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The effectiveness of classroom instruction ‘at home’ vs. study abroad for learners of English as a foreign language attending primary, secondary school and university

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Given the growing importance of English as a lingua franca, this study examines which context (classroom instruction in the students' home country vs. studying abroad in an English-speaking country) better facilitates the acquisition of English by learners of different ages: children, adolescents and adults. Participants ($N = 197$) completed several tests before and after their respective programmes so that we could explore their development of English oral and written skills in terms of fluency, lexical and syntactic complexity, and accuracy. Results show that the 'study abroad' (SA) context is superior to the 'at home' (AH) context, especially for the development of oral skills. Additionally, when learning context is not considered, older students surpass younger students. However, when both learning context and age are taken into account, results reveal that younger SA participants tend to do better than older SA participants regarding oral skills, whereas results are less clear concerning written skills. Three important implications can be drawn from the present study: (1) there should be more SA programmes targeting children and adolescents; (2) primary and secondary schools should offer students the possibility of studying abroad for a term or two; (3) given the significant economic and educational implications, SA programme organizers should take into account factors that impede or facilitate the learning of foreign languages in order to maximize the effects of these stays abroad.

Introduction and literature review

In the last decade, the number of studies that examine the effects of study abroad (SA) experiences has grown together with the popularity of SA programmes all over the world. The growth of SA programmes can partly be explained because the SA context is believed to be one of the most efficient contexts (Collentine 2009) to learn a foreign language (FL) because it offers unlimited and authentic exposure. Although there are several studies that examine the effects of SA experiences on different domains, we will focus on FL development since this is one of the main motives for enrolling in an SA programme (Allen 2010).

The SA setting has been shown to be especially beneficial for the development of FL oral fluency. Most of the studies that have examined the development of SA participants' FL oral fluency have found this skill is significantly improved after time spent abroad, regardless of the types of instruments used and the measures adopted to account for L2 gains (Klapper and Rees 2012; Llanes and Muñoz 2009; Freed et al. 2004). The same is true for the learning of FL vocabulary (Dewey 2008; Foster 2009) and listening skills (Dyson 1988; Llanes and Muñoz 2009).

However, the effects of SA experiences on other domains such as FL pronunciation, reading and writing are rather unclear. On the one hand, the few studies that have examined the development of FL pronunciation following an SA experience report contradictory results (Díaz-Campos 2004; Mora 2008; Stevens 2011). The same holds true for reading development, for which some studies show improvement of reading skills during time spent abroad (Kinginger 2008), whereas others show practically no improvement (Dewey 2004). Finally, regarding writing, results are also controversial since studies by Freed, So and Lazar (2003) and Llanes (2013) report on the lack of effectiveness of the SA context for the development of writing skills, whereas the studies by Sasaki (2004, 2009) show the opposite. However, this apparent contradiction in the fields of pronunciation, reading and writing might be due to the type of instruments used and measures adopted to account for L2 gains; in the case of pronunciation, for example, the two studies that *did not* find an advantage for SA participants (Díaz-Campos, 2004; Mora, 2008) examined the development of certain consonants, whereas the study by Stevens (2001), which found a clear advantage for SA participants, analyzed vowel development. Similarly, in the case of reading, the study by Kinginger (2009) explored reading comprehension by means of a multiple choice test, whereas Dewey (2004) used more sophisticated instruments that focused on reading processes. Finally, as regards writing development, a possible explanation for the apparent lack of effectiveness of the SA context may be the amount of time elapsed between the pre- and post-test (one semester in the studies by Freed et al. 2003 and Llanes 2013, and one year or longer in the studies by Sasaki).

Most of the above-mentioned studies have focused on the effects of SA on FL development in groups of adults. Only a few studies have focused on adolescents (Lapkin et al. 1995; Llanes and Muñoz 2009) and only two studies, to our knowledge, have examined children (Llanes 2012; Llanes 2013). Lapkin et al. (1995) examined the linguistic gains of a group of 119 Canadian English speakers (aged 15-17) learning French in Quebec. The authors found that after spending three months in Quebec, participants experienced considerable gains in dictation and speaking skills. The other study that included adolescents (Llanes and Muñoz 2009) examined exhaustively the oral fluency gains of a group of 24 Catalan/Spanish learners of English ($n= 22$ adolescents and $n= 2$ young adults) spending 3-4 weeks abroad. The authors found that even after spending such a short period of time abroad, participants significantly improved their oral fluency despite significant use of their L1. Finally, Llanes (2012) explored the short- and long-term effects of a short SA experience of a group of children spending 3 months abroad, whereas (Llanes and Muñoz 2013) compared the L2 development of a group of children with that of a group of adults. Llanes (2012) found that after spending 3 months abroad, participants experienced significant gains in oral skills but not in written ones, and that participants' scores one year after their return from the host country were still as high or even higher than the scores in the post-test. Likewise, Llanes and Muñoz (2013) found that whereas for child participants the SA context was more beneficial (especially for the improvement of their oral skills), the AH context was more beneficial for adult participants in terms of improvement in their written skills. The fact that age has been unexplored with respect to the SA context is surprising given that its effects have been

investigated in depth regarding other learning contexts such as the naturalistic setting, the FL instructed setting and the immersion setting.

The studies that have explored the effects of age on FL development in a naturalistic setting (when the participants emigrate to the host country for an indefinite period of time) typically examine the participants' ultimate attainment with respect to their age of arrival in the FL country. These studies have generally found that older learners (usually adolescents) surpass younger learners (children) in the short term, but in the long run, younger learners catch up with, and even outscore, older learners (Krashen, Long, and Scarcella 1979). These findings affect several domains of the FL, such as pronunciation (Birdsong 1992), morphosyntax (Ervin-Tripp 1974) and global FL learning (Snow and Hoefnagel-Höhle 1978).

However, research that has examined the effects of age on FL development in an FL instructed setting, that is to say, when the FL instruction takes place in the participants' home institution and they receive instruction in the FL only for a few hours a week, has found rather the opposite: that older participants do better than younger participants (García-Mayo and García-Lecumberri 2003; Muñoz 2006). These findings apply to oral comprehension skills (Muñoz 2003), phonetics (Fullana 2006), oral fluency (Mora, 2006), vocabulary (Miralpeix 2006), writing (Celaya and Navés 2009), and global L2 proficiency (Cenoz 2003).

What has been found with regards to the FL instructed setting is nearly in line with the findings of studies that have investigated the effects of age on FL development in an immersion setting, in which participants learn the FL (and through the FL) in their home country for many hours a week: that is, the only aspect in which early starters significantly outperform late starters is oral/aural skills (Lapkin, Swain, Kamin, and Hanna 1980), despite the fact that early starters received much more instruction in the FL than participants who started learning the FL at an older age.

Finally, there is only one study that has analysed the impact of age on FL development in an SA context: Llanes (2013). This study compared the oral and written FL development of two groups of children (one learning English in their home country and the other one abroad) and two groups of adults (again, one 'at home' (AH) and the other one abroad). The findings from Llanes (2013) suggest that in general, SA children show an advantage over SA adults, but that this advantage is limited to their oral skills. Given that there is only one study that examines the effects of age in an SA context and this study has focused on children and adults, the aim of the present study is to build on this study by adding a third group of participants: adolescents. Since there are many SA programmes targeting adolescents and at the same time there is very little research examining this type of population, the present study fills an important gap both in the SA literature and in age-related studies. The study of adolescents is particularly interesting since they differ from the other two groups of participants (children and adults) in social, affective and cognitive aspects, such as level of maturity and social practices, which may well influence L2 acquisition.

Research questions

The present study seeks to answer the following research question:

- 1 Do learning context (SA vs. AH) and age (children vs. adolescents vs. adults) play a significant role in the oral and written development of English as an FL, measured in terms of fluency, lexical and syntactic complexity, and accuracy?
 - 1a If so, what learning context is more beneficial for the development of the FL?
 - 1b If so, what age group benefits the most from SA?

The research

Participants

The participants of the present study were 197 Catalan/Spanish bilinguals learning English as an FL. As shown in Table 1, participants were grouped according to their age (children, adolescents or adults) and learning context (learning English AH or SA). The groups of children were studying at three private single-sex primary schools in Spain and the mean onset age (age at which they started learning English) for this group was 4.74. These participants received instruction in English for four hours per week and science classes in English two hours per week. Therefore, they were exposed to English a total of six hours per week and this was nearly the only contact that they had with the FL. Some of these students were offered the opportunity to study in Ireland for two or three months. They were accompanied by a Catalan/Spanish teacher and they all lived with Irish families with no other foreign students, they were placed in Irish schools with no other Catalan/Spanish classmates and they attended content and language classes for five hours a day.

INSERT TABLE 1 HERE

The groups of adolescents were studying at a private school in Spain and they received the same amount of instruction as child participants (six hours per week in total). The mean onset age for the group of adolescents was 5.31. They were also given the opportunity to study abroad for a term, namely in Vancouver, Canada for two months. Most of those participants who went to Canada were placed in different schools, although a few attended the same school and the same class. They attended classes for five hours a day and they also lived with local families. Nearly all of these students reported that no other foreign students lived with them.

Finally, the group of AH adults were English majors at the University of Barcelona and attended classes in English an average of 15 hours a week. The mean onset age for this group of participants was 8.42. As for the group of SA participants (Erasmus students), 25 were English majors, whereas the rest ($n = 21$) majored in other areas and attended classes in English for an average of 12 hours a week. They studied abroad for three months, the majority of them in the UK, and few ($n = 4$) in Ireland. The Erasmus students reported various living arrangements. The majority rented an apartment either alone or with other Catalan/Spanish speakers or other foreign students (57.2%), while others stayed in residence halls (38.1%), and a very small minority stayed with families (4.8%).

Instruments

The instrumentation for the present study consisted of a written composition, an oral picture-elicited narrative task and a language contact questionnaire.

For the written test, participants were given 15 minutes to write a composition entitled 'My life: past, present and future expectations'. This topic was chosen because it had been used previously with participants of different ages and found to be successful at eliciting interesting L2 written data for all types of participants (Muñoz 2006). Participants then took part in an oral interview in English focusing on their language learning history as well as some other biographical questions. This interview led to a picture-elicited narrative task in which participants were shown a story about two children going on a picnic (Heaton 1966). This story was chosen because it had previously been used with participants of different ages and FL proficiency levels with satisfactory results (see Muñoz 2006). Participants were given

one minute to plan their utterances and then were asked to explain the events depicted in the pictures. The data extracted through this oral narrative were the data considered to examine participants' oral production.

At post-test only, participants were asked to fill out a language contact questionnaire in their L1. This questionnaire included some biographical questions and also inquired about the amount and type of first language (L1) and FL use during the time of the study. SA participants were also asked questions about their living arrangements and types of interactions they had while overseas. This questionnaire was an adaptation of the Language Contact Profile [LCP] (Freed, Dewey, Segalowitz, and Halter 2004), but it was simplified in order to make it suitable for children. Only 21 out of the 46 SA adult participants returned the questionnaire.

Procedure

This study consists of a pre- and post-test. The pre-test took place the week before the participants' departure to the host country, and the post-test was administered the week after the participants' arrival from the FL country¹. The three tests were administered on the same day, except for the child participants, who, at the request of their schools and due to time restrictions, completed the written test the day before the oral test and the questionnaire.

Measures

The measures chosen to assess written FL gains in the present study are considered amongst the most reliable measures according to Wolfe-Quintero, Inagaki and Kim (1998) to examine FL learners' written production. For most measures we adopted the T-unit as the production unit. The T-unit is defined in Hunt (1965: 20) as 'one main clause with all subordinate clauses attached to it'. For comparison purposes, the same measures were adopted to account for oral gains, except for oral fluency. Whereas written fluency was measured through the ratio of number of words per T-unit (WDS/TU), oral fluency was computed through pruned syllables per minute (SPM), as this measure has been claimed to be more accurate for oral production than WDS/TU. Lexical complexity was examined by means of the Guiraud's Index of Lexical Complexity (GUI), which consists of dividing the total number of word types by the square root of the total number of tokens. Syntactic complexity was computed by the ratio of clauses per T-unit (CL/TU) and finally, two measures accounted for accuracy: error-free T-unit per T-unit (EFTU/TU), and the ratio of number of errors per T-unit (ERR/TU). For an improvement to be demonstrated, a higher value had to be shown in the post-test for all measures except for ERR/TU, for which a decrease indicated improvement.

Analysis

The data were transcribed and coded by the first authors of this study using CLAN (MacWhinney 2000). To check reliability, the second author then also coded 15% of the data; Interrater and intrarater reliability were both high (92.4% and 95.4%, respectively).

In order to answer our research question, between-group comparisons were carried out through Multivariate Analysis of Covariance (MANCOVA) tests. MANCOVAs were employed because they allow the researcher to control for a variable that might influence the results (covariate), and since participants' pre-test scores were not homogeneous (adults had significantly higher scores than children), the participants' proficiency level in the pre-test was controlled for. In the MANCOVAs performed, the dependent variables were the scores in

each of the measures in the post-test, the covariates were the scores in the pre-test, and the independent variables were learning context and age. MANCOVA tests were carried out separately for the oral and written variables because the number of child participants in the oral and written tests was slightly different given that these tests were completed on different days. For all of the analyses, the alpha level was set at .05.

Results

Preliminary assumption testing was conducted to check for normality, linearity, outliers and multicollinearity, with no serious violations noted. The MANCOVA tests for the written measures revealed that there were no significant differences between the participants in the two *learning contexts* ($F(5, 166) = 2.087, p = .069, \text{Wilks' Lambda} = .941$). However, for the oral measures, learning context turned out to be statistically significant ($F(5, 141) = 17.757, p < .001, \text{Wilks' Lambda} = .614$). It was found that the SA setting was clearly more beneficial than the AH one (see Table 2 below and Appendix 1 for the descriptive statistics) since participants in the SA context scored significantly higher in almost all of the measures (SPM, GUI, EFTU/TU and ERR/TU), with the exception of CL/TU. It can be observed that for all of these significant differences, effect sizes were rather small (Ferguson 2009), with the exception of SPM, for which the effect size was moderate and therefore indicated that improvement in this measure was quite uniform across groups.

TABLE 2

Regarding *age* (see Table 3), the MANCOVA tests revealed differences between participants of different age groups both concerning written skills ($F(5, 121) = 5.995, p < .001, \text{Wilks' Lambda} = .801$) and oral skills ($F(10, 282) = 2.024, p = .031, \text{Wilks' Lambda} = .871$). Regarding the written measures, it was found that adults showed a greater increase than the rest of the groups in WDS/TU, GUI, CL/TU and ERR/TU, the effect size of these differences being moderate for written fluency and accuracy, and small to moderate for written lexical and syntactic complexity. With regards to the oral skills, only GUI was found to be significantly different, and, again, the group of adults outscored the remaining groups and the effect size of the difference was from small to moderate.

TABLE 3

Finally, the *interaction between learning context and age* (see Table 4) was also found to be significant both for the written ($F(10, 332) = 3.290, p < .001, \text{Wilks' Lambda} = .828$) and oral ($F(10, 282) = 2.563, p = .006, \text{Wilks' Lambda} = .840$) measures. Concerning the written production, it was found that AH adults showed a greater increase than the remaining groups in terms of WDS/TU and CL/TU, both of them with a small effect size. In both cases the group of AH adults was followed by the groups of SA adults, SA children, SA adolescents, AH adolescents and AH children, respectively. However, with regards to EFTU/TU, it was found that the groups of SA adolescents and SA children scored practically the same and were the groups that experienced the greatest gains, followed by AH adolescents, AH adults, SA adults and AH children, respectively. Likewise, concerning ERR/TU, the group of SA children outscored the rest of the groups, followed by SA adolescents, AH adults, AH adolescents, SA adults and AH children. In both cases effect sizes were small.

Regarding the effects of the interaction of learning context and age on oral variables, three measures turned out to be statistically significant: SPM, EFTU/TU and ERR/TU, the

first two showing a small effect size, and the latter a small to moderate effect. Regarding oral fluency, the group of SA children was the group that showed the greatest gains, followed by the groups of SA adolescents, SA adults, AH adolescents, AH adults and AH children, respectively. For EFTU/TU, the group of SA adolescents yielded the greatest gains, followed by SA children, SA adults, AH adults, AH adolescents and AH children. Finally, concerning ERR/TU, the group of SA children experienced the greatest gains, followed by SA adolescents, AH adults, SA adults, AH adolescents and AH children.

TABLE 4

In sum, the results suggest that the SA context is superior to the AH context, especially for the development of oral skills. They also provide evidence for the claim that adults do better than adolescents and children when learning context is *not* considered. Regarding the interaction effects between learning context and age, it can be claimed that younger participants in the SA context seemed to experience the greatest gains concerning the oral skills measured, but these effects were not so clear with respect to the written skills.

Discussion and conclusion

In general, findings are in agreement with Llanes (2013): younger participants abroad experience more linguistic gains, especially regarding oral production, and this is in line with previous findings which show the superiority of the SA context over the AH one (Freed et al. 2003; Freed et al. 2004). Llanes (2013) explain this superiority of the SA learning context over the AH one by the amount of practice in the FL that the SA context offers: the SA participants had more opportunities to practise the FL than participants in the AH setting. The fact that the benefits accrued in the SA setting are restricted to oral skills and do not apply to writing, could also be explained by the amount and type of practice that SA participants experienced (see Appendix 2 for information on practice). Moreover, SA participants were exposed to the FL more, and more intensively, than their AH peers, so intensity of exposure/input received might explain the superiority of SA participants (in line with Muñoz 2012).

The results of the present study corroborate Llanes's (2013) findings with respect to age. These indicate that when learning context was *not* taken into account, in general terms, older participants outscore younger participants. This finding confirms what previous research on age in an FL instructed setting has found: an advantage for older participants over younger participants (García-Mayo and García-Lecumberri 2003; Muñoz 2006). However, this finding was basically confined to written skills. The supremacy of adult participants over younger participants regarding writing skills could be due to the older learners' more developed cognitive skills and their fully-developed L1 literacy (Cumming 1989), since FL writing is considered to be a 'bilingual event' (Manchón, Murphy and Roca 2007: 165).

Finally, results regarding the interaction between learning context and age by Llanes (2013) and the present results show that SA children outscored the remaining groups in oral SPM and ERR/TU; however, whereas in Llanes's (2013) study oral Guiraud's Index was also significant, in the present study it was not. The present study reveals that there was improvement in these measures of oral fluency and accuracy, with younger participants in the SA context doing significantly better than older participants in the AH context. However, with regards to the effects of the interaction between learning context and age on the participants' written skills, in both Llanes's (2013) study and the present study it was found that AH adults surpassed the rest of the groups on two measures (WDS/TU and CL/TU).

While a non-significant effect was found concerning written ERR/TU in Llanes's (2013) study, in the present study a significant effect was found for this measure, in which SA children outscored the remaining groups. The same was true for the other accuracy measure EFTU/TU, for which the groups of SA children and SA adolescents scored practically the same and outperformed the other groups. It is not surprising that AH adults surpassed other groups in measures of written fluency and complexity as these participants reported having written in the FL more than adolescents and children, but also as these are skills that could well be transferred from the participants' L1 and therefore the adults would be at an advantage. The higher performance by SA children with regards to accuracy could be explained by the type of exposure and FL contact they had, in that they seem to have received high-quality input. The reason why children abroad did better than adolescents abroad when the latter reported practising the FL slightly more could tentatively be explained by the fact that children are typically more uninhibited than adolescents, and that for this reason they improved their oral skills more than the rest of groups of participants (Dewaele, personal communication).

This study has a number of limitations. First, the group of adolescents was smaller than the other two groups, and a larger sample of adolescents would be desirable in order to make results more generalisable. Second, the data extracted through the questionnaire is self-reported, and for the group of SA adults, these data come from only 21 (out of 46) participants, which weakens its reliability. A further limitation is that although previous research shows that social, affective and cognitive factors are associated with age, it is possible that such differences also existed *within* the participant groups (and not only between groups) given that different biological ages were represented in the groups themselves. Finally, it is important to note that this study did not take account of participants' proficiency levels at the start. Further research may need to consider this variable since previous research has shown that proficiency levels could influence the results (Brecht and Robinson 1995; Llanes and Muñoz 2009).

Nonetheless, the present study makes an important contribution to both the fields of SA and age-related studies, as it is the first investigation that compares participants of three different age ranges learning English as an FL in an SA context, and it has some important potential implications for L2 pedagogy. The research would encourage SA programme organisers to focus on creating more programmes for younger participants since they seem to benefit from the SA learning context more than older participants. Given the positive outcomes achieved by SA children, primary (and secondary) schools should increase opportunities to engage in an SA experience. Within Europe, a mobility programme equivalent to the European Community's Erasmus programme could be set up for school students (children and adolescents) However, any mobility programme for children would obviously need to take into account potential affective and social challenges for participants who typically might not be used to being away from their family context and who would thus have very different needs to the typical Erasmus exchange student.

Note

1. The time between pre- and post-test was either two or three months for all the groups, except for a few adult students in the SA context, who, for reasons we could not control, had to take the post-test three weeks before the rest. However, we compared these participants with the ones who did the post-test later on and found no significant differences. Those participants staying abroad for only two months spent 'the third' month in the home institution with their AH peers.

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Appendix 1

Table 1A: Descriptive statistics in the pre- and post-test for the groups of children

	AH children		SA children	
	Pre-test	Post-test	Pre-test	Post-test
O. SPM	67.55 (41.07)*	71.98 (42)	76 (38.85)	119.68 (37.80)
O. GUI	3.71 (1.23)	3.61 (1.30)	4.09 (0.74)	4.49 (0.56)
O. CL/TU	1.30 (0.58)	1.37 (0.56)	1.41 (0.42)	1.60 (0.39)
O. EFTU/TU	0.18 (0.21)	0.14 (0.19)	0.21 (0.23)	0.34 (0.26)
O. ERR/TU	1.97 (1.15)	2.07 (1.14)	1.81 (1.02)	1.19 (0.77)
W. WDS/TU	6.94 (2.02)	6.96 (1.72)	7.51 (1.88)	7.97 (1.4)
W. GUI	5.07 (1.02)	5.25 (0.92)	5.15 (0.86)	5.58 (0.87)
W. CL/TU	1.28 (0.28)	1.28 (0.25)	1.32 (0.26)	1.36 (0.26)
W. EFTU/TU	0.36 (0.21)	0.33 (0.22)	0.34 (0.21)	0.47 (0.21)
W. ERR/TU	1.09 (1.19)	1.03 (0.64)	1.09 (0.89)	0.71 (0.48)

Table 1B: Descriptive statistics in the pre- and post-test for adolescent groups

	AH adolescents		SA adolescents	
	Pre-test	Post-test	Pre-test	Post-test
O. SPM	94.31 (20)*	109.63 (29.99)	105.63 (40.75)	138.71(37.46)
O. GUI	4.66 (0.32)	4.45 (0.34)	4.78 (0.43)	5.05 (0.35)
O. CL/TU	1.65 (0.31)	1.60 (0.33)	1.81 (0.44)	1.74 (0.37)
O. EFTU/TU	0.23 (0.16)	0.24 (0.16)	0.35 (0.20)	0.48 (0.19)
O. ERR/TU	1.65 (0.65)	1.64 (0.77)	1.26 (0.48)	0.82 (0.36)
W. WDS/TU	8.14 (1.09)	8.13 (1.19)	7.69 (1.18)	8.24 (0.88)
W. GUI	5.80 (0.43)	5.75 (0.57)	6.12 (1.17)	6.37 (0.51)
W. CL/TU	1.41 (0.18)	1.43 (0.22)	1.44 (0.24)	1.52 (0.21)
W. EFTU/TU	0.47 (0.17)	0.51 (0.16)	0.53 (0.16)	0.59 (0.15)
W. ERR/TU	0.04 (0.05)	0.58 (0.19)	0.09 (0.12)	0.41 (0.17)

Table 1C: Descriptive statistics in the pre- and post-test for adult groups

	AH adults		SA adults	
	Pre-test	Post-test	Pre-test	Post-test
O. SPM	121.90 (31.42)*	125.29 (34.59)	123.44 (29.90)	146.41 (31.37)
O. GUI	5.14 (0.64)	5.36 (0.70)	5.69 (0.80)	5.93 (0.63)
O. CL/TU	1.75 (0.38)	1.80 (0.47)	1.73 (0.21)	1.86 (0.32)

O. EFTU/TU	0.54 (0.27)	0.53 (0.24)	0.55 (0.22)	0.56 (0.22)
O. ERR/TU	0.81 (0.61)	0.68 (0.43)	0.73 (0.47)	0.70 (0.44)
W. WDS/TU	14.39 (5.45)	16.38 (2.13)	10.83 (2.34)	11.44 (2.28)
W. GUI	7.08 (0.71)	7.73 (0.75)	7.30 (0.77)	7.62 (0.85)
W. CL/TU	2.52 (0.62)	2.43 (0.37)	1.92 (0.39)	1.92 (0.36)
W. EFTU/TU	0.43 (0.20)	0.57 (0.23)	0.65 (0.17)	0.62 (0.17)
W. ERR/TU	1.06 (0.45)	0.74 (0.69)	0.48 (0.32)	0.54 (0.35)

Note

* Standard deviations in parentheses

Appendix 2. Information on amount and type of FL practice

Table 2A: Hours a week spent practising the FL

	Children		Adolescents		Adults	
	SA	AH	SA	AH	SA	AH
Speaking	30.17 (9.23)*	4.2 (2.3)	34.3 (7)	2.5 (0.42)	22.57 (11.66)	9.45 (7.36)
Reading	7.46 (6.9)	2.15 (2.15)	5.8 (5.9)	3.25 (4.80)	11 (8.63)	11.75 (8.87)
Listening	32.3 (8.4)	5.3 (3.8)	26.7 (6.5)	6.25 (4.15)	28 (9.89)	16.6 (9.17)
Writing	10.07 (8.22)	3.38 (2.05)	16.2 (8.7)	4.91 (3.70)	7.19 (6.67)	11 (7.78)
Total	80	15.03	83	16.91	68.76	48.8

Table 2B: Hours per week spent interacting with native-speakers of English (NSs) and non-native speakers (NNSs)

	Children		Adolescents		Adults	
	SA	AH	SA	AH	SA	AH
NSs (h/w)	28.19 (9.94)*	0 (0)	29.40 (6.51)	0 (0)	6.95 (4.64)	3.32 (1.15)
NNSs (h/w)	1.97 (0.57)	4.2 (2.28)	7.99 (4.92)	4.87 (2.51)	15.62 (8.53)	6.13 (4.28)

Note

* Standard deviations in parentheses