Investigating the fuzzy areas of accuracy and confidence of muslim pupils-learners of Greek as Second Language in Thrace Greece

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1 Introduction

In recent years there has been an increasing interest in teaching Greek as a second/foreign Language among Muslim, Turkish speaking populations of Thrace. The majority of the Muslims in Thrace may have grown up in an environment where the official language is Greek, however, they speak either Turkish and/or Pomak but do not speak a word of Greek. They usually come in contact with Greek for the first time if they decide to go to a state school, primary or secondary, where instruction is in Greek but even then, they can hardly construct a simple sentence in Greek. Things can get more complicated linguistically as young pupils will also have to attend English and, sometimes, French or German as compulsory subjects in the curriculum. These children will hardly deal with Greek in their school years and they usually go to study in Turkey.

Given the specific situation, we have every reason to believe that the main source for the poor performance of those children at school is mainly the low level of their linguistic competence in the Greek language, which is also transferred into any other subject taught in this language. Consequently, we feel that it constitutes a real challenge in all purely scientific-linguistic and educational-pedagogical levels, to contribute to the identification of the problem and suggest ways to deal with it.

2 Research background

2.1 Guessing as a processing strategy

Guessing from context is considered to be one of the most popular strategies employed by both native and non-native speakers in the process of reading and communicating. Researchers such as Kambakis-Vougiouklis (1993, 1995) and, more recently, Shynkaruk & Thompson (2006) point out that readers usually search for *cues or clues* anywhere in the surrounding context. Context, in this specific type of research, includes both the use of the known words by the reader while the wider context includes pragmatic or extralinguistic information.

It is a fact that every foreign language learner (FLL) has experienced frustration more than once, when is unable to bridge the gap between intended message and actual message. In order to cope with such difficult communicatively situations, learners use communication strategies (CS), which are some kind of *first aids* (Scholfield, 1981) techniques in situations of imperfect knowledge of a foreign language.

A few writers have considered the role that CS play in the learning process (Kelly 1990, Kambakis-Vougiouklis 1992a, 1992b, 1993, 2001, Psaltou-

Joycey 2001, Gavriilidou and Papanis 2009). Furthermore, it has not yet completely clarified what distinguishes CS from other types of strategies, namely learning (LS) and processing strategies (PS) in reading.

2.2 Accuracy of guesses

Accuracy of the message preserves communication. Successful reading or communication we have when the message is perceived exactly as sent. Of course it is very important for FLLs to be trained to evaluate their hypotheses and to be able to estimate when an assumption has a good degree of possibility to be true or accurate.

Accuracy could be affected by a number of factors such as lack of intralinguistic or extralinguistic knowledge, inadequate strategic competence and finally gender or social class. Therefore, accuracy cannot be achieved in a guessing process when the subjects underestimate a 'good' information or, overestimate a negligible one. We believe that this limitation of accuracy as a dependant variable, could be compensated for by another parameter, that of *confidence.*

2.3 Confidence in one's guesses

Confidence is not measured or taken into consideration in any way by lexical guessing researchers despite the fact it might prove to be of crucial importance for FLLs, especially if we expect that CS could be transformed into LS. The dependent variable of confidence might supply us with more information about the subjects' attitude towards the accuracy of their guesses. What is impressive about such a parameter is that we are talking about a variable judged by the subject and nobody can intervene with his/her decision. The only case that would affect subjects' decision is more or different type of information, or feedback about the *objective accuracy*.

Kambakis-Vougiouklis, (2001, 2002 in Greek), was the first to investigate confidence as a factor that might affect learners' strategic competence. In a series of experiments, with native (NSG) and non- native speakers of Greek (NNSG), she made some interesting observations about the profile of such learners. She actually found that overall the NNSG had lower performance than NSG but the correlation of accuracy—confidence appears to be imbalanced among the NNSG.

Based on the results of those experiments, we conducted a series of experiments, in fact pilot studies, in Komotini, during the years 2005-2006. In the experiments (Ιντζέ, 2007, 2009) there were involved both native (NSG) and non-native speakers of Greek (NNSG). The analysis yielded results similar to those of Kambakis-Vougiouklis. These means that boys was less accurate-more confident and girls more accurate-less confident. The NSG, again, had a better correlation between accuracy and confidence.

3 Purpose and rationale

Based on the results of previous experiments by Kambaki-Vougioukli (1990, 1992a, 1992b, 1993, 2001, 2002) and the pilot studies by Intze (ibid), we focused our investigation on NNSG, pupils in Thrace. The purpose of our

investigation was to study the linguistic characteristics of NNSG as well as the degree of both their accuracy and confidence in a reading comprehension.

As for accuracy, we do not expect statistically significant differences between males and females, because all the pupils of the specific study attend the same State School and belong to similar socioeconomic background. As for confidence, we expect males to be more confident than females. The important issue is to see whether their accuracy-confidence correlations will be better balanced than in the pilot studies, due to socioeconomic homogeneity. Furthermore, we expect lower accuracy level for the NNSG than that of the NSG used as a comparison group and higher accuracy levels for the pupils whose parents are better educated for both NSG and NNSG. We do not expect differences in parameters such as *part of speech.*

4 Method

4.1 Participants

The sample of our final experiment consisted of male and female pupils, all attending the Second class (13-14 years old) of the Greek State School, in the Prefectures of Xanthi and Rhodopi.

(a) From the Prefecture of Xanthi there were selected the *3rd* and *the 6th High Schoo*l where all the pupils Graekophone either NSG or NNSG.

(b) From the Prefecture of Rhodopi there were selected the *Minority High School* and the *Seminary High School of Komotini* attended only by Muslim NNSG. We also selected the *4th High School of Komotini* and *the Sapes High School* attended by Graekophones, both NSG and NNSG.

The NNSG were the target group while there was a comparison group consisting of NSG. The final number of the participants was 290, 155 males and 135 females.

4.2 Instrumentation

The tools of the investigation were (a) a questionnaire and (b) a text in Greek.

(a) The questionnaire

The questionnaire was divided in two parts: (i) the first part included personal information including time and place of birth, school and gender. (ii) The second part concerned information about the parents of the participants such as education, their fluency in Greek.

(b) The Greek text

The text chosen was «Στη θέση του άλλου», by Πολυχρονοπούλου-Ζαχαρόγιωργα Στ., which was selected from the handbook of the third grade, i.e. the grade the pupils were to attend the following year. This was consciously done in order to avoid pupils having read or looked at it. After the text was typed, we wiped out 12 items, 4 verbs, 4 nouns and 4 adjectives, leaving a blank. The three specific parts of speech were chosen as they are very frequently used and they are primary grammatical categories.

The type of test was a '*filling in the gaps'* and there was some degree of freedom as they could supply any word they could think of and fitted the context, which gave them a lot of information, too.

4.3 Design

The dependent variables (DV) were (a) accuracy of guesses and (b) confidence on the part of the subjects that the guess they had made was correct to some extent.

The independent variables (IV) were (a) the experimental variable *part of speech,* and (b) the subject variable subjects' NL: i) Greek as first or second language, ii) gender, iii) residence, iv) parents' education, v) parents'l fluency in Greek.

The scoring of accuracy was made according to the Likert five-point scale:

- Zero (0) for a completely wrong answer
- One (1) for an almost wrong answer
- Two (2) for answers with enough information in the semantic or syntactic level.
- Three (3) for an answer that might have some spelling or gender error.
- Four (4) for a completely correct answer

Therefore, the maximum should be 4x 12=48.00 for the twelve items.

For confidence we used the following 5-point scale:

- Zero (0) = I am extremely unsure of my choice
- One (1) = I am rather unsure of my choice
- Two (2) = I am between sure and unsure
- Three (3) = I am reasonably sure
- Four (4) = I am absolutely sure of my choice

Therefore, the maximum should be again 12X4=48.

At this point we should make it clear that subjectivity on both the part of the subjects and the researchers is difficult to avoid. We also consider both accuracy and confidence as *fuzzy areas* (Zadeh 1965) as the criteria used to define them cannot be strictly defined and that is the reason why in many instances we consider more than one answers as correct.

4.4 Procedure

The research was embedded in the time table of the school as a game. We told the pupils that our text was left out in the rain and some words had been wiped out and we wanted them to help us restore the original text.

As for the time, according to our pilot studies, we planned the test for a 45 minutes session, the conventional period of a teaching hour at high school.

5 Results

The text was filled in by all 290 pupils. Their total accuracy and confidence reached an average of 30,10 and 33,26 respectively. The correlation between these two parameters is quite high, 0,696.

Then we worked out the correlations of accuracy and confidence with the variable of *gender*. The descriptive statistics of *gender-confidence* correlation revealed that all the 155 males scored an average 33,37 and all the 135 females 33,13. This is not a statistically significant difference: $t(288) = 0,195$ $p > 0,05$.

The descriptive statistics for the *gender-accuracy* correlation yielded the result that males came up with 28,38 average, while females 32,07. Quite impressively, there is a statistically significant difference here: t (288) = 2,0024 $p < 0,05$.

Gender seems to play an important role in the accuracy of answers of students. The girls gave more correct answers, maybe, because they comprehended the text better and they were able to decode the information of the text.

The next correlation we were interested in was that of accuracy and confidence with age. At this point we should make it clear that even small age differences may play a very important role as far as both accuracy and confidence is concerned and that was something we thought it was worth testing. Pupils were divided into three age groups: <14, 14, >14. The results justified our hypothesis, as there was observed strong effect of age upon confidence F (2,85,168) = 36,651, $p < 0,05$, r = 0,453.

More specifically, there is a statistically significant difference between groups <14 and 14, <14 and >14.

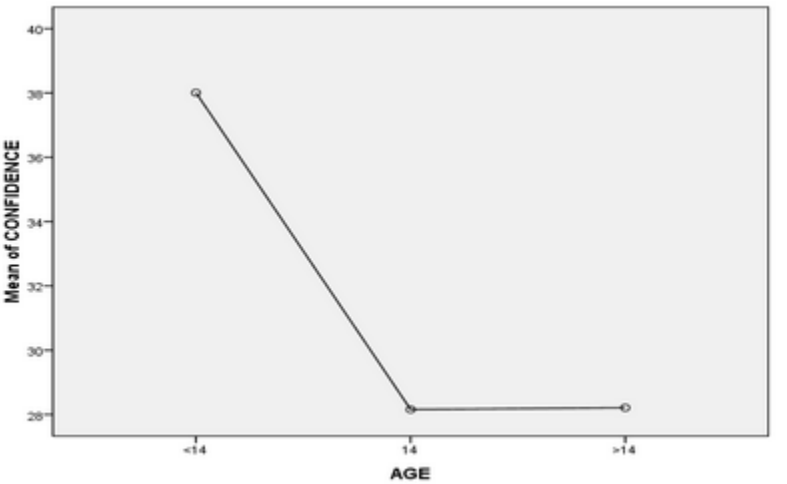

Figure 1. Correlation of confidence-age

As for accuracy we also have F (2, 87,639) = 82,507, $p < 0,05$, r = 0,603. More specifically, there is a statistically significant difference between age groups <14 and 14, <14 and >14, as before.

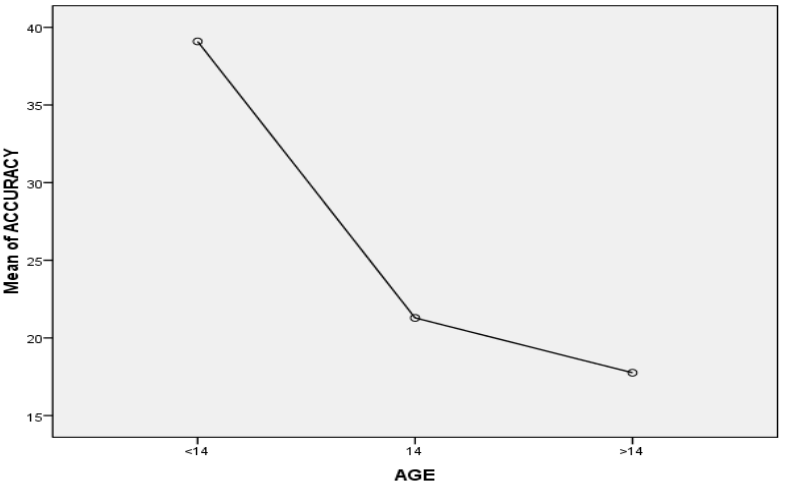

Figure 2. Correlation of accuracy-age

Age influenced considerably both confidence and accuracy of subjects. While age of students develops, it seems that confidence also increases (Λεονταρή 1998, Καψάλης 2006) and, at the same time accuracy also increases (Byrne 1996, 2002).

6 Further Research

In our research we still have to investigate the correlation of confidence and accuracy with mother tongue and residence of students, their school, parents' education and Greek language level as well as the interaction of these factors with confidence and accuracy. When the processing of results is complete, we will publish our findings, which we expect might clarify certain details, shed light on obscured areas and give some food for further research.

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