Oral application of SILL questionnaire using the bar for frequency and evaluation of strategy use by Muslim pupils in Thrace¹

Penelope Kambakis-Vougiouklis¹, Persephone Mamoukari¹, Eleni Agathopoulou² & Thomaï Alexiou²

¹Democritus University of Thrace, ²Aristotle University of Thessaloniki pekavou@helit.duth.gr, pmamouka@helit.duth.gr, agatho@enl.auth.gr, thalexiou@enl.auth.gr

Abstract

Twelve Turkish-Greek bilingual learners of English were orally administered a translated version of the SILL questionnaire (Oxford 1990) and had to specify frequency of language learning strategy (LLS) use as well as confidence in the effectiveness of each strategy on a [01] bar instead of the usual Likert scales. Deviations between frequency and confidence in the results indicate that learners either appreciate the effectiveness of a strategy but they do not know how to use it or that they use a strategy without firmly believing in its usefulness, which suggests the need for pedagogical interventions to raise the learners' awareness of language learning strategies and how to use them. More proficient learners exhibit higher frequency and confidence in reported LLS use than their less proficient peers, while the age of the learners does not seem to affect LLS use.

Keywords: strategies, qualitative, bar, Likert scales, frequency, confidence, proficiency

1. Introduction

Language learning strategies (hereafter LLS) are the conscious or semi-conscious mental processes employed for language learning and language use (Cohen 2003). Given the strong evidence that strategies may facilitate language learning, strategic behavior has greatly concerned research in language learning (Chamot 2007; Ehrman & Oxford 1995; Mochizuki 1999; Oxford & Nyikos 1989; Schmidt & Watanabe 2001; Psaltou-Joycey 2003; Vrettou 2011; Wharton 2000). Moreover, there is enough convincing evidence that language learning strategies can and should be taught

¹ This study is part of the Thales project MIS 379335. It was held in the frame of the National Strategic Reference Frame (E. Σ . Π .A) and was co-funded by resources of the European Union (European Social Fund) and national resources.

(Chamot 2005; Cohen & Macaro 2007; Graham & Macaro 2008; Μανώλη 2011; Σαραφιανού 2013).

The picture that emerges from LLS research is often unclear, perhaps not surprisingly, since strategic use depends on various factors, for example, the learners' age, their target language proficiency, and the socio-cultural context (see Tragant & Victori 2012 and references therein). Moreover, discrepancies between studies may derive from differences regarding the methodological tools selected to investigate LLS use. It is with respect to the latter factor that our study differs from most previous ones on LLS in ways we explain next.

In the present study we focus on the LLS of a small number of bilingual Turkish-Greek speaking learners of English living in Thrace, Greece. Our study mainly aims at a qualitative analysis of these learners' LLS use as well as, importantly, their confidence in the effectiveness of each strategy, as measured by an oral questionnaire using the [01] bar instead of the usual Likert scales. The secondary aims of this study are to examine problematic areas in the questionnaire itself, as well as how the interaction between the learners' English language proficiency and their age may affect LLS use.

2. Previous research on the LLS use of Turkish-Greek bilinguals in Thrace

The particular population that concerns us here are Muslim secondary school learners who are born and live in Thrace, Greece. These learners have Turkish as home and community language and start learning Greek when they go to school, where instruction is in Greek. Thus, they are successive bilinguals whose L2 Greek is far from perfect and who are learning English as a Foreign Language (EFL).

There is little research concerning LLS use by the population described above. The first research of this sort was based on O'Malley and Chamot's (1990) LLS classification and employed a 36-item Likert-scale instrument written in Greek (Gavriilidou & Papanis 2010; $\Pi \alpha \pi \dot{\alpha} v \eta \varsigma$ 2008). Results showed two basic restrictions of that instrument: first, the fact that it was written in Greek affected its validity, given the learners' poor knowledge of Greek, and second, the data collected with that instrument as well as the results of the study were not comparable with other studies on LLS use, since the instrument used in the majority of such studies is the Strategy Inventory for Language Learning (SILL, Oxford 1990). On the other hand, unpublished pilot studies held by $\Pi \alpha \pi \dot{\alpha} v \eta \varsigma$ and by Gavriilidou & Papanis (op. cit.)

using a version of SILL translated into standard Turkish (Demirel 2009) showed that this version of SILL was not suitable for the specific population who speak a local variety of Turkish. Hence the main aim of the present research is to contribute towards the better exploitation of the potential of SILL with a similar population of EFL learners.

Other relevant studies that dealt with issues concerning the SILL instrument employed here as well as measurement of confidence in LLS use will be discussed in the following sections.

3. On LLS data collection and data processing

Oxford's (1990) SILL has maintained its reliability, validity, utility (Oxford 1996) and, consequently, its popularity among researchers for more than three decades. SILL measures how frequently learners use *memory, cognitive, comprehension, metacognitive, affective* and *social* language learning strategies, as described by Oxford (1990). SILL is used to identify the level of strategy use (low, medium, high) and the statistical tool used to measure this frequency is the 5-point Likert scale. Most studies on LLS have employed this measurement for comparable results. Recently, however, there have been researchers who argue that SILL has a lot more potential not yet investigated and identified. For instance, Bull and Ma (2001: 174) introduced the Learning Style-Learning Strategies addition to SILL to measure "similarity between individual learning strategies", which may raise learner awareness of LLS use and usefulness. In the present study too we introduced an alternative measurement, described next.

3.1 An alternative statistical tool: The [01] bar

In their investigation of the possible hidden potential in the SILL questionnaire, Kambaki-Vougioukli and Vougiouklis (2008) and Kambaki-Vougioukli et al. (2011) have introduced an alternative way of measuring the learners' responses. This alternative way concerns the use of a bar [01] instead of the conventionally used Likert scales on the assumption that such a tool facilitates the collection and processing of the data.

More specifically, a bar [01], 0_____1, is suggested, where 0 represents the completely negative answer/attitude and 1 the completely positive answer/attitude.

The completion of the questionnaire using a Likert scale requires that the learners fully understand the usually fine difference between grades. On the other hand, the bar allows learners to indicate their answers by cutting it at any point –actually infinite– they think that expresses their attitude towards any item. Their response to the questions is not influenced by their linguistic knowledge, as it is mostly a hands-on procedure that requires them to 'feel', sense their position on the bar, rather than consciously think of the wording or any suggested division pre-arranged for them. Replacing the discrete character of Likert scales by a fuzzy one, such as that of the bar, seems even more suitable when a questionnaire is not in the learners' mother tongue and where insufficient linguistic knowledge of the target language may distort the validity of the questionnaire. Similarly, at the results processing stage, when using a Likert scale, researchers must decide in advance how many divisions will be used. By contrast, the employment of the bar does not require such an initially predetermined decision. Moreover, the same data can be processed using different subdivisions, for a number of reasons including that of comparability with different researches.

The bar was first introduced at a length of 10 cm but was later modified at 6.2 cm, which is the Golden Ratio of 10. The reason for this change is that, as argued, since human eyes are used to the decimal system, people can easily divide a 10 cm long bar equally, which is not desirable in our case. On the other hand, a bar length of 6.2 avoids familiar divisions, leaving the participant free to choose from an infinite number of points (Vougiouklis & Kambaki-Vougioukli 2011). Finally, Kambaki-Vougioukli et al. (2011) compared the fuzzy bar with the Likert scale in an application of a departmental evaluation questionnaire among all students of the Department of Education in Alexandroupolis, Greece, asking the students to specify which method they preferred. The results yielded an overwhelming majority of 98% in favour of the bar.

3.2 Confidence as a complementary to frequency parameter

Confidence as an important, yet not systematically studied, factor in the process of language learning has been investigated in association with communication strategies (Kambaki-Vougioukli 1990, 1992a, b; Καμπάκη-Βουγιουκλή 2001) and among regular student populations (Mathioudakis & Kambaki-Vougioukli 2010). Also Intze and Kambaki-Vougioukli (2009) and Intze (2010) investigated confidence in

association with the strategy of guessing among Muslim learners of Greek as a second/foreign language and found statistically significant differences between males and females, with the latter being better at guessing and more confident too, compared to their male peers.

When questionnaires such as the SILL are used, some issues normally not tackled, at least to our knowledge, might develop. How familiar are the learners with certain strategies mentioned in the questionnaire? Are they sure they really employ the strategies they claim they do or do they think so because they have heard the teacher or their peers mentioning it? Although one would assume that when learners claim they use a strategy, they are most likely to consider it effective, we have reasons to believe that this might not probably be the case. In a series of studies (Kambaki-Vougioukli 2012; Kambaki-Vougioukli 2013; Vougiouklis & Kambaki-Vougioukli 2011) included confidence along with frequency in the SILL questionnaire, namely, the learners were asked to specify not only how frequently they used each strategy but also how confident they felt of its effectiveness. Results from these studies indicate that when the learners claim they use a strategy, this does not necessarily imply that they also consider it effective as evidenced by low confidence scores in strategies they claimed they use very often. Also, conversely, there were cases where learners claimed they did not use a strategy but nevertheless seemed confident that this strategy would really help them in language learning.

The interpretation of the above results was that when confidence is higher than frequency, then this strategy might need to be systematically taught to learners as they seem to evaluate it. If, on the other hand, there is lower confidence than the actual frequency, one could assume that the learners might use this strategy as a routine, not really appreciating it. In either case instruction is necessary before considering different action, such as excluding some strategies for the specific learners. However, given that the discussed results come from the analysis of questionnaires completed in a written form and also given the lack of opportunity to ask those who completed the questionnaire for clarifications, the above interpretation of the data needs to be further investigated.

3.3 About SILL administration and data analysis

SILL questionnaires are generally in written form and their data analysis process is usually quantitative. However, the oral administration of SILL may glean important insights by stimulating the learners' individual experiences and by allowing the expression of attitudes, feelings and behaviors, possibly opening up new topic areas. A qualitative analysis of such results, alongside a quantitative one may better explain why a particular response was given.

4. The factors of proficiency and age in LLS use

While more advanced learners generally fare better at LLS use than less advanced learners (Magogwe & Oliver 2007)², there are also studies that show no such connection (e.g. Phillips 1991). Discrepancies across studies in this respect may be due to differences between the participants' cultural background (Psaltou-Joycey 2008) and/or to the different ways in which proficiency is measured, namely, based on the learners' grades or the learners'/teachers' relevant opinions or independent proficiency tests (Tragant & Victori 2012). Also, there is the question of whether advanced strategy use is the outcome or the reason for high proficiency levels and there seems to be a bidirectional relationship between the two, and interference in both ways (Bremner 1997; Green & Oxford 1995; MacIntyre 1994; McDonough 1999).

A similar inconclusiveness in the literature regards how age affects LLS use. In short, while more mature learners are expected to be more resourceful in LLS use, such an expectation is not verified in all studies (Psaltou & Sougari 2010). Regarding the interaction between age and proficiency that interests us here, the more relevant study is the one by Tragant & Victory (2006), a study with Spanish adolescent learners of EFL, where the learners' English proficiency was based on their school grades. Results from this study showed that age affects LLS use irrespective of proficiency. Let it be noted, however, that the methodological instrument in the latter study was not the SILL questionnaire which is employed in the current study.

5. The present study

5.1 Aims and rationale

Our research questions were the following:

² This is a simplified presentation, given that proficiency also affects the types of strategies learners use more or less often. For instance, proficient learners exhibit more frequent us of cognitive and meta-cognitive strategies (Cohen 1998; Gu 2002; Nisbet, Tindall & Arroyo 2005). Such effects, however, will not concern us here.

(a) How and to what extent does the use of an extra parameter, called learners' confidence in the effectiveness of a strategy, enlighten us about LLS use?

(b) Does the version of our questionnaire contain any problematic items, i.e. items that are not well understood?

(c) Does the learners' proficiency in English (in combination with their age) affect their strategic behavior and if so, how?

5.2 The learners

The learners in our study were all Turkish-Greek bilingual Muslims, and were recruited from the first three grades of a public secondary school in Thrace. There was convenience sampling of four learners out of each grade, two of low and two of high level in English, one male, one female, thus twelve learners altogether, six males, six females. The learners' level of English language proficiency was estimated according to their performance in class and their course grades by their English teacher, who was also one of the investigators in the present research. We did not include learners of intermediate English language proficiency because previous research found differences in LLS use only between learners of low and high proficiency in the target language (Magogwe & Oliver 2007; see Psaltou-Joycey & Sougari 2010 for a review).

5.3 The instrument and procedure of administration

Our questionnaire was the Greek version of the 50-items SILL (Oxford 1990) translated and validated by Gavriilidou and Mitits (2013). Each question was followed by two separate bars. The first bar was for measuring frequency of LLS use and the second one for measuring confidence in the effectiveness of each strategy, as exemplified in Figure 1.

Ξέρω καλά τι πρέπει να κάνω για να βελτιώσω τ' Αγγλικά μου

(I have clear goals for improving my English skills)



Figure 1. An example from the SILL questionnaire employing the [01] bar for frequency and confidence

The questionnaire was orally administered to all learners during individual interviews by their English teacher. The learners explained their decision each time they marked where they cut either of the bars.

The learners had been previously instructed by the teacher-researcher about how to fill in the SILL questionnaire using the bar, which was something completely new to them; they seemed to understand it straight away. Then they were asked to pay attention to the fact that not only did they have to indicate how often they used a strategy but also how confident they felt with each of them, or, in other words, how effective they thought each strategy was. At this specific moment the learners reacted by saying that if they claim they often use a strategy, this implies they consider this strategy effective. They were then told that this might not be necessarily so and that it was an issue to be investigated. All interviews were recorded throughout, on the learners' consent.

6. Results

Within the content-analysis technique, all the answers were normalized into groups on the basis of two criteria, (a) confidence, where the deviation between frequency of use and confidence in the effectiveness of each strategy for every single question was examined and (b) the nature of certain questions and/or their wording might have caused some problems. Also, a decision was made on the (arbitrary) convention that if the difference between the confidence and the frequency scorings was 6 on the 6.2 bar, then it was negligible and no further investigation was necessary. If it were higher, we estimated that it would need investigation.

6.1 The criterion of confidence and how learners behaved towards it

The questions that concern us here are, (a) are the learners confident that the strategy they employ each time is effective so they score high confidence where they score high frequency? (b) do they use certain strategies often but they are not sure of their effectiveness, so they score lower confidence? (c) do they not often use a strategy but nevertheless score high confidence in this strategy?

Results suggest that certain SILL items are of particular interest regarding the way the learners perceive and answer these items, always in relation to the confidence factor. These items are the following. *Combining the image with the sound of a new word* (Memory strategy): Four learners scored lower confidence than frequency, not regarding it as a useful strategy, while three scored higher confidence than frequency. Also four learners scored similarly in frequency and in confidence, yet their score was low, ranging from 0.3 to 3.6. Last, only one learner scored very high on both bars (Frequency: 5.7, Confidence: 5.8).

I use flashcards with the new word on one side and the definition or other information on the other (Memory strategy): All learners exhibited a negative attitude towards this strategy, which indicates that the learners underestimate or even disregard it. Seven learners scored higher confidence than frequency while five scored equally low in both. Here, the result could be interpreted as an appeal for instruction; most of the learners seem to appreciate the strategy, as they score higher confidence than frequency.

I physically act out new English words (Memory strategy): All learners but one stated they never use physical acting as a means of language learning. However, only four of these learners scored in this strategy low confidence too, while eight learners actually thought that they could benefit if they adopted this strategy. It is worth mentioning that the four learners who did not consider physical acting important were male and seemingly with introvert personalities, as stated by the interviewer who had also been their English language teacher for two years.

I use flashcards in order to remember the new words (Memory strategy): Eight learners scored higher in confidence than in frequency while five of them had almost perfect agreement between their frequency and confidence scores, yet both scores were very low. We interpret such a result as a positive attitude towards this strategy and as an appeal for instruction, too.

I read books and magazines (Cognitive strategy): Six learners scored very low frequency but very high confidence, which may imply their need more instruction concerning this strategy.

I talk about the way I feel when learning English (Affective strategy): Eleven learners scored higher confidence than frequency, which means they appreciate the strategy but they do not use it as often as they wish, perhaps because they do not know how to do it. We believe that here we have a clear appeal for instruction.

6.2 The criterion of problematic areas

There were certain 'grey zones' in the questionnaire itself that might possibly need attention/revision.

(a) Questions that are not easily understood and need further explanation

I use rhymes to remember new English words' (memory strategy): three of the learners needed further clarification in order to fully understand the question, due to the fact that the use of rhymes is not frequented in the Greek system. These learners were given examples and the interviewer did not continue until they were comfortable with the question. There were also two other learners who, although asked no questions about this strategy, looked puzzled and so the interviewer gave them some examples. Finally, there was one learner who answered after some pause and hesitation.

I give myself a reward or treat when I do well in English (affective strategy): although all students understood and gave their answers, some hesitation was recorded leading the interviewer to give more details and examples. Two students, laughed (laughter as a communication strategy) and two made a rather long pause.

I try not to translate word-for-word and I read English without looking up every new word: There was a lot of confusion with these two items. All the high-level learners (hereafter HL learners) scored closer to the far right end of the bar, thus, stating that they do not translate nor look up every word in dictionaries. The low-level learners (hereafter LL learners) scored closer to the left end of the bar (0), which means they actually translate and look up words in dictionaries. However, when the learners were asked to justify their choice of frequency regarding this strategy, there was the following difference between the HL and the LL learners: while the formers' explanations were in compliance with their answers in the questionnaire, the LL said that they neither translate nor look up words in dictionaries. Recall that the questionnaire was in Greek, so given that the learners were grouped as HL and LL according to their English language proficiency, this between-group difference seems puzzling. As we, unfortunately, do not have information about these learners' proficiency in Greek, we can only speculate based on anecdotal evidence that in the school under investigation, as well as in other similar schools in Thrace, Turkish learners who do well in Greek, also do well in English while those who remain poor

in Greek, often do not do well in English either³. Therefore, maybe the LL learners also had low proficiency in Greek too, which may explain why they misunderstood these SILL items.

The above prove the important advantage of the oral application of SILL, combined with individual interviews, namely, that it allows clarifications and may prevent from wrong assumptions. Last, the negatively worded items discussed are problematic and may need to be reworded.

(b) Questions that appear to be redundant

'I ask English speakers to correct me when I talk' and 'I ask for help from English speakers' appeared quite similar and the learners told the researcher that one of them could have been avoided.

6.3 The criterion of language proficiency and age

Most of the HL learners exhibited high confidence in most of the questions they scored high frequency, too. Such a behavior probably indicates that they consciously employ certain strategies.

In particular, HL first graders confidence scores are either higher or similar to those of frequency yet not reaching the far right end of the bar- usually after the middle, i.e. 4-5.5. The difference between frequency and confidence becomes greater in questions that relate to the way they learn vocabulary and they mainly concern compensation strategies. Similarly, HL second graders score very high in confidence, often reaching 6.2, yet their frequency is mostly lower and only in some cases similar to their confidence levels. From their comments, one could assume that they are particularly aware of their language learning processes and the way they can achieve higher proficiency, even if they may not always apply the strategies. The fact that there is still some difference between frequency and confidence scores might indicate that there is need for strategy instruction. As for the HL third graders, they also appear to have particularly high confidence in social strategies as well as in many other strategies where their scores reach 6.2. Their scores in frequency and confidence are quite similar, probably indicating that these learners use the strategies they feel confident with. The only strategies in which they exhibit some deviation in favor of confidence are memory strategies.

³ This anecdotal evidence is offered by educators in the area where the school is situated, as well as by our learners' teacher of English who is also one of the authors of the present paper.

In the LL group, first graders appear to have very high confidence, much higher than their frequency scores, in most of the social strategies. They score 6.2 in confidence in all apart from '*I try to learn about the culture of English speakers*'. As for frequency, they score low between 2 and 3.5. They also had great differences in their frequency-confidence scores overall, with frequency being very low ranging from 1 to 4 while confidence ranges between 5.5 and 6.2. Quite similarly, most of the LL learners in second and third grades appear to have low frequency, very similar to that of the first LL graders. Their confidence is higher than frequency but it seldom reaches the far end (6.2), unlike the scores of first graders. However, as their confidence scores are higher than those in frequency, one could assume that they also seek for more assistance with strategy use. Strikingly enough, most of the LL learners of all three grades do not believe that knowledge about the civilization of the target language might enhance their learning, as attested by their low confidence and frequency score in this strategy.

7. Discussion

Let us first state the obvious limitation of the current study, which is its small number of participants. Future research with a larger sample would allow quantitative analyses and correlations that would provide more valid conclusions. The above limitation should also be taken into serious consideration as, due to the way of the administration of the suggested instrument –oral administration and interviews– the fact that it cannot be applied to a large number of learners provides us with very restricted data. With the above important limitation in mind, we tentatively came to realize the following.

Concerning the first question of our research about whether confidence affects learners' choice of strategy, we have seen that in a number of items there was great deviation between frequency and confidence. This could imply an appeal for instruction, as the learners appear to be confident that the specific strategy might help them, even if their frequency of use indicates that they do not use the strategy in an extensive scale that often or even not at all in some cases. This is an important finding as it demonstrates the difference between what is used and what is considered useful. Such an assumption would have been impossible without the introduction of the parameter of the confidence and without the use of the bar.

As for the second question, if there are certain problematic items in the questionnaire, we have identified at least two that need to be revised: *I try not to translate word-for-word* and *I read English without looking up every new word* because the answer '*never*', for example, might be ambiguous and either be interpreted as '*I never try not to translate*' which implies '*I always translate*', or, by contrast, as '*I never translate*'. Probably, these two items need to be reworded into a positive mode (see Dörnyei 2003, as well as Roszgowski & Soven 2010 for suggesting similar improvements in questionnaires).

Finally, concerning the third research question, namely how proficiency in English, combined with age, affects the learners' strategic behaviour, it is clear that it does. The HL group are moving from comparatively high confidence and lower frequency scores to gradually higher and more rationally balanced frequency and confidence scores. Regarding LL learners, however, while first graders exhibit similar behaviour to that of their HL peers, second and third graders do not seem to develop in the same way as their HL peers: their frequency and confidence scores remain unbalanced, with their confidence higher than frequency indicating that they still do not know how to use strategies. Such results indicate that proficiency in English plays a more important role in the learners' performance than age. While this findings may support results in studies which show that proficiency is a major factor in LLS use (see Section 4), they are unlike the results in Tragant and Victory's (2006) study with Spanish adolescents where only age but not proficiency affected LLS use (see Section 4). Nevertheless the difference between our results and those in the latter study may be due to that the two studies do not share the same methodological instruments and to that there are cultural differences between participants in the two studies. Clearly, then, the interaction between age and proficiency in LLS use is an issue that needs further investigation.

8. Conclusion

As a general conclusion, we could point out that apart from certain improvement and/or changes that need to be performed on the questionnaire to make it more appropriate for the specific learners, the need for instruction is apparent as it will boost the learners' confidence in the strategies' effectiveness and it will probably encourage and reinforce their self-study. Moreover, the format of the data-collection could be adapted, so as that a bigger number of participants could be included, and therefore more valid information could be extracted through the use of a differentiated format of the same questionnaire, aiming to its massive application to groups of learners, receiving little or even no aid by their interviewer.

References

- Bremner, S. 1997. Language learning strategies and language proficiency: Causes or outcomes? *Perspectives 9.* Retrieved 18 April 2012 from: http://sunzi1.lib.hku.hk/hkjo/view/10/1000125.pdf
- Bull, S. & Y. Ma. 2001. Raising learner awareness of language learning strategies in situations of limited resources. *Interactive Learning Environments* 9: 171-200.
- Chamot, A.U. 2005. Language learning strategy instruction: Current issues and research. *Annual Review of Applied Linguistics* 25: 112-130.
- Chamot, A.U. 2007. Accelerating academic achievement of English language learners: A synthesis of five evaluations of the CALLA Model. In J. Cummins & C. Davison (eds), *The International Handbook of English Language Learning, Part I.* Norwell, MA: Springer Publications, 317-331.
- Cohen, A.D. 1998. Strategies in Learning and Using a Second Language. London: Longman.
- Cohen, A.D. 2003. The learner's side of foreign language learning: Where do styles, strategies, and tasks meet? *International Review of Applied Linguistics in Language Teaching* 41(4): 279-291.
- Cohen, A.D. & E. Macaro. 2007. Language learner strategies: 30 years of research and practice. Oxford, UK: Oxford University Press.
- Demirel, M. 2009. The validity and reliability study of Turkish version of strategy inventory for language learners. *World Applied Sciences Journal* 7(6): 708-713.
- Dörnyei, Z. 2003. *Questionnaires in second language research: Construction, administration, and processing.* Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Ehrman, M.E. & R. Oxford. 1995. Cognition plus: Correlates of adult language proficiency. *The Modern Language Journal* 79 (1): 67-89.
- Gavriilidou, Z. & L. Mitits. 2013. Adaptation of the Strategy Inventory for Language Learning (SILL) for students aged 12-15 into Greek: A pilot study. *Paper presented at the 21st International Symposium of Theoretical and Applied Linguistics*, School of English, Aristotle University of Thessaloniki.
- Gavriilidou, Z. & A. Papanis. 2010. The effect of strategy instruction on strategy use by Muslim pupils learning English as a second language. *Journal of Applied Linguistics* 25: 47-63.
- Graham, S. & E. Macaro. 2008. Strategy instruction in listening for lower and intermediate learners of French. Language Learning 58(4): 747-783.
- Green, J.M. & R. Oxford. 1995. A closer look at learning strategies, L2 proficiency, and gender. TESOL Quarterly 29(2): 261-297.
- Gu, P.Y. 2002. Gender, academic major, and vocabulary learning strategies of Chinese EFL learners. *RELC Journal* 33(1): 35-54.
- Intze, P. 2010. Accuracy and confidence in Modern Greek vocabulary of native and non native speakers in Western Thrace (in Greek). Unpublished PhD thesis, Democritus University of Thrace, Greece.
- Intze, P. & P. Kambaki-Vougioukli. 2009. Lexical guessing: Accuracy and confidence of pupils of Greek as a first or second language. *Journal of Applied Linguistics* 25: 65-83.
- Καμπάκη-Βουγιουκλή, Π. 2001. Γλωσσική αποκατάσταση παιδιών επαναπατριζομένων από την πρώην ΕΣΣΔ: Μια ψυχογλωσσική προσέγγιση. *PHASIS*, ICPBMGS, 4: 71-81, LOGOS, Tbilisi, Georgia.
- Kambaki-Vougioukli, P. 1990. Lexical decomposition as a strategy for guessing unknown words: Users' competence and confidence. Eric Document Reproduction Service No.ED., 328 096.

- Kambaki-Vougioukli, P. 1992a. Greek and English readers' accuracy and confidence when inferencing meanings of unknown words. *Proceedings*, 6th International Symposium on The Description and/or comparison of English and Greek. Komotini: Democtitus University of Thrace, 89-112.
- Kambaki-Vougioukli, P. 1992b. Accuracy and confidence of Greek learners guessing English word meaning. Unpublished PhD dissertation, University of Wales.
- Kambaki-Vougioukli, P. 2012. SILL revisited: Confidence in strategy effectiveness and use of the bar in data collecting and processing. In Z. Gavriilidou, A. Efthymiou, E. Thomadaki & P. Kambaki-Vougioukli (eds), *Selected papers of the 10th ICGL*, Komotini, Greece, Democtitus University of Thrace, 342-353.
- Kambaki-Vougioukli, P. 2013. Bar in SILL questionnaire for multiple results processing: Users' frequency and confidence. *Sino-US English Teaching* 10(3): 184-199.
- Kambaki-Vougioukli, P., A. Karakos, N. Lygeros & T. Vougiouklis. 2011. Fuzzy instead of discrete. Annals of Fuzzy Mathematics and Informatics (AFMI) 2(1): 81-89.
- Kambaki-Vougioukli, P. & T. Vougiouklis. 2008. Bar instead of a scale. Ratio Sociologica 3: 49-56.
- MacIntyre, P.D. 1994. Toward a social psychological model of strategy use. *Foreign Language Annals* 27: 185-195.
- Magogwe, J.M. & R. Oliver. 2007. The relationship between language learning strategies, proficiency, age and self-efficacy beliefs: A study of language learners in Botswana. *System* 35: 338-352.
- Μανώλη, Π. 2011. Συμβολή των στρατηγικών στην εκμάθηση γλωσσών. Παρουσίαση στην ηλεκτρονική πλατφόρμα Ταζίδι στο γραμματισμό, http://www.literacy.gr/strathgikes. Ανακτήθηκε στις 23/6/2014από το https://www.academia.edu/6247442/_
- Mathioudakis, N. & P. Kambaki-Vougioukli. 2010. The adjectival identity of Ulysses in Kazantzakis' ODYSSEY through the fuzzy sets. Retrieved 18 July 2014 from: http://www.eens.org/EENS_congresses/2010/Mathioudakis_Nikolaos_Kambaki-Vougioukli_Penelope.pdf
- McDonough, S.H. 1999. Learner strategies. Language Teaching 32(1): 1-18.
- Mochizuki, A. 1999. Language learning strategies used by Japanese university students. *RELC* 30(2): 101-113.
- Nisbet, D.L., E.R. Tindall & A.A. Arroyo. 2005. Language learning strategies and English proficiency of Chinese University students. *Foreign Language Annals* 38(1): 100-107.
- O'Malley, J.M. & A.U. Chamot. 1990. *Learning strategies in second language acquisition*. Cambridge: Cambridge University Press.
- Oxford, R.L. 1990. Language learning strategies: What every teacher should know. New York: Newburry House.
- Oxford, R.L. 1996. Employing a questionnaire to assess the use of language learning strategies. *Applied Language Learning* 7: 25-45.
- Oxford, R.L. & M. Nyikos. 1989. Variables affecting choice of language learning strategies by university students. *The Modern Language Journal* 73 (3): 291-300.
- Παπάνης, Α. 2008. Στρατηγικές εκμάθησης των Μουσουλμανοπαίδων της Θράκης που μαθαίνουν την αγγλική ως ξένη γλώσσα. Διδακτορική Διατριβή, Τμήμα Επιστημών της Εκπαίδευσης στην Προσχολική Ηλικία, Δημοκρίτειο Πανεπιστήμιο.
- Phillips, V. 1991. A look at learner strategy use and ESL proficiency. CATESOL Journal 4: 57-67.
- Psaltou-Joycey, A. 2003. Strategy use by Greek university students of English. In E. Mela-Athanasopoulou (ed.), *Selected Papers of the 13th International Symposium of Theoretical and Applied Linguistics*, School of English, Aristotle University of Thessaloniki, 591-601.
- Psaltou-Joycey, A. 2008. Cross-cultural differences in the use of learning strategies by students of Greek as a second language. *Journal of Multilingual and Multicultural Development* 29(3): 310-324.

- Psaltou-Joycey, A. & A.-M. Sougari. 2010. Greek young learners' perceptions about foreign language learning and teaching. In A. Psaltou-Joycey & M. Mattheoudakis (eds), Advances in Research on Language Learning and Teaching: Selected Papers. Thessaloniki: The Greek Applied Linguistics Association, 387-401.
- Roszkowski, M.J. & M. Soven. 2010. Shifting gears: Consequences of including two negatively worded items in the middle of a positively worded questionnaire. Assessment & Evaluation in Higher Education 35(1): 113-130.
- Σαραφιανού, Ά. 2013. Στρατηγικές εκμάθησης της ζένης γλώσσας: Η άμεση και ενσωματωμένη διδασκαλία τους στα πλαίσια εφαρμογής ενός παρεμβατικού προγράμματος καλλιέργειας στρατηγικής εκμάθησης των Αγγλικών σε μαθητές Λυκείου. Αδημοσίευτη διδακτορικη διατριβή, Δημοκρίτειο Πανεπιστήμιο.
- Schmidt, R. & Y. Watanabe. 2001. Motivation, strategy use, and pedagogical preferences in foreign language learning. In Z. Dörnyei & R. Schmidt (eds), *Motivation and second language acquisition*. Honolulu, Hawaii: University of Hawaii Press, 313-359.
- Tragant, E. & M. Victori. 2006. Reported strategy use and age. In C. Munõz (ed.), Age and foreign language learning rate. The BAF project. Clevedon: Multilingual Matters, 208-236.
- Tragant, E. & M. Victori. 2012. Language learning strategies, course grades, and age in EFL secondary school learners. *Language Awareness* 2: 293-308.
- Vougiouklis, T. & P. Kambaki-Vougioukli. 2011. On the use of the bar. *China-USA Business Review* 10(6): 484-489.
- Vrettou, A. 2011. *Patterns of language learning strategy use by Greek-speaking young learners of English*. Unpublished PhD dissertation, Aristotle University of Thessaloniki.
- Wharton, G. 2000. Language learning strategy use of bilingual foreign language learners in Singapore. *Language Learning* 50(2): 203-244.