THE EFFECTIVENESS OF MODERN BOARD GAMES IN TEACHING GREEK AS L2 TO ADULT LEARNERS

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Abstract:

The important role of communicative competence in foreign language learning highlighted the need for the use of task-based or content-oriented activities within the foreign language instructional context. Several studies have recently focused on such activities and, in particular, on the use of games (Peters, 2015; Petrovic, 2007; Yaccob & Yunus, 2019); their findings have attracted researchers' interest as they underlined the positive effects, they seem to have on the development of language proficiency (Bush, 2015; Lan, Van & Huyen, 2019; Nguyen & Nga, 2003). Some of these studies have examined the effect of games on learners' language development, competency and motivation in learning an L2 (Marzano, 2010; Stavy, Subon & Unin, 2019; Tuan, 2012), while others have focused on students' and teachers' attitudes towards their use in language classrooms (Hamzah & Dourado, 2010; Lawrence & Lawrence, 2013; Reyes-Chua & Lidawan, 2019). However, what has not been adequately researched is the impact of board games on adult students and their systematic integration and use within the language curricula (Phuong & Nguyen, 2017). In this study, we aim to present two different types of modern board games which have been adjusted for the teaching of Greek as a foreign language at B1 level (according to CEFR). The games were used to practice vocabulary and grammar as well as promote interpersonal communication according to the syllabus of the School of Modern Greek (2010). The study will compare the use of board games with conventional activities and tasks so as to assess their effectiveness as a tool in the adult foreign language classroom.

Keywords: foreign language teaching, board games, Greek as L2, adult learners

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1. Introduction

According to Yaccob and Yunus (2019), there are two types of games; digital and non-digital or physical games. The former ones include videogames (pc games, console games, mobile games) and educational games. Although nowadays digital games seem to be more popular in students' everyday life, they do not exhibit any human interaction and seem to promote a more passive gameplay. Of course, another limitation of digital games is their dependence on technology, which is not always available in school classrooms (Razak & Eswaran, 2013). On the contrary, non-digital games, such as board games, are usually more interactive, as they provide opportunities for physical action and interaction among two or more people. In addition, the implementation of board games is easier in language classrooms, as they do not require access to technology but only a track, meeples, dice and cards (Wu, Chen & Huang, 2014).

All language games may be considered to be based on the principles of Communicative Language Teaching, as, by default, they are based on and further promote learner-centeredness, meaningful collaboration and interaction, involve the use of authentic materials, focus on meaning and use of linguistic forms in context, and require teachers to act as facilitators rather than as instructors (Richards & Rodgers, 2001). Language games may be used for practicing mainly speaking, listening, reading and vocabulary, while they encourage students to use language spontaneously and creatively and offer variety to the lesson's repertoire. A well-designed game provides students with the incentive to play the game, again and again, thus boosting memorization and facilitating retrieval. Apart from that, games create an engaging and playful atmosphere where students are neither inhibited from making mistakes nor excluded if they do not know the answer (Treher, 2011).

According to Wojtowicz et al., (2011), Game-Based Learning (GBL) is a valuable resource also for CLIL purposes. Content and Language Integrated Learning (CLIL) is "a dual-focused educational approach in which the focus is not only on the content, and not only on the language (Coyle et al., 2010). In particular, CLIL provides an environment for naturalistic language learning where implicit teaching dominates, incidental learning is expected and meaning-based instruction is central (Mattheoudakis, 2019). Similarly, the use of board games in the classroom provides opportunities to discuss hypotheses or the proposed solution, while it enables the spontaneous use and repetition of certain vocabulary. The cognitive processes and demands of engaging with subject content and concepts in a language that is not the learners' first language (L1) can be also associated with the development of higher-order thinking skills and independent learning (Lister, 2022). In the same way, GBL requires learners to engage appropriate cognitive processes with increased speed of processing, sensitivity to environmental inputs, or flexibility in allocating cognitive and perceptual resources (Anderson & Bavelier, 2011).

1.1. Theoretical background
Over the past few years, an increasing number of studies have used language games to examine their impact on language acquisition, learners' competency and motivation in

learning a language, focusing on a variety of language areas and skills. Stavy, Subon and Unin (2019) conducted a study in order to examine the impact of language games on students' vocabulary retention in a rural primary school in Malaysia. This study employed a one group pre-test and post-test design; the same group of students acted both as the experimental and the control group. 64 participants were taught new words using conventional teaching methods for two weeks. The same students were taught some more new words using six different games and after two weeks they took the post-test. The findings revealed that learners were able to retain significantly more words when these were taught via the use of games than when they were taught with the use of conventional teaching methods.

Omar and Said (2019) applied puzzle-based learning activities to identify their effect on young learners' vocabulary acquisition and learners' views regarding these activities. Their research involved 29 primary school pupils at a Malaysian rural school and data were collected through a set of pre- and post-tests as well as through a semi-structured interview. Scores from the tests and feedback from the interviews suggested that Tarsia puzzle helped learners to improve their vocabulary knowledge, offered a sense of achievement and promoted collaboration among the participants. In their case study, Dolati and Mikaili (2011) tried to empirically evaluate the effectiveness of their instruction through games and assess the acquisition of course content material among 70 female students at an Iranian primary school, between the age of 12 and 13 years old. Based on participants' scores in the pre- and post-test, researchers found that all participants of the experimental group achieved different levels of improvement in their mastery of vocabulary. In addition, the use of games motivated and engaged learners, while they gave a good opportunity to the shy ones to be more active.

Regarding the effectiveness of language games on the acquisition of grammar, few articles have addressed the effectiveness of games in grammar instruction (Cam & Tran, 2017) and even fewer ones have presented interventions to prove their positive impact on students' language acquisition. One of the studies carried out by Al-Jarrah, Talafhah and Al-Jarrah (2019) investigated the impact of educational games on English as a Foreign Language (EFL) students' achievement in grammar. In particular, 62 eleventh grade students in a high school in East Jerusalem participated in the study; these were divided into experimental and control groups, with both groups completing a pre- and a post-test. The experimental group was taught grammar via the use of educational games for two months, while the control group was taught the same language phenomena via traditional teaching methods[ii]. The results revealed no significant differences between groups on the pre-test, while the post-test revealed a significant difference between the experimental group and the control group.

Kamal and Youngkeun (2019) examined the effectiveness of the use of grammar games in teaching grammar lessons, as well as teachers` attitudes towards the use of language games. To collect the data, a questionnaire was delivered to 30 Moroccan EFL

[ii] The term "traditional teaching methods" refers to language teaching through the sole use of the coursebook.

high school teachers; in order to examine the effectiveness of using games, 50 high school students were divided into an experimental and a control group. The experimental groups were taught the grammatical structures using games and the control group was taught the same phenomena without the use of games. The findings of this study indicated that the specific Moroccan EFL teachers had positive attitudes towards the use of grammar games in the classroom; according to their answers, games are effective in the process of learning grammar. Students' scores in the grammar test proved that those who were taught grammar via the use of games performed significantly better than the ones who were taught grammar without the use of games. Additionally, it was found that during the grammar lessons with the use of games, students participated more actively and created their own sentences, which helped them to remember the forms and the uses of the grammar elements they had studied.

Hamzah and Dourado (2010) carried out a study on the effect of the use of games in teaching simple present and simple past tense to 56 students in Malaysia. Students with similar academic achievements were chosen for the experiment and they were divided into two groups; the experimental group used games to learn grammar, whereas no similar treatment was given to the control group. Four EFL teachers were also interviewed in order to provide insights on the use of games in enhancing grammar teaching and learning in the EFL class. Results indicated that the experimental group was more excited and motivated in learning grammar, while teachers positively supported the use of games in teaching grammar. However, as the researcher states, the study does not provide sufficient evidence to reach a firm conclusion regarding the use of games in teaching grammar. It should be noted that the data of the pre and post-test used in this study are not presented and the group of participants was too small for conclusions to be generalisable.

Relevant studies have also been conducted focusing either on the impact of games on learners' fluency and communicative skills or on their preferences and motivation regarding the use of games. Gerovasiliou and Makrina (2017) adopted a number of ready-made board games in order to stimulate 8 six year old students' motivation in learning topic vocabulary in a foreign language classroom. The researchers employed both qualitative and quantitative data research tools, such as recorded interviews, observations during the actual teaching of the lessons, field notes and pre and post-tests. The outcomes that emerged from the analysis of the interviews conducted with the students who practiced language via board games indicated that their use enhanced students' motivation, interest and learning effectiveness. Moreover, the results which emerged from the comparison of the pre-and the post-test of both groups, showed that eventually, the mean score achieved by the students who played board games was significantly higher, which indicates that they benefited from the particular intervention.

Most of the aforementioned studies underline the positive impact of games on students' learning, but they also present the challenges encountered in the use of games in the foreign language classroom. The majority of them use board-game based activities with simple game mechanics, such as Snake and Ladders, puzzles or memory cards. Although several studies underline the need for selecting games that are suitable –

contentwise, languagewise and levelwise – for the target group, unfortunately, none of them makes any particular suggestions as to how this selection can be made so as to better target the needs of each student group. Finally, most literature on games used in foreign language classes concerns young learners. However, the play does not end with childhood, nor does learning. Just as there are games -digital, physical or board games- for adults, there should also be games that can be used for teaching and learning purposes in adult classes.

2. Our study

2.1 Aim and research questions
The aim of this paper is to investigate the effectiveness of using modern board games as a tool for practicing grammar and vocabulary in Greek as a second/foreign language (L2) in adult classes. To this end, the following research questions are going to be addressed:

1) Do adult students who practice the past tense (past simple & past continuous) in Greek as an L2 via the use of board games perform significantly better than their peers who practice the same tenses via traditional methods?
2) Do adult students who practice vocabulary in Greek as an L2 via the use of board games perform significantly better than their peers who practice the same vocabulary via traditional methods?

2.2 Participants
Seventy-two (72) adult students at B1 level of proficiency in Greek as L2 participated in this study. There were in total 26 males and 46 females of various ethnic and language backgrounds. Their ages ranged from 18 to 70 years old, and all students had completed at least their secondary education. Thirty (30) of them participated in the grammar teaching interventions and the rest of them - 42 students - participated in the vocabulary teaching interventions. Each of these groups was further sub-divided into two cohorts: a control and an experimental one. In particular, the grammar control and experimental cohorts included 15 students each. The vocabulary control cohort included 20 students and the vocabulary experimental cohort 22 (Table 1)[iii].

Table 1: The control and experimental cohorts per intervention

	Control cohort	Experimental cohort
Grammar	15	15
Vocabulary	20	22

Seven classes from four different schools were chosen for this study; all of them started attending B1 classes in Greek in Autumn 2021. The classes were divided into two categories, one for the grammar and one for the vocabulary intervention. In order to ensure comparability between the groups, we took into consideration the number of

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[iii] Unfortunately, we were not allowed access to the demographic details of all students as these are confidential.

teaching sessions per week, the instructional materials used by their teachers and the school curricula. However, the assignment of classes to the control or to the experimental cohort was completely random. In Table 2 below we can see in detail the number of students from each class and school participating in the research:

Table 2: Educational contexts and participants

Schools	n	Male	Female
Modern Greek Language Teaching Centre, University of Athens	15	5	10
Greek Language Courses, Aegean University (Mytilene, Greece)	11	5	6
Greek Language School, Municipality Neapolis-Sykeon (Thessaloniki)	4	1	3
Modern Greek Language Teaching Centre, University of Athens	11	8	3
Modern Greek Language Teaching Centre, University of Athens	18	2	16
School of Modern Greek, Aristotle University of Thessaloniki	9	3	6
Greek Language Courses, Aegean University (Mytilene)	4	2	2
Total number:	72	26	46

2.3 Methodology

2.3.1 Research instruments

This study employed two assessment instruments – one for grammar and one for vocabulary - to measure the effectiveness of board games on adult students' language acquisition. These instruments were used both as a pre-test and as a post-test before and after each teaching intervention, respectively. Students' performance in the tests allowed us to compare the language development of the two cohorts - the control and the experimental one - after the teaching interventions. The cohorts that participated in the grammar teaching interventions were given the grammar pre and post-test, while the cohorts that participated in the vocabulary teaching interventions were given the vocabulary pre and post-test. The teaching intervention for the control group followed conventional language teaching methods, while the teaching intervention for the experimental group was based on the use of board games. The term "conventional methods" will be used in this study to refer to instructional practices which are based exclusively on the use of a coursebook, as stated also by the teachers who participated in the teaching interventions of the control groups.

A test is one of the most common tools for gathering quantitative data (Dörnyei, 2007). However, the choice of the appropriate assessment tool for measuring students' language growth was quite hard in our study, since the assessment process should be consistent with students' learning experience. In our study, a compromise had to be made between a communicative assessment tool that would be more appropriate for the experimental groups, and a more traditional one, more appropriate for the control groups. To this aim, the assessment tool for grammar was based on an authentic literary text, taken from a contemporary communicative coursebook (Klik in Greek B1, unit 5, page 196, exercise 6) (Appendix 1); this was used as a cloze-test activity examining the use of Past Simple and Past Continuous (27 items in total) (Appendix 1). The assessment tool for vocabulary was taken from two contemporary coursebooks (*Klik in Greek B1*, unit 5, page 199, exercise 2 & page 204, exercise 1 and *Greek B'-Method of learning Greek as a*

foreign language, unit 11, page 185, exercise 28) (Appendix 2); the test included a matching activity, a fill-in the gap activity and a cloze test activity, and tested vocabulary related to the theme "Travel and Holidays" (24 items in total) (Appendix 2).

Students' performance in both the pre-tests and post-tests was assessed on a scale from 1 to 100 and scores were recorded on SPSS. To examine whether the difference in mean scores before and after our intervention within a group was statistically significant, we performed a paired samples t-test on their pre and post-test scores. To evaluate whether the experimental group had statistically significant improvement in their scores compared to the control group, we performed an independent samples t-test on their improvement, namely the difference between the pre and post-test scores in grammar and between the pre and post-test scores in vocabulary.

2.3.2 Board games
For the implementation of the experimental intervention, we used two different board games; one for practicing grammar and one for practicing vocabulary. Both were adapted to practice linguistic objectives of B1 level of proficiency in Greek, according to the Common European Framework of Reference for Languages (CEFR, Council of Europe 2001); this was also in tune with the syllabus of the School of Modern Greek Language (School of Modern Greek Language, 2010) and the Greek language coursebooks used by the teachers who participated in this research (*Greek B'-Method of learning Greek as a foreign language, Modern Greek in no time 2, Mathainoume ellinika! Akoma kalytera* (level 2), *Taksidi stin Ellada B'*).

"Dixit" board game (Roubira, 2008) was used to practice Past Simple and Past Continuous tenses. The board game consisted of meeples, cards, dice and a board. Dixit is a quite popular party game that relies on players' imagination and storytelling ability. It comes with 84 unique cards, each with vivid and sometimes quite surreal artwork on them. For the purpose of the current research, its game mechanics were adapted, and its cards were used for oral narrations and creative writing in past forms. Students tried to form short stories both individually and in pairs, and according to the number of verbs formed correctly in Past Simple and Past Continuous by the players, they would move their meeples on the board. The players who would reach the highest part of the tableau by the end of the game would be the winners.

"Times' up" board game (Sarrett, 2010) was used to practice vocabulary for the theme "Travel and Holidays". The board game consisted of cards and an hourglass. Time's Up! is a charades-based party game for teams of two or more players and is played using a set of randomly chosen name cards. For the purpose of this research, its game mechanics remained unaltered, but the words presented in the cards were replaced with the ones presented in the equivalent chapters of the course books for this theme. Students played in groups and in each round, team members took turns trying to get their teammates to guess as many words as possible in 60 seconds. In round one, almost any kind of clue is allowed to describe a word. In round two, no more than one word can be used in each clue and, in round three, the cluegiver can use no words at all, but only miming and physical moves.

2.4 Procedure

The teaching interventions took place in November and December 2021 and lasted around two months for both groups, in total. A grammar pre-test and a vocabulary pre-test were given to all students before the teaching interventions and the introduction to the new language phenomena. All students took both the grammar and the vocabulary pre-test because students had not been assigned yet to the grammar or to the vocabulary group. Both grammar cohorts (control and experimental) were taught the new grammatical structures by their respective teachers, and, similarly, both vocabulary cohorts (control and experimental) were taught the new vocabulary items by their respective teachers in class. Subsequently, the control cohorts – the grammar control and the vocabulary control cohorts - practiced those structures and vocabulary by filling out activities and completing exercises in their activity books, while the experimental cohorts – the grammar and the vocabulary cohorts - practiced them through the use of board games. Upon completion of the teaching interventions, the same tests that were used as pre-tests were taken as post-tests; this time the grammar post-test was taken only by the grammar groups and the vocabulary post-test was taken only by the vocabulary groups.

The interventions with the use of board games were integrated into the course schedule and every intervention lasted between two and three instructional periods. Only one board game was used in each intervention for practicing either the grammatical structures (past tense) or the vocabulary items (on Travel and Holidays). "Dixit" was used for practicing the Past tense (Past simple and Past continuous) with the creation of oral and written stories, mainly based on the cards of the game. "Times' up" was used for providing oral practice of the vocabulary, as students were required to describe, provide vocabulary items or mime specific vocabulary items as these were written on the cards of the game. The instructions of the games were simple and provided in Greek by the researcher, and in many cases, students code-switched in order to translate the instructions for their peers and thus support comprehension. The researcher was not participating in the gameplay, while the class teacher's role was mainly supportive, discrete and secondary, so as to facilitate natural and spontaneous interactions among students. During the game, the researcher was either noting down the points for each team or overseeing their work in order to give explanations and answer possible questions. When the game ended, the researcher along with the teacher and the students of the class reviewed words and phrases that were either difficult or unknown to them.

3. Results

3.1. Pre-test

Both vocabulary and grammar pre-tests were given to all cohorts (grammar and vocabulary control and experimental cohorts) before the teaching interventions to make sure that all students were at the same language level. As shown in the following table (Table 3), the mean score of both experimental cohorts (grammar and vocabulary ones) in both grammar and vocabulary tests was 49.96%, while the mean score of the control groups in both tests was 43.83% respectively. No statistically significant differences were

found between the two groups as regards their language level at the beginning of the study; additionally, both control and experimental cohorts had similar standard deviations, 18.96 for the control cohort and 14.26 for the experimental cohort.

Table 3: Pre-test results for both grammar and vocabulary groups

Pre-test results in both Grammar and Vocabulary tests			
	N	Mean	Std. Deviation
Control cohort	35	43.83	18.96
Experimental cohort	37	49.9650	14.26187

We also compared the mean scores of the grammar control and grammar experimental cohorts – in the grammar pre-test and we did the same for the vocabulary group in the vocabulary pre-test. What we found was that the mean score of the grammar experimental cohort in the grammar test was 53.80% while the mean score of the grammar control cohort in the same test was 37.83% (Table 4). The difference between the two groups was statistically significant (p=0.018, p>0.05) which means that the two groups were not on the same proficiency level as far as their grammatical competence is concerned before the teaching interventions.

Table 4: Grammar pre-test results for the grammar group

Pre-test in Grammar			
The Grammar Group	N	Mean	Std. Deviation
Control cohort	15	37.83	16.63
Experimental cohort	15	53.80	18.09

As table 5 shows, the mean score of the experimental cohort for vocabulary was 47.35% while the mean score of the control cohort was 48.33%. No statistically significant differences were found between the two groups as regards their level of vocabulary at the beginning of the study; however, the standard deviations of each group were quite different, 19.75 for the control group and 10.63 for the experimental group. This indicates that the control group's proficiency level is quite heterogenous compared to that of the experimental group.

Table 5: Vocabulary pre-test results for the vocabulary group

Pre-test in Vocabulary			
The Vocabulary Group	N	Mean	Std. Deviation
Control cohort	20	48.33	19.75
Experimental cohort	22	47.35	10.63

After the teaching interventions, the same test was given as a post-test to the respective groups; their results will allow us to assess and compare the control and experimental groups' growth.

3.2. Post-test

3.2.1. Grammar

Thirty (30) students attended the teaching interventions in grammar and all of them took the grammar post-test: 15 of them were in the control cohort, and 15 in the experimental one. As shown in the following table (Table 6), both groups' scores improved after the teaching interventions: the mean score of the control cohort in the post-test is 44.03% while the mean score of the experimental cohort in the same test is 69.69%. The control cohort attained a mean of 6.2% improvement, while the experimental cohort's post-test scores improved by 15.89%.

Table 6: Pre and post-test results in grammar for the grammar group

		N	Mean	Standard Deviation
Control Cohort	Pre-test	15	37.83	16.63
	Post-test	15	44.03	13.89
Experimental Cohort	Pre-test	15	53.80	18.09
	Post-test	15	69.69	14.08

We remind the reader that the first research question of our study was *whether adult students who practice the past tense (past simple & past continuous) in Greek as L2 via the use of board games perform significantly better than their peers who are taught the same tense via traditional methods.* To answer this question, we needed to compare the two cohorts' growth after the teaching interventions and to this aim, we calculated the difference in the scores of the two cohorts (control and experimental) between the pre-test and the post-test. In particular, we performed an independent samples t-test to compare the degree of improvement between the two groups). The results suggested that although the degree of improvement is bigger for the experimental group, this difference is not statistically significant $p=0.107$ ($p>0.05$).

3.2.2. Vocabulary

Forty-two (42) students attended the teaching interventions in vocabulary; this was related to the theme "Travel and Holidays". All students took the vocabulary post-test: 20 of them were in the control cohort, and 22 were in the experimental cohort. As shown in Table 7, both groups' scores improved in comparison with their scores in the pre-test: 9.05% improvement for the control cohort and 15.5% for the experimental one. This means that the experimental cohort's growth was bigger than that of the control cohort's.

Table 7: Pre and post-test results in vocabulary for the vocabulary group

		N	Mean	Standard Deviation
Control Cohort	Pre-test	20	48.33	19.75
	Post-test	20	57.38	14.23
Experimental Cohort	Pre-test	22	47.35	10.63
	Post-test	22	62.93	13.34

To this aim, we performed an independent samples t-test to compare the degree of improvement between the pre-test and the post-test for the control and the experimental cohorts. Our results indicated that p=0.17 (p>0.05), which suggests that although the improvement is bigger for the experimental group, this is not statistically significant.

4. Discussion

This study aimed to investigate the effectiveness of the use of modern board games as a tool for teaching grammar and vocabulary in Greek as a second/foreign language (L2) in adult classes. To this aim, we used two groups of students – one for the grammar and one for the vocabulary intervention. Each group was further sub-divided into two cohorts: a control and an experimental one. The two control cohorts – grammar and vocabulary ones - practiced the grammatical structures and vocabulary items respectively, via conventional teaching methods. The two experimental cohorts – grammar and vocabulary ones – practiced the same grammatical structures and vocabulary items, respectively, via the use of board games.

In response to the first research question, the results indicated that the students of the experimental group performed better than the students of the control group. However, this difference was not statistically significant, which indicates that, although the students of the experimental group benefited from the use of board games in learning the past tense, we cannot assume that the use of board games is more beneficial for adult students than the use of conventional methods, when it comes to practicing grammar structures.

As for the second research question, similarly, the results demonstrated that the students who attended the teaching interventions with the use of board games performed better that the ones who attended the teaching interventions with the conventional methods. However, the difference again was not statistically significant, which indicates that, although the students of the experimental group benefited from the use of board games in practicing the vocabulary on the theme "Travel and Holidays", we cannot assume that the use of board games is more beneficial for adult students than the use of conventional methods, when it comes to practicing vocabulary.

Although the findings of the study demonstrate a quantitative difference between the scores of the groups who practiced the language phenomena via board games and the scores of those who attended conventional methods, these are not statistically significant and, therefore, we cannot be sure that these results are due to our intervention and not due to chance. However, a non-significant finding alone does not indicate evidence for the absence of an effect, but it can bear important insights for future research.

One of the possible reasons for which the results did not reach statistical significance might be additional variables that were not taken initially into account. Although a variety of different schools were used for the representation of the sample and random allocation of students was chosen in order to eliminate systematic differences in the sample, it is possible that not all variables could be controlled. Such a variable might be the number of different teachers who were involved in this study. This

means that we were not able to control factors such as their training, educational background, teaching experience, and general efficiency as teachers. Also, characteristics of the student population might have influenced the results obtained; similarly, these could not be predicted or monitored. Relevant studies that indicated that the use of games had a significant effect on students' language acquisition used students from the same school or classes with the same teacher (Al-Jarrah, Talafhah & Al-Jarrah, 2019). In other studies, the same group of students acted both as an experimental and as a control group (Omar & Said, 2019; Stavy, Subon & Unin, 2019). Control of the student population and of the teachers involved may be an option for future studies in order to control variables whose presence may have affected the results of our study.

Another reason for the non-significant results obtained might be the fact that the students of the control and the experimental cohorts were not at the same level of proficiency in grammar before the teaching interventions (see Table 4). When both grammar and vocabulary pre-test scores were calculated for all participants, no statistically significant differences were found between the experimental and the control groups at the beginning of the study - the mean score of the experimental group for both grammar and vocabulary was 49,96% and the mean score of the control group was 43,83% (see Table 3). However, when we analyzed separately the mean scores of the grammar and the vocabulary groups in the grammar and in the vocabulary pre-test respectively, we observed that not all students were at the same level in grammar before the teaching interventions, even though all students were supposed to attend the same proficiency level class (B1 according to CEFR). This difference may have affected our results. Thus, it is important when we study the data in order to observe students' language performance in pre and post-tests to analyze each area separately – in this case, grammar and vocabulary. With that in mind, a table of means by subgroup was used to show separately students' scores in grammar and students' scores in vocabulary, which in the end highlighted differences between the subgroups' pre-test scores and led to further inferences and conclusions for future studies.

Additionally, the length of the teaching interventions was rather short compared to the length of similar interventions in relevant studies (Dolati & Mikaili, 2011). Applying the teaching interventions over an extended time period, adding some similar board games or repeating the interventions for practicing more language structures would probably provide more reliable results regarding the effectiveness of using board games in adult language learning classes. In that case, of course, more time would be needed, not only for implementing the interventions but also for preparing and adapting the material of the board games. As several researchers comment, developing and planning games for the foreign language class is time-consuming (Ketterlinus, 2017; Petrovic, 2014; Talak-Kiryk, 2010), since it is important to ensure that the board game meets the age, level and learning expectations of the target group. Practicing more language structures via board games in order to assess their effectiveness as a language strategy requires also adapting the board game to the target group's needs. This means taking into consideration whether the content of the game corresponds to the particular learning objectives, the game mechanics and its complexity, the number of students, the

time frame of the intervention, and, of course, the language and proficiency level required. Taking all these factors into account for more than one or two classes, or for examining more than one language structure, language skill or language area is quite challenging for researchers and language educators alike.

Assessing the long-term retention of the language structures and vocabulary items practiced by the experimental and the control cohorts may also provide us with more reliable evidence regarding the impact of the use of board games on adults' language learning outcomes. More and more studies aim to determine the longitudinal effect of different educational methods and strategies by measuring students' knowledge retention over time (Baker & Robinson, 2018). Thus, the design and delivery of additional post-tests in grammar and vocabulary after a longer period of time might be recommended for similar future studies in order to assess the effectiveness of the use of board games in adult language learning classes in comparison with the use of conventional methods of teaching. Once more, this would require a longer period of time for the experimental procedure and a more regulated sample of participants.

Finally, as content-based learning has inevitably shifted researchers' and educators' interest in the study of the impact of CLIL on learners' language and content learning, it would be worth exploring the effectiveness of board games on the acquisition of both language and content by adult learners.

5. Conclusion

The purpose of this study was to determine whether modern board games are effective as a tool for practicing Greek as a second/foreign language in adult classes. The results demonstrated that adult students who practiced the Past simple and the Past continuous tense in Greek as L2, as well as vocabulary items related to the theme "Travel and Holidays" through board games performed better than the students who practiced the same language phenomena through conventional methods. However, the difference between the two groups did not reach statistical significance, either for grammar or for vocabulary, which indicates that we cannot conclude that the use of board games is more beneficial for adult students than the use of conventional methods when it comes to practicing either grammar structures or vocabulary items.

The number of studies using board games in teaching interventions, particular for adult learners, is still very limited if not non-existent. Although the findings of this study are limited, they can be quite informative for future studies. The fact that students responded positively to the use of board games in the practice of thematic vocabulary (Travel and Holidays) suggests that board games may prove to be successful within CLIL instructional contexts where thematic content is at the core of the instruction. Finally, it is suggested that future studies investigate the effectiveness of modern board games as a teaching strategy for adults by examining students' performance separately in grammar and in vocabulary, but also by focusing on both students' and teachers' preferences and motivation towards game-like and game-based activities in language teaching and learning.

Conflict of Interest Statement

The authors declare no conflicts of interest.

About the Authors

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Appendix 1: Pre & Post Test in Grammar

Συμπληρώστε τα κενά με τις λέξεις της παρένθεσης στον Αόριστο ή τον Παρατατικό.

Είχε (0. Έχω) δίκιο ο Νώλης. _____ (1. είμαι) σαν αληθινή βάρκα η βαρέλα. Εκείνη τη μέρα _____ (2. γίνομαι) ένας καβγάς! Γιατί η βαρέλα _____ (3. χωράω) μόνο τρεις. Εγώ _____ (4. μπαίνω) μόνο μια φορά κι ύστερα δεν περίμενα να΄ρθει η σειρά μου. _____ (5. κάνω) μια βουτιά… Το πρώτο μπάνιο φέτος. Τι όμορφα που είναι να κολυμπάς! Και να σκεφτείς πως υπάρχουν άνθρωποι που ήρθαν στη ζωή και _____ (6. πεθαίνω) και δεν _____ (7. βλέπω) ποτέ τους θάλασσα. Δεν είδαν ποτέ τους το Λαμαγάρι…

Στην ακρογιαλιά τα παιδιά _____ (8. κοιτάζω) πολλή ώρα ένα τεράστιο ψόφιο ψάρι. Η Άρτεμη _____ (9. λέω) συνέχεια πως ήταν δελφίνι. Μετά _____ (10. φωνάζω) τον παππού.

Βέβαια και είναι δελφίνι - _____ (11. λέω) ο παππούς, μόλις το είδε. Και ύστερα μας είπε την ιστορία του δελφινιού και του Αρίωνα. Ο Αρίωνας _____ (12. είμαι) τραγουδιστής - στα αρχαία χρόνια, φυσικά - και _____ (13. ταξιδεύω) πάντα με ένα καράβι. Οι ναύτες _____ (14. θέλω) να του κλέψουν ό,τι είχε και να τον πετάξουν στη θάλασσα. Εκείνος τους _____ (15. παρακαλώ) να τον αφήσουν μόνο να τραγουδήσει.

_____ (16. παίρνω) την κιθάρα του, _____ (17. τραγουδώ) και ύστερα _____ (18. πέφτω) στη θάλασσα. Ένα δελφίνι, όμως, που _____ (19. περνώ) εκείνη τη στιγμή άκουσε το τραγούδι του Αρίωνα. Του άρεσε πάρα πολύ γι΄αυτό τον _____ (20. παίρνω) στην πλάτη του και τον _____ (21. βγάζω) στη στεριά. Η στεριά αυτή _____ (22. είναι) το νησί μας.
- Κι έτσι, να το ξέρετε, - είπε ο παππούς - ο πρώτος κάτοικος του νησιού μας ήταν ο Αρίων.

Η Άρτεμη το _____ (23. ξέρω) πως στα δελφίνια αρέσει η μουσική. Μια μέρα τα _____ (24. βλέπω) που _____ (25. τρέχω) πίσω από ένα κότερο, όπου οι άνθρωποι _____ (26. τραγουδώ) και _____ (27. παίζω) μουσική.

Διασκευασμένο από το βιβλίο της Άλκης Ζέη Το καπλάνι της βιτρίνας.

Appendix 2: Pre & Post Test in Vocabulary
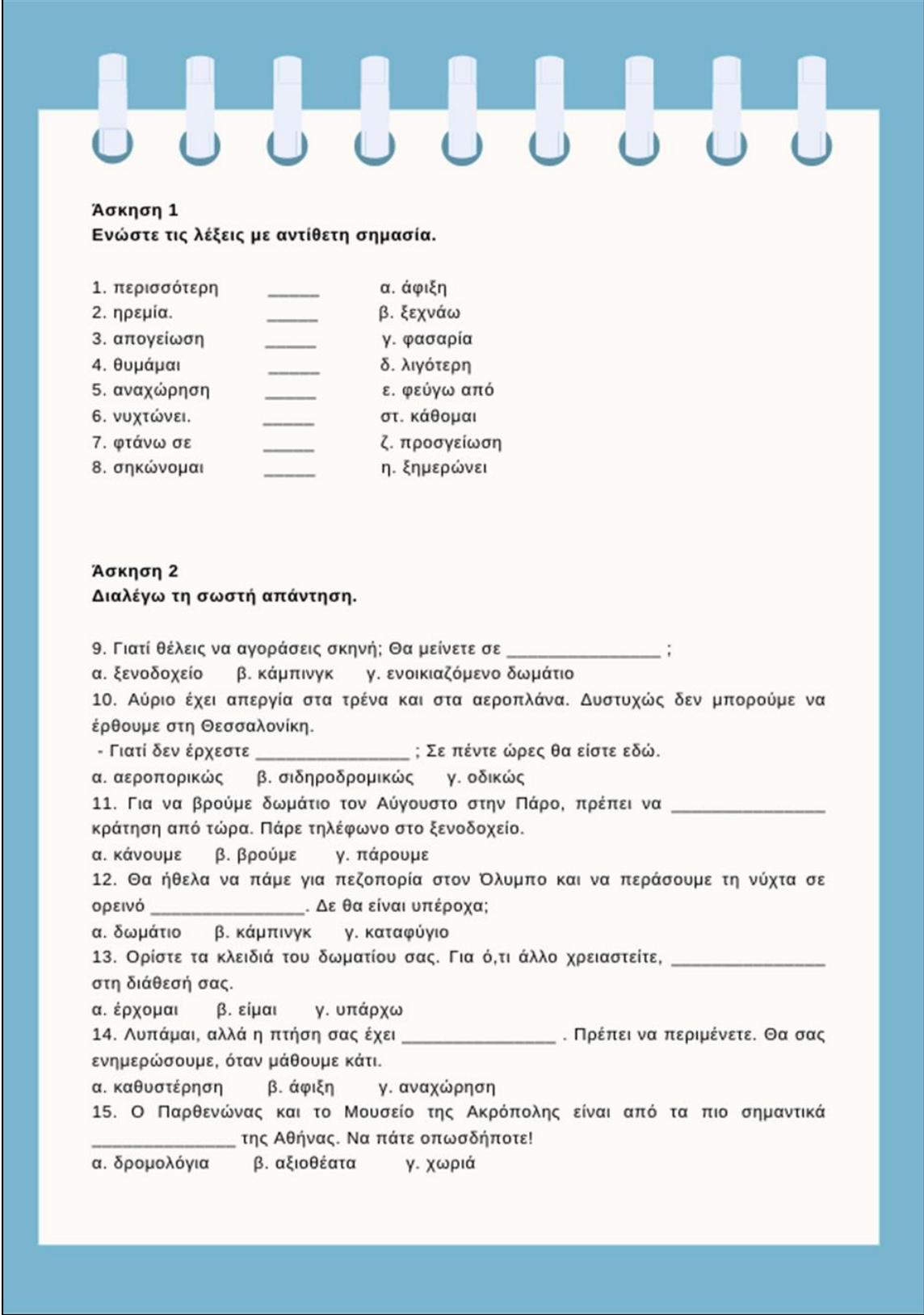
Άσκηση 1
Ενώστε τις λέξεις με αντίθετη σημασία.

1. περισσότερη	_____	α. άφιξη
2. ηρεμία.	_____	β. ξεχνάω
3. απογείωση	_____	γ. φασαρία
4. θυμάμαι	_____	δ. λιγότερη
5. αναχώρηση	_____	ε. φεύγω από
6. νυχτώνει.	_____	στ. κάθομαι
7. φτάνω σε	_____	ζ. προσγείωση
8. σηκώνομαι	_____	η. ξημερώνει

Άσκηση 2
Διαλέγω τη σωστή απάντηση.

9. Γιατί θέλεις να αγοράσεις σκηνή; Θα μείνετε σε _____ ;
α. ξενοδοχείο   β. κάμπινγκ   γ. ενοικιαζόμενο δωμάτιο

10. Αύριο έχει απεργία στα τρένα και στα αεροπλάνα. Δυστυχώς δεν μπορούμε να έρθουμε στη Θεσσαλονίκη.
 - Γιατί δεν έρχεστε _____ ; Σε πέντε ώρες θα είστε εδώ.
α. αεροπορικώς   β. σιδηροδρομικώς   γ. οδικώς

11. Για να βρούμε δωμάτιο τον Αύγουστο στην Πάρο, πρέπει να _____ κράτηση από τώρα. Πάρε τηλέφωνο στο ξενοδοχείο.
α. κάνουμε   β. βρούμε   γ. πάρουμε

12. Θα ήθελα να πάμε για πεζοπορία στον Όλυμπο και να περάσουμε τη νύχτα σε ορεινό _____. Δε θα είναι υπέροχα;
α. δωμάτιο   β. κάμπινγκ   γ. καταφύγιο

13. Ορίστε τα κλειδιά του δωματίου σας. Για ό,τι άλλο χρειαστείτε, _____ στη διάθεσή σας.
α. έρχομαι   β. είμαι   γ. υπάρχω

14. Λυπάμαι, αλλά η πτήση σας έχει _____ . Πρέπει να περιμένετε. Θα σας ενημερώσουμε, όταν μάθουμε κάτι.
α. καθυστέρηση   β. άφιξη   γ. αναχώρηση

15. Ο Παρθενώνας και το Μουσείο της Ακρόπολης είναι από τα πιο σημαντικά _____ της Αθήνας. Να πάτε οπωσδήποτε!
α. δρομολόγια   β. αξιοθέατα   γ. χωριά

Άσκηση 3
Συμπλήρωσε τα κενά με τις παρακάτω λέξεις.

ακρογιαλιές, ~~παραλίες~~, χώρα, νυχτερινά, αξιοθέατα, βυθό, προορισμό, επισκέπτες, αμμουδιές, τουριστικά

Στην Ελλάδα

Μήλος
Η Μήλος είναι γνωστή για τις ακρογιαλιές της. Έχει πάνω από 75 μικρές και μεγάλες ___*παραλίες*___(0), καθαρά και γαλανά νερά, πολύχρωμα βράχια και χρυσές _____(16) και γι' αυτό η Μήλος είναι μια ξεχωριστή εμπειρία για όλους τους _____17) της. Οι τουρίστες μπορούν να κολυμπήσουν σε οργανωμένες παραλίες ή να επιλέξουν πιο μοναχικές και άγριες _____(18). Επίσης, το νησί είναι γνωστό για τον υπέροχο _____(19) του, ο οποίος έχει πολλά και ξεχωριστά χρώματα και βάθη.

Αστυπάλαια
Η αρχιτεκτονική και το τοπίο θυμίζουν Κυκλάδες, ο χάρτης, όμως, γράφει «Δωδεκάνησα». Η βασική εικόνα του νησιού είναι η _____(20) με το βενετσιάνικο κάστρο. Η Αστυπάλαια αποτελεί αγαπημένο _____ (21) για ταξιδιώτες με σοφιστικέ αλλά και νεανικό προφίλ. Διαθέτει κάμπινγκ και μοναδικά _____(22) στέκια. Το νησί δεν είναι ιδιαίτερα μεγάλο. Έχει ΚΤΕΛ αλλά και _____(23) σκάφη, τα οποία μεταφέρουν τους τουρίστες στα κύρια _____(24) του νησιού, όπως το θέρετρο της Μαλτεζάνας, τον τουριστικό οικισμό Λοβάδι και τις πανέμορφες παραλίες της δυτικής πλευράς.

××××××××××××××××