OPEN ACCESS

The linguistic profile of Greek students as non-native speakers of Spanish in writing

Chrysovalantou Kapeta

Aristotle University of Thessaloniki

Abstract		Conference Article

The investigation of common linguistic elements among Greek students as non-native speakers of Spanish contributes to the creation of an innovative database to highlight the eases and difficulties in the production of written language. The purpose of this research is to highlight mainly the morphological, grammatical, syntactic and lexical characteristics of Greek higher education students for the Spanish language as an elective course, offered by the Department of Italian Language and Literature of the Aristotle University of Thessaloniki. Thus, 60 samples were randomly collected from a total of 104, carefully digitized manually in Word 10 format and transferred to a readability tool for the Spanish language. Then, the results of this phase were transferred to the statistical tool Tableau from where the final results were extracted. The final product led the study to the following conclusions: 1. Male Greek students produce relatively satisfactory A1 level Spanish texts in terms of the degree of difficulty, as do female Greek students. Elements such as a sufficient number of words, characters and sentences, understanding instructions, the use of correct vocabulary, and the evaluator's final grade per examination period gave relatively positive results for the profile of Greek students in the production of Spanish texts. The present research may stimulate future researchers at a national and international level to form a broader database for non-native speakers of foreign languages who learn foreign languages within universities for the construction of even more up-to-date educational materials and unified tests intended for non-native speakers.

Keywords: Non-native, university, level, readability, examination, profile.

Introduction

The use of readability formulas over the last eighty years has increasingly brought to the fore the creation of more reliable tests, especially when it comes to learning foreign languages in higher education (Heydari, 2012).

At the Greek university, and specifically at the Aristotle University of Thessaloniki, learning the Spanish language is offered by the Department of Italian Language and Literature to all other departments as an elective course as there is no (yet) autonomous department of Spanish Language and Literature.

It is therefore interesting from a linguistic point of view to investigate the profile of Greek students as non-native speakers of Spanish in terms of their morphological, grammatical, syntactic and lexical characteristics in order to better understand their vulnerabilities and difficulties in the production of written Spanish texts (Fernández & Pozzo, 2017).

On the other hand, identifying the strengths and weaknesses of Greek students as a whole student population, but also individually per student and gender, contributes to the formation of the profile of Greek students, who choose the Spanish language voluntarily without it being a mandatory subject (Fearrington et al., 2013).

A new database on the performance of students producing simple sentences and texts (Restrepo-Ramos, 2021) at the beginner language level (A1) in a foreign language, which they neither know nor systematically attend as a compulsory course, may serve as a trigger for further studies.

In other words, based on the principles of this study, a future broader database at a national and international level can contribute to the production of innovative educational material (Maslova et al., 2020), more reliable tests (Kapeta, 2024) and more modern readability measurement formulas (Kapeta, 2021) for non-native speakers, mainly University students (Ghani et al., 2021).

Thus, the following objectives will be developed:

1. What is the difference between male and female Greek students in terms of difficulty or ease (degree of readability) when producing written Spanish texts (Albarracín-Vivo et al., 2024)?

2. What morphological, grammatical, syntactic and lexical elements influence the production of A1 level Spanish texts by Greek non-native speakers of Spanish (Montrul, 2011)?

3. What are the ease and/or difficulties in producing sentences, words, and characters in Spanish by exam period and gender (Kuiken & Vedder, 2019)?

4. How can a text targeting the A1 language level be distinguished, i.e. with which variables can it be correlated if the sample is specifically identified as A1 level (Musca et al., 2011)?

In conclusion, the results of this specific research in Greece could highlight the importance of language learning within the university campus as it is now a multicultural academic environment for optimizing the use of languages by students with the ultimate goal of creating language proficiency certification tests through university institutions specifically designed for non-native speakers (Zelenicka et al., 2023).

Materials and Methods

First of all, it should be noted that the collection of the samples was not difficult as the researcher had a total of 104 samples available, which were provided by the Department of Italian Language and Literature of the Aristotle University of Thessaloniki without any obstacles.

The period of the collected 60 samples out of 104 concerns examination periods from 2016-2025. Therefore, there is a large range of results since it concerns a total of 9 consecutive years except for some periods that are not included because of COVID-19.

The collection of 60 reports was carried out by random draw and, in the second stage, they had to be digitized with great care since the process was carried out manually by converting the samples into digital Word 10 format.

This phase was very demanding and time-consuming because all the samples had to be transferred along with the authors' errors, so that the research results would ultimately be reliable and true.

During the third phase, the samples were transferred to the readability measurement tool for the Spanish language, from which the main results were obtained.

Transferring these results to an Excel file in the fourth phase, as well as transferring them to the statistical analysis tool in the fifth phase, also proved to be very time-consuming and tedious to avoid falsifications regarding the final product of this study.

The last phase completes the development of the final product as it includes the most basic variables, which determine the linguistic profile of Greek students in terms of the production of written texts at the A1 language level (Figure 1).
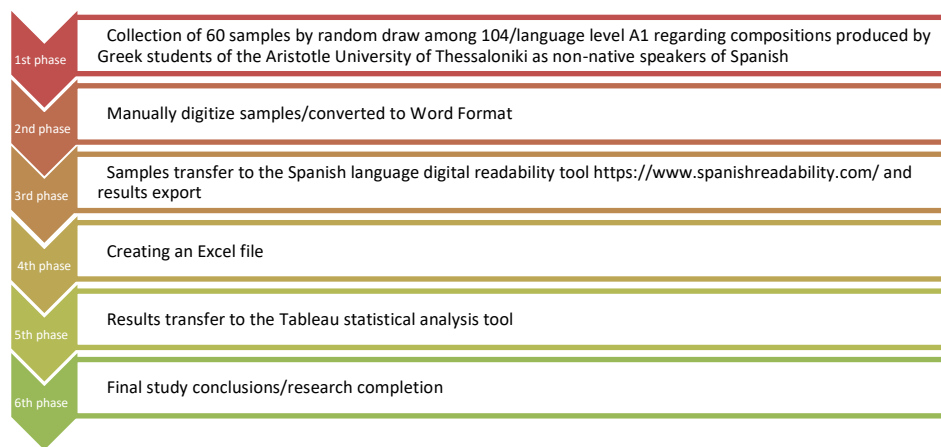

1st phase — Collection of 60 samples by random draw among 104/language level A1 regarding compositions produced by Greek students of the Aristotle University of Thessaloniki as non-native speakers of Spanish

2nd phase — Manually digitize samples/converted to Word Format

3rd phase — Samples transfer to the Spanish language digital readability tool https://www.spanishreadability.com/ and results export

4th phase — Creating an Excel file

5th phase — Results transfer to the Tableau statistical analysis tool

6th phase — Final study conclusions/research completion

Figure 1: The 6 phases of research methodology

Results and Discussion

Starting the analysis of the results, it should be mentioned that the Greek evaluation system in higher education has a base grade of 5 and an excellent grade of 10.

The second figure will analyze the performance of Greek students by year and examination period and the evaluation grade on the first line of the figure.

Additionally, with an excellent grade (10), it is observed on the right of the figure that the majority of the samples reached 100% for level A1. That is, 8 students from the February 2019 examination period, 7 students from June 2023, 3 students from September 2016 and 1 student from September 2019 managed to meet the maximum grade.

On the contrary, only 2 students obtained a grade of 2, which is well below the base in February 2019, while 5 students obtained a grade of 3 in the same examination period, also below the base.

A grade of 3 was also received by one student from the February 2023 examination period, one from September 2019 and one from September 2024.

However, focusing attention on the entire figure, a large spectrum of students can be distinguished, who managed to respond positively to the exams, reaching the base but also scoring above the base.

In conclusion, it can be considered that in general, the majority of Greek students were able to produce simple A1 level Spanish texts without particular difficulty.

This result seems to be positive overall since these are authors and examinees that are not native Spanish speakers, but choose Spanish as a second or third foreign language at University.
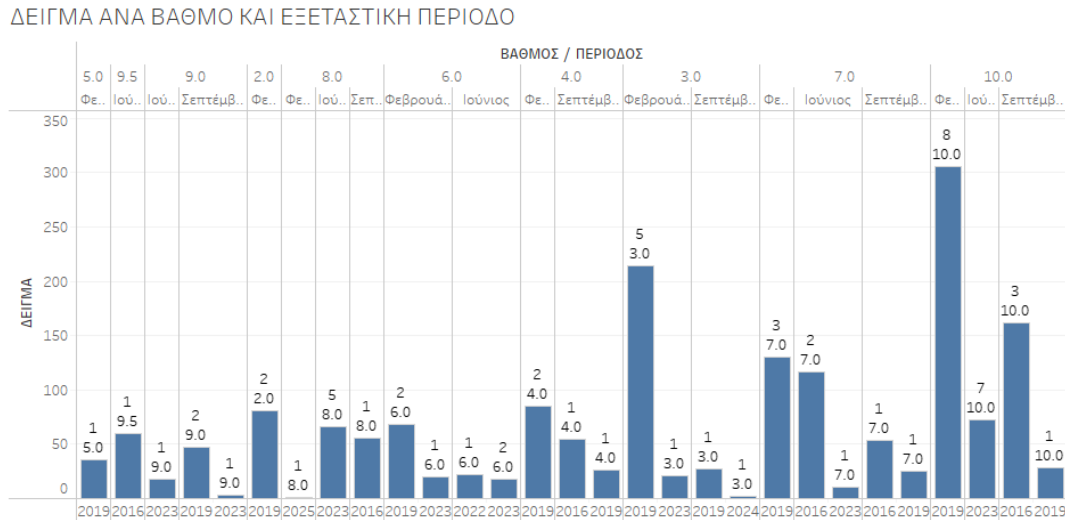
Figure 2: Sample by grade and examination period

In the next figure (figure 3), the average final score per sample and examination period can be seen, as well as the total number of samples and also the number of samples that have been evaluated with a score below the base.

Furthermore, during the January/February 2018/2019 examination period, an increased number of participating Greek students was observed (43 samples), of which 16 samples were scored around 6.1 grade.

On the contrary, during the period of June 2023, several samples (24 in total) are also presented, one of which is below the base.

However, observing the average score, in the first case we have a score of 6.1 and in the second, a score of 8, that is quite high and close to the excellent grade (10).

From these results, we can assume that most Greek students responded with relative ease overall, while a few seemed to have difficulty compared to the rest.

Also, although attendance was minimal at some times, those who participated in the exam managed to pass the base at 100%, such as in September 2023, when only 3 students participated but all 3 tried to reach an average score of 9, a very encouraging fact given that these are non-native speakers of the Spanish language.

We would draw exactly the same conclusion for the February 2025 examination period with one student reaching an average grade of 8, in June 2022 and February 2023 with one student respectively reaching an average grade of 6, also very positive results compared to only approximately 4 samples that were scored below the base with grade 3 (1 sample in September 2024 and 1 in February 2022) and other 2 samples in June 2016 with grade 4.7, which are all lower than the majority of all 60 samples according to each examination period separately.
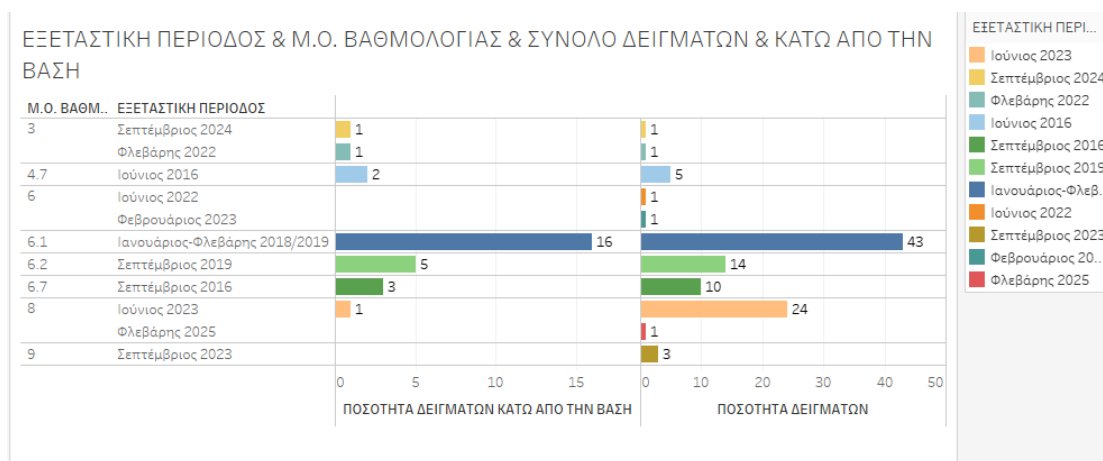
Figure 3: *Average final score total number of samples & number of samples scored below the base per examination period*

Examining the evaluation grade per grade average and gender of each student, in Figure 4 below, although male students did not participate in all examination periods, those who did take part appear to have used a greater average number of characters in written production than their female colleagues, across the widest range of scores.

What is striking about this figure is that male students were rated with grades 6, 8, 9 and 10, meaning all above the base grade (5).

Also, those male students who received a grade of 9, almost excellent, used an average of 510 characters compared to female students (330.3 characters), a very positive result if we consider that these students probably do not know Spanish at all.

On the other hand, even those female students who competed but received a score below the base used an equally high number of characters, between 164.3 and 227.4 on average, is also a very positive result.
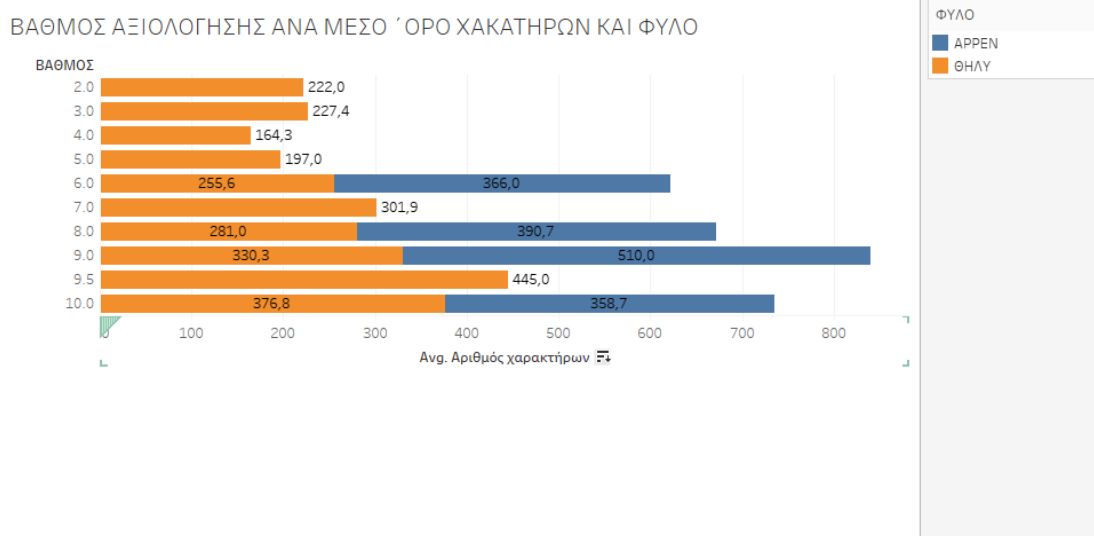

Figure 4: *Score per average of characters and gender*

The fifth and final figure depicts the samples by Spanish level and their distribution in each age group.

In other words, the majority of the samples, i.e. 40 in total, seem to be fairly easy and correspond to the 10-11 year old age group based on the Spanish language proficiency level.

The average to normal level, i.e. 19 samples, range in the age range of 12-14 years, while only one sample reaches the slightly difficult level, i.e. 14-16 years.

The above results may have been formed by the fact that Greek students include simple and everyday vocabulary, simple and short sentences (usually main sentences and slightly a main and a subordinate clause with some conjunction like "y" (and), compound verbs like "comer" (eat) but with correct use of grammar, correct use of punctuation, more Spanish words written correctly and not anglicized.

For the A1 language level, these results are partly expected because these Greek students do not attend, for example, tutoring Spanish courses, nor do they come from the Department of Spanish Language and Literature.
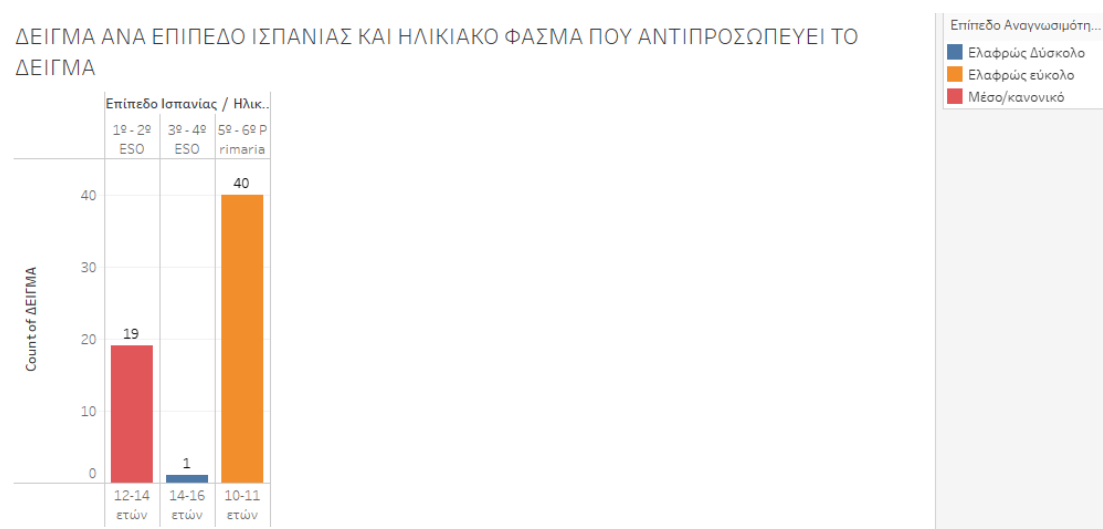

Figure 5: Sample by level in Spain and age range represented by each sample

In conclusion, it should be noted again that all these results concern Greek students who are examined in the Spanish language course voluntarily at the Aristotle University of Thessaloniki as they voluntarily choose the specific course from different departments.

At this stage, samples of advanced language levels, e.g. B2 or C2 level, could not be collected since there are currently no Spanish exams being conducted at levels other than A1 at the Aristotle University of Thessaloniki.

The positive image obtained overall from this research provides the impetus for further study of Spanish and other languages within higher education in Greece and internationally because the collection of more data would contribute to a deeper analysis of foreign language learning in Greek universities and also other universities abroad.

The eases and difficulties that Greeks or, better, non-Greek students of a language being examined often face, should perhaps be taken into account when designing especially exams for non-native candidates within higher education.

At the same time, however, special educational material for non-native speakers could be prepared in this way and a language proficiency certification exam could be conducted within university units, thus expanding the choice of more languages and language levels, and their use through transnational research programs.

Finally, it would be useful if in the future special readability formulas were constructed for texts produced by non-native speakers for an even more reliable evaluation with less human intervention during the final evaluation of the texts.

Acknowledgments

References

Albarracín-Vivo, D., Encabo-Fernández, E., Jerez-Martínez, I., Hernández-Delgado, L., 2024. Gender Differences and Critical Thinking: A Study on the Written Compositions of Primary Education Students. In *Societies 2024, 14(7), 118.* https://doi.org/10.3390/soc14070118

Fearrington, J. Y., Parker, P. D., Kidder-Ashley, P., Gagnon, S. G., McCane-Bowling, S., Sorrell, C. A., 2013. Gender differences in written expression curriculum-based measurement in third-through eighth-grade students.In *Psychology in the Schools, 51(1).* https://doi.org/10.1002/pits.21733

Fernández, S. S., Pozzo, M. I., 2017. Intercultural competence in synchronous communication between native and non-native speakers of Spanish. In *De Gruyter Brill*.

Ghani, K. A., Noh, A. S., Yusoff, N. M. R. N., Hussein, N. H., 2021. Developing Readability Computational Formula for Arabic Reading Materials Among Non-native Students in Malaysia. In: *Alareeni, B., Hamdan, A., Elgedawy, I. (eds) The Importance of New Technologies and Entrepreneurship in Business Development: In The Context of Economic Diversity in Developing Countries. ICBT 2020. Lecture Notes in Networks and Systems, vol 194.* Springer, Cham. https://doi.org/10.1007/978-3-030-69221-6_147

Heydari, P., 2012. The Validity of Some Popular Readability Formulas. In *Mediterranean Journal of Social Sciences,* 3(2). Doi:10.5901/mjss.2012.v3n2.423

Restrepo-Ramos, F., 2021. Writing to Increase Complexity:Spanish L2 Learners' Complexity Gains in a College Composition Class. In *Hispania, 104(4)-John Hopkins University Press.*

Kapeta, C., (2024). Basic elements for determining the language level and the Readability grade in text production. International Conference on Science, Innovations and Global Solutions. (pp. 222-229). In *Futurity Research Publishing*. https://futurity-publishing.com/international-conference-on-science-innovations-and-global-solutions-archive/

Kapeta, C., (2021). *Written Production: Which criteria are useful for measuring the Linguistic Level and the Level of Text Difficulty?* 8th International Conference on Language, Literature & Linguistics 2021 from 26-27 July 2021 at the National University of Singapore Society, Singapore.

Kuiken, F., Vedder, I., 2019. Syntactic complexity across proficiency and languages: L2 and L1 writing in Dutch, Italian and Spanish. In *International Journal of Applied Linguistics, 29(2).* https://doi.org/10.1111/ijal.12256

Maslova, I., Burdina, G., Krapotkina, I., 2020. The Use of Electronic Educational Resources and Innovative Educational Technologies in University Education. In *iJET, 15(16).* https://doi.org/10.3991/ijet.v15i16.14909

Montrul, S., 2011. Morphological errors in Spanish second language learners and heritage speakers. In *Studies in Second Language Acquisition , 33, Special issue 2: The Linguistic Competence of Heritage Speakers, June 2011, 163 – 192.* Cambridge University Press. DOI: https://doi.org/10.1017/S027226311000072 0

Musca, S. C., Kamiejski, R., Nugier, A., Méot, A., Er-Rafiy, A., Brauer, M., 2011. Data with hierarchical structure: impact of intraclass correlation and sample size on type-I error. In *Front. Psychol., 20;2:74.* doi:10.3389/fpsyg.2011.00074

Zelenicka E., Pavlova R., Csalova O., Burcl P. Language Testing and Certification in an International Context. In *Integration of Education. 27(1):155–170.* doi: https://doi.org/10.15507/1991-9468.110.027.202301.155-170