which is undoubted, but to try alternative conventions in order to reveal new potentials, new uses of the SILL or any other questionnaire, a rather ecological action.

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APPENDIX I

	1	2	3	4	5	6
Memory (1)		.67**	.33*	.53**	.45**	.62**
Cognitive (2)	.67**		.36*	.70**	.46**	.66**
Compensation (3)	.33*	.36*		.15	.34*	.53**
Metacognitive(4)	.53**	.70**	.15		.49**	.60**
Affective (5)	.45**	.46**	.34*	.49**		.46**
Socioaffective (6)	.62**	.66**	.53**	.60**	.46**	

*$p < 0.05$, **$p < 0.001$

Table 1 Correlations FREQUENCY OF USE

	1	2	3	4	5	6
Memory (1)		.76**	.39**	.42**	.33*	.55**
Cognitive (2)	.76**		.50**	.59**	.37**	.58**
Compensation (3)	.39**	.50**		.29*	.58**	.43**
Metacognitive(4)	.42**	.59**	.29*		.46**	.51**
Affective (5)	.33*	.37**	.58**	.46**		.32*
Socioaffective(6)	.55**	.58**	.43**	.51**	.32*	

*$p < 0.05$, **$p < 0.001$

Table 2 Correlations CONFIDENCE IN STRATEGY EFFECTIVENESS

	F		C		Difference(T-Test)		
	M	SD	M	SD	M	SE	*p*
Memory	2.02	0.69	2.16	0.72	-.14	.06	.043
Cognitive	2.26	0.81	2.42	0.75	-.15	.07	.038
Compensation	2.07	0.73	2.04	0.87	.02	.09	.818
Metacognitive	2.52	0.73	2.71	0.68	-.19	.06	.013
Affective	1.93	0.81	2.21	0.82	-.28	.09	.024
Socioaffective	2.58	0.99	2.90	0.88	-.32	.08	.006
Total	2.23	0.62	2.41	0.59	-.17	.05	.003

Table 3 Differences FREQUENCY και CONFIDENCE (total, n=50)

	F		C		Difference(T-Test)		
	M	SD	M	SD	M	SE	*P*
Memory	1.90	0.77	1.98	0.76	-.07	.08	.418
Cognitive	2.18	0.89	2.35	0.84	-.16	.07	.039
Compensation	1.91	0.69	1.88	0.87	.03	.14	.824
Metacognitive	2.56	0.77	2.71	0.66	-.14	.07	.070
Affective	1.79	0.87	2.02	0.63	-.23	.16	.169
Socioaffective	2.60	0.91	2.82	0.78	-.22	.11	.060
Total	2.17	0.65	2.31	0.59	-.13	.07	.054

Table 4 Differences F και C (males, n=25)

	F		C		Difference (T-Test)		
	M	SD	M	SD	M	SE	*P*
Memory	2.18	0.61	2.35	0.64	-.21	.09	.052
Cognitive	2.33	0.73	2.48	0.65	-.15	.11	.256
Compensation	2.22	0.75	2.20	0.86	.01	.12	.916
Metacognitive	2.47	0.70	2.72	0.72	-.24	.11	.045
Affective	2.07	0.75	2.39	0.94	-.32	.12	.032
Socioaffective	2.56	1.09	2.98	0.98	-.42	.12	.019
Total	2.30	0.59	2.52	0.58	-.21	.09	.030

Table 5 Differences F και C (females, n=25)

	Males		Females		Difference (T-Test)		
	M	SD	M	SD	M	SE	*P*
Memory	1.90	0.77	2.13	0.61	-.23	.19	.247
Cognitive	2.18	0.89	2.33	0.73	-.15	.23	.515
Compensation	1.91	0.69	2.22	0.75	-.30	.20	.141
Metacognitive	2.56	0.77	2.46	-/71	.09	.21	.641
Affective	1.79	0.87	2.07	0.75	-.28	.23	.228
Socioaffective	2.60	0.91	2.56	1.09	.04	.28	.889
Total	2.17	0.66	2.30	0.59	-.13	.17	.457

Table 6 Differences males – females (F, n=50)

	Males		Females		Difference(T-Test)		
	M	SD	M	SD	M	SE	*p*
Memory	1.97	0.76	2.35	0.64	-.37	.20	.066
Cognitive	2.35	0.84	2.48	0.65	-.13	.21	.531
Compensation	1.88	0.87	2.20	0.86	-.32	.25	.190
Metacognitive	2.71	0.66	2.72	0.72	-.01	.19	.964
Affective	2.03	0.63	2.39	0.94	-.37	.22	.113
Socioaffective	2.82	0.77	2.98	0.98	-.16	.25	.527
Total	2.31	0.59	2.52	0.58	-.21	.17	.215

Table 7 Differences males-females (C, n=50)

	F		C		Difference (T-Test)		
	M	SD	M	SD	M	SE	*p*
Memory	1.90	0.77	1.98	0.76	-.07	.08	.418
Cognitive	2.18	0.89	2.35	0.84	-.16	.07	.039
Compensation	1.91	0.69	1.88	0.87	.03	.14	.824

Metacognitive	2.56	0.77	2.71	0.66	-.14	.07	.070
Affective	1.79	0.87	2.02	0.63	-.23	.16	.169
Socioaffective	2.60	0.91	2.82	0.78	-.22	.11	.060
Total	2.17	0.65	2.31	0.59	-.13	.07	.054

Table 8 Differences males-females (males, n=25)

	F		C		Difference (T-Test)		
	M	SD	M	SD	M	SE	*p*
Memory	2.18	0.61	2.35	0.64	-.21	.09	.052
Cognitive	2.33	0.73	2.48	0.65	-.15	.11	.256
Compensation	2.22	0.75	2.20	0.86	.01	.12	.916
Metacognitive	2.47	0.70	2.72	0.72	-.24	.11	.045
Affective	2.07	0.75	2.39	0.94	-.32	.12	.032
Socioaffective	2.56	1.09	2.98	0.98	-.42	.12	.019
Total	2.30	0.59	2.52	0.58	-.21	.09	.030

Table 9 Differences F και C (females, n=25)

APPENDIX II

Examples of the questionnaire given for this specific piece of research. The subjects were instructed how to fill in not only frequency but also confidence/effectiveness for each strategy they claimed they used.

1. Ψάχνω λέξεις στη γλώσσα μου που να μοιάζουν με τις λέξεις της ξένης γλώσσας.

0 ——————————————— 1

0 ——————————————— 1

2. Προσπαθώ να βρω κανόνες στην ξένη γλώσσα.

0 ——————————————— 1

0 ——————————————— 1

3. Προσπαθώ να βρω τη σημασία μιας λέξης χωρίζοντάς την σε μέρη (μορφήματα) των οποίων τη σημασία μπορώ να καταλάβω ή τη γνωρίζω.

0 ——————————————— 1

0 ——————————————— 1