An innovative electronic device for the implementation and processing of SILL questionnaire applied on Muslim pupils in Thrace

Penelope Kambakis-Vougiouklis
Democritus University of Thrace
pekavou@helit.duth.gr

Persephone Mamoukari
Democritus University of Thrace
mamoukarip@gmail.com

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

As stated by Cohen (2003) language learning strategies (LLS) are the conscious or semi-conscious mental processes employed for language learning and language use. Previous research has given strong indications 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; Psaltou-Joycey 2003; Schmidt & Watanabe 2001; Vrettou 2011; Wharton 2000). Moreover, there is enough convincing evidence that language learning strategies can and should be taught (Chamot 2005; Cohen & Macaro 2007; Graham & Macaro 2008; Μανώλη 2011; Σαραφιανού 2013)

However, LLS research cannot provide clear and definite conclusions, 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 current 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; Παπάνης 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 Παπάνης (2008) as well as by Gavriilidou and Papanis (2010) 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

An instrument that is considered to be reliable and very popular and useful (Oxford 1996) among researchers for more than three decades, is Oxford's (1990) SILL. 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

Kambaki-Vougioukli and Vougiouklis (2008) as well as Kambaki-Vougioukli et al. (2011), in their investigation of the possible hidden potential in the SILL questionnaire, 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.

In order to have the questionnaire completed using a Likert scale the learners were required to 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 initial length of the bar was10 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

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

However, the use of questionnaires such as the SILL, might raise some issues not easily tackled, at least to our knowledge. 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; Vougioukli & 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), 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). There are studies that have shown that proficiency affects the types of strategies learners use more or less often, as for example, proficient learners use more frequently cognitive and meta-cognitive strategies (Cohen 1998; Gu 2002; Nisbet, Tindall & Arroyo 2005). 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-Joycey & Sougari 2010). Regarding the interaction between age and proficiency that interests us here, the more relevant study is the one by Tragant and 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:

(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 learners' proficiency in English (in combination with their age) affect

their strategic behavior and if so, how?

(c)   Does the learners' gender affect their strategic behavior and if so, how?

5.2 The learners

The subjects chosen were students in a State Secondary school. They were all Turkish-Greek bilingual Muslims (from the same cultural and religious background), recruited from the first three grades of a public secondary school in Thrace, randomly chosen, students of mixed ability level, both advanced and beginners. There was convenience sampling of four learners out of each grade, two of low and two of high level in English, two male, two female, thus twenty-four learners altogether, twelve males, twelve females.

There were eight students from every grade, a, b and c, four of whom were boys and four girls. Out of each sub-group of the four students, there were two boys and two girls. The total number of the students was twenty-four (beginners and advanced, boys and girls). 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).

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 (2016). The participants would answer the questions using the bar (Καμπάκη-Βουγιουκλή 2009), as in a previous study of a smaller scale, cutting the bar according to frequency and confidence level.

The questions were followed by a bar measuring the frequency and then another bar/question asking the student if s/he was confident that the strategy used helped him/her. So, each question was followed by two separate bars. The first bar is measuring frequency of LLS use and the second one 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)
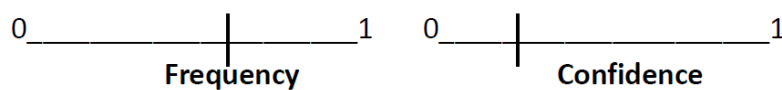
0_____\|_____1   0____\|_____1
Frequency   **Confidence**

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

All the questions were answered on a computer with the aid of an electronic application especially developed for this particular study. The questionnaire was electronically administered to all learners 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. The students read the questions on their computer screen, and were able to cut the bar accordingly, or even go back and change their initial score. There were 50 questions from the SILL questionnaire, having each question followed by a question checking the subject's confidence, overall 100 questions – bars to be answered - marked. The questions were read silently by each individual. If there was need for explanation the students asked the researcher, and instant clarification was provided. The clarification was given aloud and could be heard by the rest of the students. Their answers were saved only after all the questions had been answered. After saving their answers, the scoring was displayed in the form of numbers, starting from 0 to 6.2, depending on where the bar had been cut by each student.

6. Results

Before conducting this SPSS analysis it should be pointed out that there has been random sampling out of the three grades in the same public high school. The proficiency level was determined according to their performance in the classroom, judged by their English teacher through a placement test. In the current research there

is normal distribution of data. The majority of the data are normally distributed as both *p* values are more than 0.05 close to zero, consequently the distribution does not deviate from normal.

In SPSS statistics, we separated the groups for analysis by creating a group of independent variables (Class, Gender, Proficiency). A one-way ANOVA between groups (school class, gender, proficiency) was conducted to investigate the differences between frequency of strategy use and the confidence of the subjects as to whether and to what extent those strategies enhance their language learning. For the current study the variables chosen were the Memory strategies, eight strategies/variables, investigating frequency followed by eight questions investigating confidence in the effectiveness of their use:

1. I try to combine old with new knowledge in English
2. I use the newly acquired English words in sentences to remember them
3. I connect the sound of an English word with an image in order to remember it
4. I use rhymes to remember the new English words
5. I use flashcards to remember the new English words
6. I act out the new English words
7. I frequently revise
8. I remember the new English words and phrases because I have seen them printed
9. Confidence - I try to combine old with new knowledge in English
10. Confidence - I use the newly acquired English words in sentences to remember them
11. Confidence - I connect the sound of an English word with an image in order to remember it
12. Confidence - I use rhymes to remember the new English words
13. Confidence - I use flashcards to remember the new English words
14. Confidence - I act out the new English words
15. Confidence - I frequently revise
16. Confidence - I remember the new English words and phrases because I have seen them printed

The test compared:

- the Beginners and Advanced conditions (proficiency)

- the Male and Female conditions (gender)
- the Class A, Class B, Class C conditions (age)

6.1 Memory strategies across grade

The following strategy was statistically different regarding the frequency of the strategy use and the confidence of its effectiveness ($p = 0.05$):

"Confidence - I remember the new English words and phrases because I have seen them printed".

The means did not present statistically significant differences between groups as determined by one-way ANOVA ($F_{2,21} = 4.58$, $p = 0.02$). All classes appear to be making use of the strategy, however not to a great extent as most of the class groups score at around 3.5 within a scale of 1-6.2. However, the post-hoc Sidak test revealed that there are no statistically significant differences between Class A and B, as well as Class B and C. There seems to be significant difference between Class A and C. The students in Class C have a much higher score regarding their confidence that the strategy is helpful.

This could be interpreted as a need for further instruction of the potential benefit from the use of the strategy in Classes A and B. However, since in Class C there seems to be a higher score in confidence, it could be assumed that the students become more conscious learners as they get older and more mature. Therefore, there is the realisation that their learning might actually be enhanced through the strategy, even though it is not extendedly used:

Class A
Frequency: "Remember printed words" ($M = 3.61$, $SD = 1.58$)
Confidence: "Remember printed words" ($M = 3.18$, $SD = 1.31$)
Class B
Frequency: "Remember printed words" ($M = 3.65$, $SD = 1.62$)
Confidence: "Remember printed words" ($M = 3.85$, $SD = 1.47$)
Class C
Frequency: "Remember printed words" ($M = 3.89$, $SD = 1.95$)
Confidence: "Remember printed words" ($M = 5.03$, $SD = 0.82$)

6.2 Memory strategies across Gender

Comparison was conducted between groups across gender (male - female) investigating the following Memory strategies that revealed significant statistical differences:

"I frequently revise" and *"Confidence - I frequently revise"*.

According to the means the "Con-Frequently revise" variable is significantly different between the two groups both in frequency and confidence ($F_{1,22} = 9.56$, $p = 0.005$). The female students scored higher both in frequency and confidence, almost double, compared to the male students. This strategy was the only one out of the eight mnemonic strategies that had a higher score, only on the part of the female participants. This could be interpreted as a clear need for instruction of the particular strategy use:

Female students - frequency ($M = 4.89$, $SD = 1.12$)
Male students - frequency ($M = 2.37$, $SD = 1.89$)
Female students - confidence ($M = 5.45$, $SD = 0.79$)
Male students - confidence ($M = 3.60$, $SD = 1.92$)

"I try to combine old with new knowledge in English".

According to the means the "I try to combine old with new knowledge in English" variable is significantly different between the two groups ($F_{1,22} = 6.26$, $p = 0.02$):
Female students - frequency ($M = 4.15$, $SD = 1.65$)
Male students - frequency ($M = 2.42$, $SD = 1.73$)

"I use the newly acquired English words in sentences to remember them".

According to the means the "I use the newly acquired English words in sentences to remember them" variable has statistically significant differences between the two groups ($F_{1,22} = 5.34$, $p = 0.03$):

Female students - frequency ($M = 4.05$, $SD = 1.56$)
Male students - frequency ($M = 2.33$, $SD = 2.05$)

"I connect the sound of an English word with an image in order to remember it".

According to the means the "I connect the sound of an English word with an image in order to remember it" variable is significantly different between the two groups ($F_{1,22} = 5.04$, $p = 0.03$):

Female students - frequency ($M = 3.55$, $SD = 1.61$)

Male students - frequency ($M = 2.05$, $SD = 1.64$)

"I remember the new English words and phrases because I have seen them printed"

According to the means the "I remember the new English words and phrases because I have seen them printed" variable is significantly different between the two groups ($F_{1,22} = 8.02$, $p = 0.01$):

Female students - frequency ($M = 4.56$, $SD = 1.23$)

Male students - frequency ($M = 2.88$, $SD = 1.64$)

"I use rhymes to remember the new English words"

According to the means the "I use rhymes to remember the new English words" variable is not significantly different between the two groups ($F_{1,22} = 1.47$, $p = 0.23$):

Female students - frequency ($M = 2.50$, $SD = 2.03$)

Male students - frequency ($M = 1.55$, $SD = 1.82$)

Female students - confidence ($M = 2.27$, $SD = 1.57$)

Male students - confidence ($M = 1.22$, $SD = 0.89$)

"I use flashcards to remember the new English words".

According to the means the "I use flashcards to remember the new English words" variable is not significantly different between the two groups ($F_{1,22} = 2.70$, $p = 0.11$). However, the scoring in frequency was one of the lowest scorings in both groups regarding the Mnemonic strategies, indicating that both genders do not make use of the certain strategies and do not feel they could enhance their learning accordingly:

Female students - frequency ($M = 2.17$, $SD = 1.73$)

Male students - frequency ($M = 1.13$, $SD = 1.34$)

Female students - confidence ($M = 2.89$, $SD = 1.80$)

Male students - confidence ($M = 2.12$, $SD = 2.06$)

"I act out the new English words"

According to the means the "I act out the new English words" variable is not significantly different between the two groups ($F_{1,22} = 1.30$, $p = 0.26$). However, the scoring in frequency was one of the lowest scorings in both groups regarding the

Mnemonic strategies, indicating that both genders do not make use of the certain strategies and do not feel they could enhance their learning accordingly:

Female students - frequency ($M = 2.00$, $SD = 1.71$)

Male students - frequency ($M = 1.16$, $SD = 1.91$)

Female students - confidence ($M = 2.58$, $SD = 1.99$)

Male students - confidence ($M = 1.22$, $SD = 1.73$)

Overall, the female students scored higher both in frequency and confidence compared to the male students. This is evident to the majority of the eight memory strategies that present a higher score, only on the part of the female participants. Most of the Memory strategies seem to be underestimated by the particular group of students (24 Muslim students) and are not used as a learning tool. In particular, the male students using the strategies "I use rhymes to remember the new English words" and "I act out the new English words", scored low both in frequency and confidence, stating that they neither use the strategy nor are they confident that it is helpful towards their learning. This could be interpreted as a clear need for instruction regarding the strategy use. More specifically, in the above-mentioned strategies the students scored equally low in frequency and confidence. The scorings in these strategies were the lowest in both groups, in frequency and confidence, indicating that both genders neither use certain strategies nor feel they could enhance their learning accordingly, indicating that regardless of the gender, there is evident need for strategy instruction.

6.3 Memory strategies across Proficiency

"Confidence - I try to combine old with new knowledge in English"

A one-way ANOVA between groups (male - female) was conducted to check if the means are different between frequency of strategy use and the confidence of the two groups, as to whether and to what extent those strategies enhance their language learning.

According to the means the "Confidence - I try to combine old with new knowledge in English" variable is significantly different ($F_{1,22} = 8.44$, $p = 0.08$) between the two groups in confidence:

Beginners - confidence ($M = 3.15$, $SD = 1.24$)

Advanced - confidence: ($M = 4.66$, $SD = 1.29$)

"Confidence - I use flashcards to remember the new English words"

According to the means the "Confidence - I try to combine old with new knowledge in English" variable is significantly different between the two groups in confidence ($F_{1,22} = 6.17$, $p = 0.021$). It appears from the scoring in frequency that the beginner students use it more than the advanced ones. Moreover, as far as confidence is concerned the beginners indicate higher levels of confidence, while the advanced record less confidence that the strategy is actually useful:

Beginners - confidence ($M = 3.39$, $SD = 1.61$)

Advanced - confidence ($M = 1.62$, $SD = 1.87$)

Beginners' Frequency ($M = 2.04$, $SD = 1.77$)

Advanced Frequency ($M = 1.25$, $SD = 1.39$)

"Confidence - I act out the new English words".

According to the means the "Confidence - I act out the new English words" variable is significantly different between the two groups in confidence ($F_{1,22} = 5.82$, $p = 0.02$):

Beginners - confidence ($M = 2.77$, $SD = 1.85$)

Advanced - confidence ($M = 1.02$, $SD = 1.68$)

Beginners' Frequency ($M = 2.20$, $SD = 2.08$)

Advanced Frequency ($M = 0.96$, $SD = 1.33$)

The beginner students state that they do not use it but indicate some belief that it might actually be useful, whereas the advanced students state little use and equally little confidence that the strategy might enhance their learning.

"Frequently revise" and "Confidence- Frequently revise".

According to the means the "Con - Frequently revise" variable is significantly different between the two groups both in frequency and confidence ($F_{1,22} = 0.98$, $p = 0.33$):

Female students - frequency ($M = 4.89$, $SD = 1.12$)

Male students - frequency ($M = 2.37$, $SD = 1.89$)

Female students - confidence ($M = 5.45$, $SD = 0.79$)

Male students - confidence ($M = 3.60$, $SD = 1.92$)

The strategies that were statistically significant (0.005) either positively or negatively correlated were the following:

"I use the newly acquired English words in sentences to remember them"

Advanced: The results revealed that these two variables are positively correlated (significant $r = 0.622^*, p = 0.031$)

"I use flashcards to remember the new English words"

Advanced: The results revealed that these two variables are positively correlated (significant $r = 0.780^{**}, p = 0.003$)

"I frequently revise"

Advanced: The results revealed that these two variables are positively correlated (significant $r = 0.865^{**}, p = 0.000$)

"I remember the new English words and phrases because I have seen them printed"

Advanced: The results revealed that these two variables are positively correlated (significant $r = 0.619^*, p = 0.032$)

The students who were less proficient in L2 did not employ the above strategies; however, they considered that they might be helpful towards their learning, if employed. Therefore, the level of the frequency of use was not in accordance with the level of their recorded confidence. It could be the case that less proficient students have difficulty in applying such strategies that require them to actively participate and use the newly acquired words in sentences, with the fear of making mistakes and being exposed.

7. Conclusion

Although using the electronic form of the SILL questionnaire both saves the researcher time and is more fun to use, as most of the students feel very comfortable using a computer, the questionnaire itself appears to be rather too long, as there are the initial questions of SILL, each followed by a question checking the student's confidence. Therefore, certain improvements or changes need to be performed on the questionnaire to make it more appropriate and shorter for the learners.

Moreover, the need for instruction is apparent in order to boost the learners' confidence in the strategies' effectiveness and encourage and reinforce their self-

study, making them more autonomous learners. The adaptation of the data-collection format (electronic answer assessment) with little aid provided by the interviewer enables the researcher to include a bigger number of participants and consequently provide more valid information.

Nevertheless, the length of the questionnaire exceeds the average levels of patience of young learners who frequently feel tired and impatient towards the end of the questionnaire. A suggestion to this problem would be a careful choice of the most representative questions, so as to make the electronic questionnaire more flexible and massively applicable to a greater number of different learners.

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