The effect of explicit instruction on the acquisition of subject-verb inversion by Macedonian learners of English

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ABSTRACT

This paper reports on the effectiveness of teaching grammar explicitly, with a focus on form, function, and rules. The study tested the hypothesis that explicit instruction of grammar leads to increased accuracy in the grammaticality judgment, using a sample of 32 Macedonian learners of English at levels B and C. The structures selected for the task included subject-verb inversion, subject-verb inversion and *it*-insertion, omission of expletive and anticipatory *it* and omission of a referential subject, which are typical in the interlanguage of Macedonian learners of English due to cross-linguistic influence from their mother tongue and developmental factors. The study involved a pre-test, explicit instruction and controlled practice activities, and a post-test. The pre-test and post-test assessed the accuracy of a series of sentences, while the instruction involved contrastive analysis of examples in Macedonian and English, eliciting differences between the two languages. Results showed improved accuracy in the assessment of the grammaticality of the target structure at the post-test, but an experimental study with a control group is required to verify whether the improvement can be solely attributed to explicit instruction.

1 INTRODUCTION

Whether grammar should be explicitly taught or exposure to ample authentic input is sufficient for learners to master a particular aspect of foreign language grammar has been a subject of a longstanding debate among practitioners and researchers alike (Terrell 1991; Swan 1985; Norris and Ortega 2001). In the widespread communicative and usage-based teaching approaches an overt focus on form, function and rules is generally given a peripheral role (Krashen and Terrell 1988; Terrell 1991; Teixeira 2018). By and large, recourse to the learners' native language is similarly frowned upon, whether for contrastive purposes or for translation. Contrary to these views, this study explores if it is possible that learners actually benefit from explicit instruction focusing on grammatical structures that are assumed to pose problems for learners as a result of transfer from the mother tongue. More specifically, it studies the effectiveness of explicit grammar instruction in the acquisition of subject-verb inversion by Macedonian learners of English.

Areas investigated in this study include structures related to subject-verb inversion (SVI), which Macedonian language learners of English find problematic for two

main interconnected reasons. Firstly, there are considerable differences in the syntax of the subject in English and in the students' mother tongue, Macedonian. Macedonian is a null subject language, whereas English requires that the subject position be filled with a dummy subject when there is no referential subject (Mitkovska and Bužarovska 2018; Mitkovska et al., forthcoming). Secondly, SVI is governed by different principles in English and in Macedonian. English has a grammatical word order and imposes major constraints on SVI, while the word order in Macedonian is pragmatically motivated and SVI is much more frequently applied (Mitkovska et al., forthcoming). In English SVI is positioned at the syntax-discourse interface, which is interrelated with the syntax-phonology and the lexicon-syntax interface (Lozano and Mendikoetxea 2010). Because of these differences, some negative transfer is expected from the native language (L1) to the target language (L2).

The study followed a pre-test/intervention/post-test design and aimed to examine whether explicit instruction of grammar focusing on the governing principles and constraints of SVI in English contributes to increased accuracy in the students' acceptability judgment of SVI sentences. The structures investigated in this study are characteristic of the interlanguage of Macedonian learners of English and stem from the cross-linguistic influence from their native language, as well as certain developmental factors. They comprise subject-verb inversion, subject-verb inversion + *it*-insertion, omission of expletive and anticipatory *it* and omission of a referential subject, all of which are briefly outlined below.

What is meant by inversion in this study is a subject-verb inversion in declarative sentences, also known as 'full inversion' of the subject and the verb, as in: *On one long wall hung a row of Van Goghs* (Biber et al. 2021: 904). Cases of subject-operator inversion, also known as 'partial inversion', as in: *And no way could she get Sarah to understand that* (Biber et al. 2021: 907) were not within the scope of the study.

Keeping in mind that English has a rather fixed subject-verb-object (SVO) word order, the use of SVI in English declarative sentences is highly constrained and typically occurs when the following conditions have been met: in sentence-initial position there is an adverbial (usually of place or time) that builds on the preceding discourse; the verb belongs to the category of intransitive or copular verbs and denotes existence or appearance in a particular setting; and the subject is rather long and brings new information in the discourse (Biber et al. 2021: 903). In Macedonian the word order is more flexible and the linear arrangement of sentence constituents is driven by the communicative needs of the speakers (Minova-Ǵurkova 2000), which is why SVI is more common. This fact is expected to pose difficulties for Macedonian learners of English who are unaware of the constraints on SVI in English.

The structure labelled 'SVI + *it*-insertion' applies to the occurrence of non-referential *it* in sentences with a verb-subject (VS) word order, which is occasionally encountered in L2 English (Lozano and Mendikoetxea, 2010; Agathopoulou, 2014). Mitkovska et al. (forthcoming) found that *it*-insertion is a phenomenon typically occurring in the interlanguage of Macedonian learners of English to a greater or a lesser extent depending on the level of proficiency, while English native speakers almost entirely reject sentences with SVI + *it*-insertion.

As English is a non-null subject language, in the absence of a referential subject in a sentence, the dummy pronoun *it* is used since the subject slot must be filled for the sentence to be grammatical. The English non-referential *it* has no counterpart in Macedonian and it has no translation equivalent. Unlike English, Macedonian readily allows the omission of the subject since verbal inflections provide information about the person, number, and sometimes even the gender of the subject. Not only can the subject be omitted, but it generally *is* omitted when it is recoverable from the context. It is specifically mentioned only for the purposes of emphasis or contrast. Thus, in this study, the omission of non-referential *it* and the omission of a referential subject are considered in view of the cross-linguistic influence from the learners' L1.

2 THEORETICAL BACKGROUND

While the explicit focus on grammar was an indispensable part of language instruction from the sixties to the early eighties of the twentieth century, with the advent of various communicative methods in language teaching, explicit grammar instruction was no longer perceived as central to foreign language teaching (Terrell 1991; Swan 1985). This trend has persisted in the following decades. Yet, findings from multiple previous studies demonstrate that explicit instruction is effective (Rahimpour and Salimi 2010; Bowles and Montrul 2008), or even more effective compared to implicit instruction (Norris and Ortega 2001). Research has revealed that grammatical accuracy cannot be achieved by learners of a foreign language simply by exposure to ample authentic and comprehensible input (Swain 1985; Swain and Lapkin 1982). Similarly, in a study of French children learning English as their L2, White (1991) found that exposure only to positive evidence was insufficient for learners to realise the impossibility and ungrammaticality of a given L1 grammatical structure in L2 and that negative evidence (in the form of form-focused instruction and error-correction) was more helpful in this regard. In another study, even though the positive evidence did contribute to the increased use of the targeted L2 word order by the learners, it did little to prevent them from also using a word order, typical of L1 but unacceptable in L2. This might suggest that explicit instruction could be helpful in such cases, but it could also point to the mere coexistence of different forms in the interlanguage for a certain period of time, which is oftentimes attested in second language acquisition (SLA) (Trahey and White 1993).

As for the acquisition of SVI in English, there are some indications that it is best acquired at the advanced stages of L2 proficiency. Specifically, for native speakers of European Portuguese (a null subject language like Macedonian), it was found that explicit instruction on the ungrammaticality of "free" inversion can only benefit learners when they are at the advanced level, because that is the period when they are developmentally ready to acquire it (Teixeira 2018: 363–364).

Lozano and Mendikoetxea (2010) demonstrate that the VS order in English is restricted by properties operating at the lexicon-syntax, syntax-phonology and syntax-discourse interface. They analysed both the specifics and the interrelatedness of

these interfaces and found that the lexicon-syntax interface is reflected in the fact that it is the class of unaccusative verbs that constitutes a necessary (though insufficient) condition for the occurrence of the VS order. Secondly, according to the end-weight principle, the order of the subject and the verb is more likely to be inverted when the subject is phonologically heavy, i.e. long and structurally complex, which is indicative of the involvement of the syntax-phonology interface in SVI. Finally, the fact that in English SVI the subject tends to bring new information in the discourse illustrates the role of the syntax-discourse interface in SVI. This is based on the end-focus principle, according to which the element that conveys new information in the discourse is placed towards the end of a clause.

The Interface Hypothesis was initially formulated in Sorace and Filiaci's paper (2006: 340) and postulated that "narrow syntactic properties are completely acquirable in a second language […] whereas interface properties involving syntax and another cognitive domain may not be fully acquirable". This hypothesis did not come without a caveat that some narrow syntactic properties, though acquirable, can still cause developmental difficulties. Studies demonstrated that some interfaces are more susceptible to errors than others (Slabakova and Ivanov 2011: 637). Tsimpli and Sorace (2006) found that there are differences between the developmental patterns displayed by the syntax-semantics and the syntax-discourse interface, based on the assumption that properties at the syntax-semantics interface belong to the language system itself and are therefore more easily mastered, unlike the properties at the syntax-discourse interface which pose greater difficulties for foreign language learners as a result of the greater processing demands placed on the learners trying to integrate language-internal and pragmatic information. The study by Sorace and Serratrice (2009) makes a clear distinction between internal interfaces (between narrow syntax and other linguistic modules) and external interfaces (between syntax and other cognitive systems). It pointed to similar results focusing specifically on the differences in the acquisition of phenomena at the syntax-semantics interface and the syntax-discourse/pragmatics interface in bilingual speakers. It was believed that this external interface is a source of residual optionality for L2 learners even at near-native level of proficiency (Slabakova and Ivanov 2011: 638). This residual optionality is seen as a consequence of the inefficiency at integrating syntactic and discourse-pragmatic information in actual language use (Sorace 2011). Unlike the narrow syntax domain (which includes the ungrammaticality of null subjects and "free" inversion in English), some optionality is expected to occur at the syntax-discourse interface, regardless of the L1–L2 combinations, as a by-product of bilingualism (Teixeira 2018: 157–158).

Having said that, it may be the case that the relationship between particular interfaces and SLA might not be so straightforward. Difficulties in SLA arise across all interfaces, since even in internal interfaces there appear to be phenomena that cannot be completely mastered, whereas some discourse-related properties can be fully acquired (Slabakova and Ivanov 2011: 650). This blurs the supposedly clear-cut correlation between the internal interfaces and the absence of optionality at the near-native level on the one hand, as well as the correlation between the external interfaces and the residual optionality, on the other.

Thus, studies on the syntax-discourse interface have yielded conflicting results, sometimes finding residual optionality and other times detecting no optionality in end-state grammars. A possible reason for this could be that the methodology employed (generally untimed offline tasks) was not well-suited to the detection of optionality if it was weakly present, since optionality is best detected via timed online tasks that reveal processing inefficiencies (Teixeira 2020: 34).

Several generative second language acquisition researchers (Rothman 2010; Valenzuela and McCormack 2013; VanPatten and Rothman 2015; Whong et al. 2014, as cited in Teixeira 2018) have suggested that explicit instruction could assist in the acquisition of properties at the syntax-discourse interface and have even encouraged greater focus on these phenomena in the process of instruction. Along these lines, the present study was intended to raise the students' awareness of the principles regulating SVI in English and to examine whether students could progress towards native-like proficiency in SVI through explicit instruction.

3 STUDY DESIGN AND METHODOLOGY

The study was carried out among students from Ss. Cyril and Methodius University and FON University in Skopje. A total of thirty-two native Macedonian learners of English (mean age: 20.88 years, standard deviation: 0.98; male=6, female=26) at levels B and C according to the Common European Framework of Reference (CEFR) participated in the study. Of these, ten were at level B (intermediate to upper-intermediate) and twenty-two were at level C (advanced to proficiency). The students' level of English proficiency was determined with a placement test, which was administered at the two universities and comprised 46 multiple choice questions that tested knowledge of grammatical structures and vocabulary at various levels of complexity. The data collection process, as well as the explicit grammar instruction and controlled practice activities, took place offline, in a classroom setting.

For the purposes of this study a short experiment was designed involving three stages: a pre-test, explicit instruction and controlled practice activities, and a post-test. The pre-test and post-test were conceived as timed tasks in the form of a grammaticality judgment and correction task (GJCT) and centred on the assessment of the accuracy of a series of sentences, samples of which are available in the Appendix. The pre-test comprised 29 sentences, which included sentences that tested the students' understanding of SVI in English, as well as distractor sentences. Students were asked to label these sentences as either correct or wrong. They were also asked to correct the sentences they thought were wrong. The instruction involved contrastive analysis of examples in Macedonian and English, eliciting differences between the two languages. This was followed by a set of controlled practice activities which were done in pairs and involved identifying errors related to SVI, as well as subject realization and subject omission in individual sentences and in short texts. The post-test consisted of 21 sentences structured according to the same principles as the ones in the pre-test. In the Results section of this paper, the pre-test and post-test are also referred to as Test 1 and Test 2, respectively.

The study period spanned over fifteen days, with the pre-test and the post-test being administered at the beginning and at the end of this time-frame, respectively. The instruction and controlled practice activities were carried out on Day 8 of the study period, midway between the pre-test and the post-test. The structures tested in this study included subject-verb inversion, subject-verb inversion + *it*-insertion, omission of expletive and anticipatory *it* and omission of a referential subject, all of which are typical for the interlanguage of Macedonian learners of English due to cross-linguistic influence from their L1 as well as some developmental factors.

Seeing that the conditions for parametric statistics (including normal distribution) were not entirely met at either level B or level C, a Wilcoxon signed-rank test was performed for both levels under the null hypothesis that the median of the underlying population of differences is equal to 0. This test made possible the comparison between the pre-test and the post-test results per category within the same proficiency level. In addition, test results were compared between the two proficiency levels by applying the Wilcoxon rank-sum test. A comparison between the pre-test and the post-test results of individual students on both levels is offered as well. As is widely accepted, a p-value of less than 0.05 was considered statistically significant.

Since the study was performed without a control group, diverse confounding variables are assumed to pose threats to the causal validity of the study (Marsden and Torgerson 2012), some of which are addressed herein. As far as maturation is concerned, the interval between Test 1 and Test 2 was rather short for a discernible maturation effect to take place. With regard to history, no known past event was identified that could have potentially influenced the students' scores. As for the test effects, several distractor sentences were inserted in each GJCT so as to mask the true purpose of the tests, though it cannot be dismissed that some awareness-raising might have occurred as a result of the questions on the pre-test.

4 RESULTS

The study findings are summarized in sections 4.1–4.5. Sections 4.1 and 4.3 offer a comparison between the pre-test and post-test results for levels B and C per category, while sections 4.2 and 4.4 present pre-test/post-test results of individual participants at these two levels respectively. Section 4.5 offers a comparison between the results on level B and level C.

4.1. LEVEL B RESULTS PER CATEGORY
As shown in Table 1, the data indicate improvement across all 4 categories. In Test 1 in the category of SVI 47% of the sentences were wrongly classified as correct, and that number significantly dropped to a little over 20% in Test 2. Similarly, there has been a marked decline in wrong answers in the next two categories: SVI with *it* insertion and Omission of expletive and anticipatory *it*. As far as the Omission of a referential subject is concerned, in Test 2 no sentences were wrongly labeled as correct. The Wilcoxon signed-rank test demonstrated that there was statistically significant difference between Test 1 and Test 2 in the category of SVI and Omission of a referential

subject. The results showed improvement on Test 2 even in the other two categories, only this improvement could not be labelled as statistically significant. More precisely, the p-values measuring statistically significant difference between the scores on Test 1 and Test 2 per category were as follows: p=0.0106 for SVI, p=0.1238 for SVI with *it* insertion, p=0.0648 for Omission of expletive and anticipatory *it*, and p=0.0455 for the Omission of a referential subject. There was also a statistically significant difference (p=0.0107) between the mean for Test 1 and the mean for Test 2. The z-values and the p-values for all categories are summarized in Table 2.

	SVI		SVI with *it*- insertion		Omission of expletive and anticipatory *it*		Omission of a referential subject	
	T1	T2	T1	T2	T1	T2	T1	T2
Mean	0.47	0.22	0.48	0.33	0.55	0.30	0.10	0.00
Median	0.58	0.20	0.50	0.33	0.58	0.25	0.00	0.00
Standard Deviation	0.31	0.24	0.30	0.35	0.25	0.31	0.13	0.00
Minimum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum	0.83	0.60	0.80	1.00	0.83	0.75	0.25	0.00

TABLE 1. Level B: Proportion of sentences wrongly classified as correct (Test 1 vs Test 2)

	Level B	
	z-value	*p*-value
SVI (Test 1 vs Test 2)	2.555	0.0106
SVI with *it* insertion (Test 1 vs Test 2)	1.539	0.1238
Omission of expletive and anticipatory *it* (Test 1 vs Test 2)	1.847	0.0648
Omission of a referential subject (Test 1 vs Test 2)	2.000	0.0455
Mean test results (Test 1 vs Test 2)	2.552	0.0107

TABLE 2. Level B: Comparison between Test 1 and Test 2

4.2. LEVEL B RESULTS PER PARTICIPANT

It is obvious from Figure 1 that most level B students performed better on Test 2, and some students even demonstrated considerable improvement, as was the case with student 8B. On the other hand, there were students, such as students 4B and 10B, who did not make any progress at the post-test. Section 5.5 outlines some of the reasons that could potentially explain the individual variation encountered among level B students.

4.3. LEVEL C — RESULTS PER CATEGORY

Table 3 shows a comparison between the scores on Test 1 and Test 2 among the students at level C. It is evident that the data indicate considerable improvement across
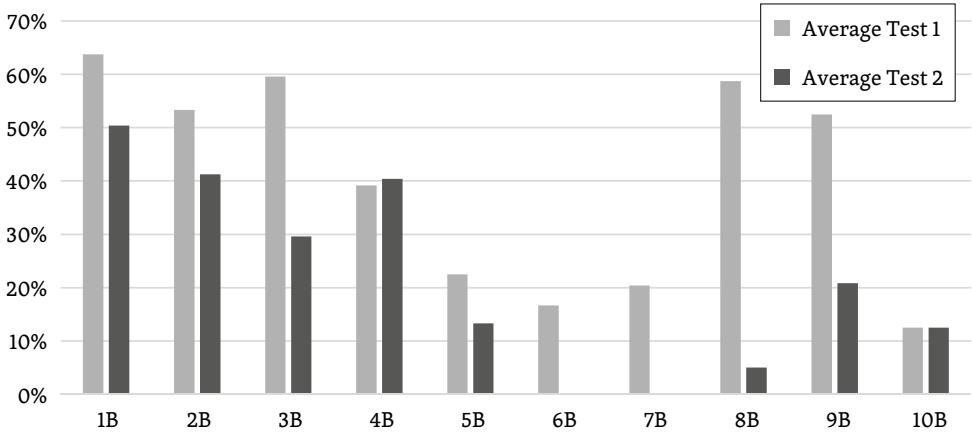
FIGURE 1. Level B results per participant (Percentage of sentences wrongly classified as correct in Test 1 vs Test 2)

all four categories. The scores indicate less than 20% of wrong answers to start with on Test 1 in each of the 4 categories, and this has been reduced more than twofold on Test 2 in each of the four categories. Considering p-values of less than 0.05 as statistically significant, the Wilcoxon signed-rank test demonstrates that there was significant improvement in all categories except the first one. Specifically, the p-values measuring statistical significance between the scores on Test 1 and Test 2 per category are as follows: p=0.0940 for SVI, p=0.0049 for SVI with *it* insertion, p=0.0041 for Omission of expletive and anticipatory *it*, and p=0.0249 for the Omission of a referential subject. There was also a statistically significant difference (p=0.0047) between the mean for Test 1 and the mean for Test 2. The z-values and the p-values for all categories are summarized in Table 4.

	SVI		SVI with *it* insertion		Omission of expletive and anticipatory *it*		Omission of a referential subject	
	T1	T2	T1	T2	T1	T2	T1	T2
Mean	0.14	0.06	0.16	0.02	0.20	0.06	0.14	0.02
Median	0.17	0.00	0.10	0.00	0.17	0.00	0.00	0.00
Standard Deviation	0.16	0.13	0.20	0.07	0.19	0.13	0.24	0.07
Minimum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum	0.50	0.40	0.60	0.33	0.67	0.50	1.00	0.33

TABLE 3. Level C: Proportion of sentences wrongly classified as correct (Test 1 vs Test 2)

	Level C	
	z-value	**p-value**
SVI (Test 1 vs Test 2)	1.675	0.0940
SVI with *it* insertion (Test 1 vs Test 2)	2.817	0.0049
Omission of expletive and anticipatory *it* (Test 1 vs Test 2)	2.873	0.0041
Omission of a referential subject (Test 1 vs Test 2)	2.243	0.0249
Mean test results (Test 1 vs Test 2)	2.827	0.0047

TABLE 4. Level C: Comparison between Test 1 and Test 2

4.4. LEVEL C — RESULTS PER PARTICIPANT

Focusing on individual students' results, at level C the improvement seems more remarkable, as 14 of the 22 participants (ca. 64 %) made no mistakes at all at the post-test, which is evident in Figure 2. This statement comes with a caveat that there are also several students who made no progress at all or only a slight progress on the second test (students 6C, 8C, 21C), as well as a few students who actually performed worse on the post-test (students 4C, 13C, 16C, 17C). These students had one or two wrong answers more on Test 2 than on Test 1. Possible reasons for this intra-level variation are expounded in section 5.5.
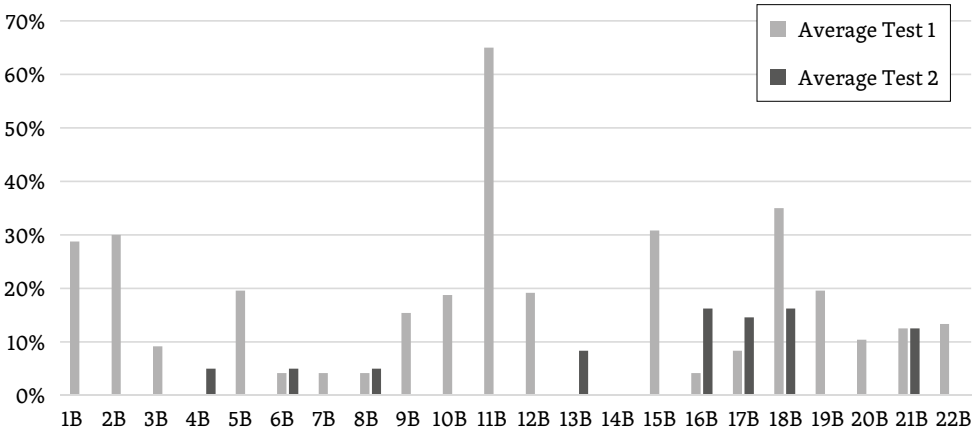

FIGURE 2. Level C results per participant (Percentage of sentences wrongly classified as correct in Test 1 vs Test 2)

4.5 COMPARISON BETWEEN LEVELS B AND C

Table 5 displays the results from the Wilcoxon rank-sum test whereby level B and level C results have been compared per category, both on the pre-test and on the post-test. The data demonstrate statistically significant difference between the two levels on both tests and across all categories, except for the Omission of a referential sub-

ject. In addition, there was a statistically significant difference between the mean for Level B and the mean for Level C, both on the pre-test (p=0.0032) and the post-test (p=0.0036).

	Test 1		Test 2	
	z-value	**p-value**	**z-value**	**p-value**
SVI (level B vs level C)	2.644	0.0082	2.146	0.0318
SVI with *it* insertion (level B vs level C)	2.737	0.0062	3.519	0.0004
Omission of expletive and anticipatory *it* (level B vs level C)	3.278	0.0010	2.581	0.0098
Omission of a referential subject (level B vs level C)	0.000	1.0000	–0.674	0.5002
Mean test results (level B vs level C)	2.952	0.0032	2.915	0.0036

TABLE 5. Comparison between level B and level C results on Test 1 and Test 2

5 DISCUSSION

Sections 5.1–5.4 discuss the findings of the four tested structures (SVI, SVI + *it* insertion, Omission of non-referential *it* and Omission of a referential subject) in the context of other relevant studies. Section 5.5 offers an explanation of the individual variation among participants at the different levels, section 5.6 outlines the pedagogical implications, while section 5.7 deals with the limitations of the study.

5.1 SUBJECT-VERB INVERSION
The comparison between level B and level C in the category of SVI revealed a statistically significant difference between these two proficiency levels both on the pre-test and on the post-test, as evident from Table 5. This fact may indicate that once the students' progress towards a more advanced English proficiency level, they attain the developmental readiness to master the constraints on English SVI. While the results for the intermediate learners were 47% and 22% (at the pre-test and the post-test, respectively) even advanced learners made wrong acceptability judgments to an extent (14% at the pre-test and 6% at the post-test). Such residual optionality has been acknowledged even among learners at a near-native level, especially with phenomena rarely encountered in L2, since learners require ample evidence and frequent exposure in order to master these particular structures (Sorace 2003: 140). This statement might be applicable to the acquisition of SVI by learners of English as well, as SVI is rarely encountered in English. However, as shown in other previous studies, some learners might never fully overcome problems at the syntax-discourse interface, even with explicit instruction (Teixeira 2018: 343, 346, 348).

Given the differences between the principles regulating English and Macedonian SVI, which have been outlined in the Introduction, Macedonian learners of English

are oftentimes confused about the non-acceptability of SVI in English in certain contexts. As a result of these differences, students experience a negative transfer from their L1 and overuse the VS word order, particularly at lower levels of proficiency.

Since Macedonian has a pragmatic word order, under the influence of their native language, some Macedonian learners of English find examples like (1) and (2) acceptable.

(1) Tomorrow are coming my grandmother and grandfather, because it's my birthday.
(2) In example (5) instead of Present Continuous is used Present Simple Tense.

This is in keeping with a study by Rutherford (1989) who found that learners of English whose L1 exhibits a pragmatic word order (Spanish, Arabic) tend to permute the canonical English word order and produce XVS sentences in their interlanguage (where X stands for an adverbial expression, V is an unaccusative verb and S is its only argument). As a matter of fact, Macedonian presentative sentences typically include a locative or temporal adverbial expression in initial position, an unaccusative verb and an inverted subject, because the subject in these sentences is by default new information and cannot be placed in initial (theme) position (Bužarovska et al. 2019).

One of the frequently mentioned constraints on full inversion is that 'the construction may not contain modal auxiliaries, perfective *have*, or progressive *be*' (Prado Alonso 2011: 103). Thus, although *come* is an unaccusative verb that does occur in SVI constructions, example (1) is unacceptable since the occurrence of SVI is restricted to the simple tenses, present and past. Quirk et al. (1985: 1381) illustrate this with the following sentences: *Here comes my brother* vs *Here is coming my brother*. Biber et al. (2021: 905) provide examples of SVI sentences with the verb *come* in present or past simple, in which a temporal adverbial (*then, again, first, next, now* but not: *tomorrow*) occurs in initial position and oftentimes provides a link to some already given information.

Example (2) mirrors the word order of the Macedonian translation equivalent, starting with an adverbial expression of place to set the scene (*In example (5)*), indicating a location in the text rather than physical location), followed by a topicalized expression (*instead of Present Continuous*), a passivized verb (*is used*) and finally, a non-agentive subject (*Present Simple Tense*). It has been attested in authentic Macedonian examples that SVI conveniently occurs in presentative passive constructions, since the participant in subject position does not have an active role (Bužarovska et al. 2019). In English, however, subject-verb inversion is acceptable with passive verbs in cases of locative inversion only with several specific subclasses of verbs: verbs of putting, verbs of putting in a spatial configuration, verbs of attachment, verbs of image impression, verbs of creation and verbs of perception (Levin and Rappaport-Hovav 1995).

The purpose of the explicit instruction in this study was to clarify this confusion stemming from the different principles guiding SVI in the two languages, and, by specifying the exact circumstances where SVI is allowed in English, it was intended to make students more confident in their use of the target language. The data demon-

strated a twofold improvement in the acceptability judgment of sentences that tested knowledge of SVI at Test 2 on both levels. The fact that there was such an improvement between the results from the pre-test and the post-test suggests that in this study explicit instruction has contributed to the improvement in the test scores. This, however, needs to be verified through an experimental study with random allocation of participants to an experimental and a control group.

5.2 SUBJECT-VERB INVERSION + *IT* INSERTION

In this study the acceptance of SVI + *it* insertion among Macedonian learners of English was checked through the inclusion of sentences like (3) and (4) in the GJCT.

(3) It is quite obvious the omission of the definite article 'the'.
(4) In some schools, beside English and German it is also studied French.

The pre-test results for this structure demonstrated a statistically significant difference between levels B and C (as evident in Table 5). More precisely, at Test 1 the acceptance rate of this structure was 48% among the intermediate learners, and 16% among the advanced learners, suggesting that the transition between intermediate and advanced level of proficiency is the period when students start outgrowing this developmental stage. While there was some improvement in the intermediate group at Test 2 (a reduction in the acceptance rate to 33%), the almost tenfold improvement (a decrease in the acceptance rate to 2%) in the advanced group was statistically significant. This points to a greater developmental readiness among the advanced learners to understand and pinpoint the ungrammaticality of this structure, although some developmental readiness is exhibited even among the intermediate students.

The reason for the occurrence of this structure in the interlanguage of Macedonian learners of English could lie in the fact that intermediate learners get some exposure to anticipatory *it*, but have not managed to master the exact circumstances that license the occurrence of non-referential *it* yet (Mitkovska et al., forthcoming). Thus, driven by the similarity of example (3) to constructions with anticipatory-*it*, some students find this example acceptable, unaware that these constructions require that the extraposed subject be a long and complex clause, rather than a long and complex noun phrase. Beside this, example (4) seems to point to another potential reason that could prompt the occurrence of *it*-insertion in the interlanguage of Macedonian learners of English, and that is the formal resemblance between several distinct types of Macedonian *se*-constructions. Of these, some are translated with non-referential *it* and extraposed subject clauses in English and others with standard *be*-passive constructions. More specifically, Macedonian *se*-passive constructions where the subject position is filled with a thematic argument[1] can be translated into English with a *be*-passive construction that has an overt preverbal referential subject (e.g. *Se otkaža natprevarot* vs *The match was cancelled*). On the other hand, some subjectless *se*-constructions where the verb has a clausal complement can be trans-

1   Mitkovska (2011) provides a detailed account of Macedonian *se*-constructions.

lated with a construction with a preverbal non-referential anticipatory *it* and an extraposed clause (e.g. *Se veli deka...* vs *It is said that...* or *Se gleda deka...* vs *It is obvious that...*). When Macedonian learners try to render into English content that would normally be expressed through a *se*-passive in Macedonian, as in example (4), some of them preserve the Macedonian VS order (*...is also studied French* corresponding to *...se izučuva i francuski*), but add an *it* in clause-initial position (*...it is also studied French*), sensing that the preverbal position cannot be left unfilled in English and possibly confused by those *se*-constructions that are translated with a non-referential *it*. Further adding to the confusion is the fact that Macedonian subjectless sentences with impersonal verbs, which exhibit some structural similarity with *se*-passive constructions, are also translated with non-referential *it* (*Se stemnuva* vs. *It is getting dark*). Thus, it might well be that Macedonian intermediate learners are overgeneralizing the use of non-referential *it* to multiple types of *se*-constructions.

5.3 OMISSION OF NON-REFERENTIAL *IT*

This study tested the students' acceptance of the omission of two kinds of non-referential *it*: empty (expletive) *it* as in (5), and anticipatory *it*, as in (6).

(5) Here in Bitola is very nice and the people are nice, too.
(6) Sometimes is hard to read and understand English poetry.

It has been confirmed on multiple occasions prior to this study that learners whose L1 is a null subject language (like Macedonian) experience negative transfer from their L1 when trying to learn a non-null subject language (like English). This is particularly evident at lower levels of proficiency, when the influence of the mother tongue is at its strongest, as was confirmed in a study of Macedonian learners of English by Mitkovska and Bužarovska (2018). Similarly, the pre-test in this study showed that intermediate students were much more likely to find the sentences with omitted non-referential *it* acceptable compared to the advanced students. To be more precise, the correspondence between level B and level C was 55% to 20%, which has proved to be a statistically significant difference (as evident from Table 5). This suggests that level C learners have started to advance past this developmental stage. The acceptance rate for the omission of non-referential *it* dropped almost twofold after the explicit instruction in the intermediate group, and more than threefold in the advanced group. Even though there was substantial improvement at both levels, yet the advanced learners demonstrated greater progress at Test 2 (evident in the statistical significance between the results on Test 1 and Test 2 in this category), which may bring the effectiveness of the explicit instruction in correlation with the students' English proficiency level and with their developmental readiness to grasp the grammatical unacceptability of the omission of non-referential *it* in these cases. As a matter of fact, Mitkovska et al. (forthcoming) uncover a parallel development regarding the constraints of SVI in English, SVI plus *it*-insertion, and the omission of non-referential *it*, confirmed by the fact that the scores for the acceptance rates of these three parameters display a similar falling trend from level B to level C. This testifies to the interrelatedness between the acquisition of the constraints on SVI in English and the

awareness about the grammatical unacceptability of SVI with *it*-insertion and the omission of non-referential *it*.

5.4 OMISSION OF A REFERENTIAL SUBJECT

The GJCT in this study included items which tested the acceptance of referential null subjects in English, such as (7).

(7) I have studied the present perfect tense in English and how is translated in our language.

It is interesting that the findings from this study point to a better overall score in the intermediate group to start with, as the mean percentage for the acceptance of null subjects on the pre-test was 10% among level B students and 14% among level C students. This was the only category where the difference between the two levels of proficiency was not statistically significant, suggesting that level B students have grasped the concept of unacceptability of referential null subject in English and have approached level C students in their development in this respect. At the post-test, intermediate students attained native-like results, while the advanced students also made a statistically significant improvement, but some minor optionality was still evident.

In this study Macedonian learners of English allow more non-referential null subjects than referential null subjects, which is in line with the previous findings for learners of English from other null subject L1 backgrounds (Prentza and Tsimpli 2013; Judy and Rothman 2010). An interesting finding is that the acceptability of non-referential null subjects is considerably higher on level B than on level C on the pre-test (55% vs. 20%), even after the instructional intervention (30% vs. 6%). In comparison, the acceptability of referential null subjects on levels B and C on the pre-test was 10% and 14% respectively, and after the instructional intervention it was 0% vs. 2%. Hence, the unacceptability of referential null subjects in English is acquired earlier than the unacceptability of non-referential null subjects by Macedonian learners of English, and the acquisition of English non-referential *it* is more problematic for them, which also confirms the results from Mitkovska and Bužarovska (2018). As a matter of fact, in a corpus study of the interlanguage of the Macedonian learners of English at levels A1-B2, it was demonstrated that learners experience greater difficulties producing sentences with non-referential subjects "because they find no semantic support for them", i.e. in the absence of a referential subject, semantics cannot facilitate the acquisition process, as is the case with the acquisition of obligatory referential subjects (Mitkovska and Bužarovska 2018: 19).

In cases when a null subject L1 is coupled with a non-null subject L2, the syntax of subjects in a foreign language is fully acquirable, but only at advanced stages of proficiency (Teixeira 2018: 218, 243, 271). As the null subject (which involves the 'narrow' syntax domain) is licenced in L1 but not in L2, this confirms that issues that belong to syntax proper are completely acquirable in an L2, unlike issues at the syntax-discourse interface which remain a source of optionality even at a near-native level due to difficulties in the processing of syntax-discourse mappings. This fact supports the Interface Hypothesis (IH).

Even from this study it is evident that SVI-related optionality tends to linger with learners of English longer than the Omission of a referential subject.

5.5 INDIVIDUAL VARIATION

Although most level B students performed better on Test 2, yet some students (4B and 10B) failed to make such progress in the time frame between Test 1 and Test 2. This could be attributed to the assumption that these two students might not have been developmentally ready to internalize the rules governing English SVI at this point. Viewing the intermediate B level as a continuum from lower- to upper-intermediate also provides a possible rationale for the intra-level variation among students, since some of them technically belonged to the upper-intermediate end of the spectrum and were thus closer to the required developmental readiness for English SVI acquisition, while others were not as close. Another reason (which is probably related to the previous one) could be that some students might need explicit instruction of longer duration and/or greater frequency and more controlled practice activities for their knowledge to sink in before they could actually perform better, especially if the material taught was well beyond their developmental reach to begin with.

When it comes to level C students, the fact that around 64% of them made no mistakes whatsoever at the post-test may be related to the previously mentioned assumption that the effectiveness of instruction depends on the developmental readiness of the students to comprehend, remember and apply the rules on SVI in a new context. These results may indicate that students at C level are much more developmentally ready to benefit from instruction related to English SVI. Possible reasons for the lack of improvement (or even slightly worse results) on Test 2 in some students include incomplete internalization of the rules governing English SVI in this rather short time frame or the residual optionality typically exhibited even by advanced learners trying to master L2 properties at the syntax-discourse interface, especially when L1 and L2 are rather different and when the investigated construction is rather rare in language (Teixeira 2018; Sorace 2003).

5.6 PEDAGOGICAL IMPLICATIONS

Although the findings from this exploratory study suggest that explicit instruction may be beneficial for mastering English SVI, yet this does not mean that SVI cannot be acquired simply by following the 'natural route'.

Slabakova (2015) maintains that the frequency of a particular structure at the syntax-discourse interface in the input becomes important only when transfer from L1 to L2 is an issue. Thus, only when transfer from the mother tongue is expected due to differences between L1 and L2 can exposure to copious and unambiguous input be helpful. If no transfer is expected, ample input is not necessary. In the context of this study, since the transfer from the L1 is misleading and the structure is infrequent in the input, greater exposure would potentially be of assistance and possibly even enhance the effects of explicit instruction. As a matter of fact, it seems that a combination between positive and negative evidence might be a better approach than either one of them in isolation. Thus, by providing naturalistic input as positive evidence, as well as delivering form-focused instruction and providing corrective feedback in

the controlled practise activities as negative evidence, greater grammatical accuracy may be within closer reach.

The statistically significant improvement in the overall acquisition of English SVI-related structures both on an intermediate (p=0.0107) and on an advanced level (p=0.0047) following instruction centred on grammar and contrastive analysis between the two languages, contrary to predominant views in the late twentieth century, lends some support to the claim that "L1 can and should have a relevant role at least in L2 grammar teaching and learning" (Teixeira 2018: 348).

5.7 LIMITATIONS

The results of this study should be interpreted with caution, keeping in mind that it does not allow the inference of definitive or generalized conclusions regarding the effect of explicit instruction on the acquisition of SVI by Macedonian learners of English, due to the lack of a control group in the study design. The observed improvement may have resulted, at least partially, from a combination of confounding variables, the effect of which cannot be determined with certainty. Other limitations of this study include the fact that there was no long-term follow-up to verify if the knowledge related to SVI was permanent and the rather small sample size, knowing that the increase in the sample size contributes to greater statistical power (Warne 2018: 251) and greater precision of the study inferences (Miah 2016: 246). This is why random allocation of participants to an experimental and a control group, a delayed post-test and recruiting a larger number of participants might well be considered, should this study be replicated at some point in the future. Another idea that could be taken into consideration for some future study is assessing the students' productive language skills in relation to SVI in English. The results from such a study could complement the findings from this study which relied on the students' assessment of the (non-) acceptability of given sentences.

6 CONCLUSIONS

In this exploratory study of the effect of explicit instruction on the acquisition of SVI in English, Macedonian learners of English at levels B and C generally performed significantly better at the post-test than at the pre-test. This indicates that in this study explicit instruction may have led to improved assessment of the acceptability or non-acceptability of the target structure — SVI in English. Understandably, this needs to be verified in an experimental study with a control group. This study revealed that the effectiveness of explicit instruction depends on several factors: the cross-linguistic influence from L1; the developmental readiness of learners to acquire the target structure, which is closely related to the level of proficiency in English; and the domains involved in the target structure.

As for the first factor, the different principles governing SVI in English and Macedonian inevitably contribute to the difficulties of the Macedonian learners in the acquisition of the SVI in English. Typologically, English and Macedonian are different in that Macedonian is a null subject language, while English is a non-null subject

language and this fact is also a source of confusion for some Macedonian learners. With regard to the second factor, we saw greater progress in students at level C than in students at level B, which means that intermediate students might not be as developmentally ready to master these structures as advanced learners. And we also saw that, despite the general trend towards improvement at both levels, mastering SVI was still beyond the grasp of individual students at both levels within the two-week time frame of the study. When it comes to the last factor, studies demonstrate that grammatical issues in the strict syntactic domain (like Omission of a referential subject) can be acquired even by learners who do not achieve native-like proficiency. However, learners find it hard to come to grips with complex issues such as SVI, which are at the interface between several domains (such as the syntax-discourse domain) and it is in these areas that learners could benefit from explicit instruction (Teixeira 2018). Although the findings from this study unambiguously point to a significant improvement, it might be sensible to replicate this study in the future, with the addition of a control group, a delayed post-test and with a larger respondent sample size, so as to examine whether the findings from this study would be confirmed.

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APPENDIX

Sample questions (some of which are distractors) extracted from the grammaticality judgment and correction tasks (GJCT)[2]:

1. In example (5) instead of Present Continuous is used Present Simple Tense.

   _____

2. Here is very hot and the sea is blue and lovely.

   _____

3. On the position of post-modifiers can stand either phrases or clauses.

   _____

4. We can hear "h" when is in initial position, for example: *house*.

   _____

2　The GJCTs were compiled by Liljana Mitkovska and Eleni Bužarovska.

5. All uses of the Present Simple Tense are examined in this study.

_____

6. Sometimes is hard to read and understand English poetry.

_____

7. So it should be used the adjective *comfortable* instead of *comfortably*.

_____

8. Here in Bitola is very nice, and the people are kind, too.

_____

9. I have studied the present perfect tense in English and how is translated in our language.

_____

10. In some schools, beside English and German it is also studied French.

_____

11. It is quite obvious the omission of the definite article 'the'.

_____

12. In this paragraph through examples will be illustrated which of the verbs of thinking have finite complement clauses.

_____

13. The grass was soft like sand and it was hard to walk on it.

_____

14. Tomorrow are coming my grandmother and grandfather, because it's my birthday.

_____