

Motivation and Vocabulary Breadth in CLIL and EFL Contexts. Different age, Same Time of Exposure

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ABSTRACT

Numerous studies have found a positive connection between learners' motivation towards foreign language and foreign language achievement. The present study examines the role of motivation in receptive vocabulary breadth (size) of two groups of Spanish learners of different ages, but all with 734 hours of instruction in English as a Foreign Language (EFL): a CLIL (Content and Language Integrated Learning) group in primary education and a non-CLIL (or EFL) group in secondary education. Most students in both groups were found to be highly motivated. The primary CLIL group slightly overcame the secondary non-CLIL group with respect to the mean general motivation but this is a non-significant difference. The secondary group surpassed significantly the primary group in receptive vocabulary size. No relationship between the receptive vocabulary knowledge and general motivation is found in the primary CLIL group. On the other hand, a positive significant connection, although a very small one, is identified for the secondary non-CLIL group. We will discuss on the type of test, the age of students and the type of instruction as variables that could be influencing the results.

Keywords: motivation, EFL receptive vocabulary, Content and Language Integrated Learning (CLIL), time of instruction, age

1. INTRODUCTION

Content and Language Integrated Learning (CLIL) is a dual-focused approach that allows students to learn a content subject while being exposed to the foreign language in which this subject is taught (Dalton-Puffer 2008). In the last few decades, the implementation of CLIL is a growing tendency in the European educational setting. In understanding the research findings in studies where the type of instruction is involved, we should single out several possible moderating variables, such as the learners' age, the time of foreign language exposure, and the type of instruction itself, i.e., CLIL vs. EFL (English as a Foreign Language). In EFL the foreign language is not the vehicular language as it is in CLIL. In addition, CLIL requires the implementation of a set of techniques to support both content and foreign language teaching. To know the extent up to which some each of these variables, independent of the others, has some weight on language achievement is an arduous task, since the

learners' age, which usually goes hand in hand with the educational level, runs parallel to the time of EFL exposure. CLIL entails an increase of exposure independent of the learners' age or educational level. In Spanish education, a typical profile is one in which a learner in a CLIL context receives weekly at least the same hours of exposure to English as a non-CLIL learner plus the hours in English received through the different CLIL subjects. In other cases, the CLIL learner may even receive more hours in English weekly.

This paper attempts to explore the connection between learners' motivation and their EFL receptive vocabulary knowledge. Specifically, it aims to probe into the connection between the size of receptive vocabulary and general, intrinsic and extrinsic motivation of two groups of Spanish learners: a CLIL group in primary education and a non-CLIL group in secondary education. Both groups had received 734 hours of instruction in English, which cancels out the effect of time of exposure.

1.1. RECEPTIVE VOCABULARY

Foreign language vocabulary knowledge has become a topic of major importance in the field of Second Language Acquisition (SLA) as a substantial body of research attests in the last decade (e.g. Schmitt 2000, Qian 2002, López Mezquita 2005, Nation 2006, Staehr 2008). Different aspects are of considerable importance within foreign language vocabulary acquisition. A starting point for discussion is the distinction between productive and receptive types of vocabulary knowledge. Nation (2001) explains that whereas receptive knowledge is understood as a passive skill whose performance involves the perception of a word and understanding of its meaning both in listening and reading, productive word knowledge is perceived as an active skill consisting in the production of words to match the speaker's intention in speaking and writing. Nation (1990, 2001) and Meara (1996) refer to form, meaning and use as key aspects involved in the learning of a new word both productively and receptively. Research has also examined foreign language learner's types of vocabulary knowledge and concludes that production is a more demanding task than reception (e.g. Laufer and Paribakht 1998, Webb 2008).

Among the tools to measure receptive vocabulary knowledge, the Vocabulary Levels Test (VLT) by Nation (1983, 1990) has been widely used and validated in research (Schmitt and Meara 1997; Laufer 1998; Laufer and Paribakht 1998; Cobb and Horst 1999; Schmitt, Schmitt and Clapham 2001; Cameron 2002; Jiménez Catalán and Terrazas 2005-2008; Mokhtar et al. 2010; Agustín Llach and Terrazas Gallego 2012). Traditionally implemented at the university level (Waring 1997, Cobb and Horst 1999, Nurweni and Read 1999, Pérez Basanta 2005, Mokhtar et al. 2010), it has also been used in primary and secondary education (e.g. Laufer 1998, Qian 2002, López-Mezquita 2005, Terrazas and Agustín Llach 2009, Agustín Llach and Terrazas Gallego 2012, Fernández Fontecha and Terrazas Gallego 2012). With the

purpose of informing vocabulary teaching, the VLT is a word-definition matching test that measures receptive vocabulary breadth (i.e., size or number of words) based on the subjects' recognition of words of graded frequency lists of 2,000, 3,000, 5,000, the Academic Word List (AWL) and the 10,000 most frequent words in English. The test-takers are required to match three definitions to three words out of a list of six target words that belong to a frequency list. The testees must know the six words in order to check them against the given definitions. Knowing words in a frequency band implies knowing words in all lower bands.

Table 1 shows results of different studies conducted in Spain with the 2,000-word frequency-band from the receptive version of the Vocabulary Levels Test (2K VLT), version 2, by Schmitt, Schmitt and Clapham's (2001). These results are arranged according to the number of words known receptively. In general, the results in VLT studies reveal that the number of hours of L2 exposure and the age or educational level has a predominant effect in the receptive vocabulary size.

Study	Receptive Vocabulary Size (No. of words)	Hours of L2 exposure	L1	Educational level / type of instruction
López–Mezquita (2005)	941	1049	Spanish	Secondary Education (4th secondary/10th grade) / EFL
Canga Alonso (in press)	935	1049	Spanish	Secondary Education (4th secondary/10th grade) / EFL
Fernández Fontecha and Terrazas Gallego (2009)	1215	944	Spanish	Secondary Education (3rd secondary/9th grade) / EFL (1st secondary learners of the present study)
Canga Alonso (2013)	972	839	Spanish	Secondary Education (2nd secondary/8th grade) / EFL (subsample of 1st secondary learners of the present study)
Canga Alonso (2013)	696	839	Spanish	Primary Education (5th grade) / CLIL (learners of the present study)
Agustín Llach and Terrazas Gallego (2012)	663	629	Spanish	Primary Education (6th grade) / EFL
Agustín Llach (2012)	479	734	Spanish	Primary Education (4th grade) / CLIL (same learners of the present study)
Agustín Llach (2012)	595	419	Spanish	Primary education (4th grade) / EFL

Table 1. 2K VLT: average receptive vocabulary size in EFL Spanish learners

1.2. MOTIVATION IN FOREIGN LANGUAGE ACQUISITION

Motivation is not an unknown variable in the field of foreign language acquisition. Its influence in learning in general and in foreign language learning in particular has been traditionally covered in the literature. Different models have attempted to shed some light on this complex relationship of language learning and motivation. To mention some, Gardner and Lambert's (1972) Socio-Psychological Model, Self-Determination Theory (Deci and Ryan 1985; Noels 2001; Noels, Pelletier, Clément and Vallerand 2000) or Dörnyei's (2005, 2009) L2 Motivational Self System. According to Gardner (1985: 11), motivation towards language learning is the desire to achieve that language, the learner's immediate goal, by means of effort, want or desire, and affect or attitude. He points to two types of orientations or learner's ultimate reasons for learning the language: integrative orientation, i.e., learners' willingness to learn the language to become part of the target language community, and instrumental orientation, i.e., learners' desire to command the foreign language for practical reasons. Despite the importance of this attempt in determining the types of motivation, different studies revealed the need for further classifications (Clément and Kruidenier 1983, Crookes and Schmidt 1991). In this line, the Self-Determination Theory classified motivation in terms of (1) extrinsic motivation, based on the external factors that influence foreign language learning, and (2) intrinsic motivation, which refers to the interest generated by the activity itself. Due to the apparent resemblance of these terms and concepts, instant parallelisms could be lightly articulated between instrumental motivation and extrinsic motivation, and between intrinsic motivation and some forms of integrative motivation. However, because of the different conceptualizations of these terms, the utmost caution must be exercised before any association is made.

In the last few decades, a vast amount of studies have examined the connection between learners' motivation towards the foreign language and foreign language achievement. As could be expected, a positive relationship is identified (Schmidt and Watanabe 2001, Masgoret and Gardner 2003, Bernaus and Gardner 2008, Yu and Watkins 2008, Fernández Fontecha 2010). Although the knowledge of words seems to be strongly linked to a necessity or motivation about expressing meanings, the relationship between motivation and foreign vocabulary learning remains almost unexplored (Elley 1989, Gardner and MacIntyre 1991, Laufer and Husltijn 2001, Kim 2008). A recent line of research conducted in the Spanish context focuses on identifying connections between receptive and productive vocabulary knowledge and motivational levels of male and female students in different types of instructional contexts, e.g. CLIL (Content and Language Integrated Learning) (Fernández Fontecha 2010, Fernández Fontecha and Terrazas Gallego 2012, Fernández Fontecha and Canga Alonso in press).

1.3. MOTIVATION AND OTHER FACTORS: AGE AND TYPE OF INSTRUCTION

An issue of major importance is the way motivation towards foreign language interacts with learners' age. Many studies point to a decrease of motivation with age (Chambers 1999; Williams, Burden and Lanvers 2002; Cenoz 2003; Ghenghesh 2010). Tragant (2006) found that secondary education students were more motivated than primary education students, but this tendency stops somewhere in upper secondary education. Motivation becomes stable after secondary education, as Lasagabaster (2003) notes in a research study conducted with university students. Concerning the type of motivation addressed, in a study with CLIL and EFL groups in 7th and 8th grades (1st and 3rd grade of secondary education), Dolz, Lasagabaster and Sierra (2013) find out that the youngest learners show greater intrinsic motivation, but the oldest have more instrumental orientation. In the line of the last study, some studies have focused on examining motivation in Content and Language Integrated Learning (CLIL) and EFL contexts. Most researchers find that motivational levels are higher in CLIL settings (Lasagabaster 2011, Murtagh 2007, Seikkula-Leino 2007). One of the reasons for this result is provided by Dalton-Puffer (2008), who points to the idea that CLIL may make learners lose their inhibitions to use the foreign language in a spontaneous way.

2. PURPOSE

Given a group of non-CLIL 1st graders of Spanish secondary education (grade 7) and a group of CLIL 4th graders of primary education who, at the time of data collection, had been exposed to English as a foreign language during 734 hours, this research intends to explore:

1. The levels of general motivation (GMot) together with intrinsic (IMot) and extrinsic (EMot) motivation of the two groups;
2. Their receptive vocabulary knowledge; and
3. Whether there is any connection between the level of motivation towards EFL and the scores obtained by the students in each group in the 2K Vocabulary Levels Test.

3. METHOD

3.1. PARTICIPANTS

Two groups of students took part in this study: a group of 304 1st graders of secondary education (grade 7) – aged around 12-13 years old, and a group of 58 CLIL 4th graders of primary education – aged around 9-10 years old. They were

randomly selected from different mixed-gender school centres with a similar socio-economic background located in La Rioja (north of Spain). The CLIL students were enrolled in a CLIL regional programme called PILC project (Proyectos de Innovación Lingüística en Centros - School Language Innovative Projects), in which Natural Science was taught through English. At time of testing, both groups had received 734 hours of instruction in English as a Foreign Language (3 hours/week). Thus, whilst each group had been exposed to EFL in the English Language Classroom, the primary group had also received extra hours of EFL through a CLIL subject.

3.2. INSTRUMENTS, PROCEDURES, AND ANALYSIS

We use Schmitt, Schmitt and Clapham's (2001) version 2 of the 2,000-word frequency-band from the receptive version of the Vocabulary Levels Test (2K VLT) to measure learners' vocabulary knowledge. The test consists of ten groups of six words and three definitions per group. Testees match each target word to its definition. Correct matching of each target word with its definition is given one point, so that the maximum score of the test is 30 points. In order to calculate students' word estimates, Nation's (1990: 78) formula has been applied: "Vocabulary size = N correct answers multiplied by total N words in dictionary (the relevant word list) divided by N items in test." We gathered data in one regular school time session. Test-takers had 10 minutes to complete the test. Before starting, they were given clear instructions in their mother tongue both orally and in written form.

The assessment of learners' motivation towards EFL is done by means of a semantic differential technique of 7-point bipolar rating scale using the following 7 pairs of bipolar adjectives: 'necessary'/'unnecessary', 'ugly'/'nice', 'attractive'/'unattractive', 'pleasant'/'unpleasant', 'important'/'unimportant', 'useful'/'useless', and 'interesting'/'boring'. These adjectives are introduced with the Spanish phrase "*Considero que el inglés es...*" ("I consider English to be..."). This scale is part of a questionnaire adapted from Gardner's (1985) Attitude/Motivation Test Battery (A/MTB). Intrinsic motivation is measured through the pairs 'ugly'/'nice', 'attractive'/'unattractive', 'pleasant'/'unpleasant', and 'interesting'/'boring'; the extrinsic motivation is measured through the pairs 'necessary'/'unnecessary', 'important'/'unimportant', and 'useful'/'useless'.

Data from the VLT and the motivation scale were analyzed through SPSS program version 19.0.

4. RESULTS

RQ1. Levels of general motivation (GMot) together with the two types of motivation, intrinsic (IMot) and extrinsic (EMot), of the two groups

In order to answer the first research question of this study, i.e., which are the levels of general motivation (GMot), intrinsic motivation (IMot) and extrinsic motivation (EMot)?, we arranged the scores obtained in the motivation test according to an arbitrary three-level scale ranging from level 1 (marks: 1.0 to 3.0), level 2 (marks: 3.01 to 5.0), and level 3 (marks: 5.01 to 7.0), where 1 is the lowest level of motivation and 7 the highest. The results are almost identical in each group in terms of percentages of number of learners highly, medium and lowly motivated. Most learners in both groups are highly motivated (1st secondary = 62%, 4th primary = 62%), followed by those who are motivated at level 2 (1st secondary = 33%, 4th primary = 34%). Very few low-motivated learners are identified (1st secondary = 5%, 4th primary = 4%).

Table 2 displays the number of learners per level of general motivation for 1st secondary and 4th primary:

Motivation levels	1 st secondary (N)	%	4 th primary (N)	%
Level 1	15	5%	2	4%
Level 2	100	33%	18	34%
Level 3	188	62%	33	62%
Total	303		53	
Missing (students who do not answer questions)	1		5	

Table 2. Motivation levels: Frequency

Table 3 shows the means of general motivation together with the means of the two types: intrinsic and extrinsic motivation for each group of learners. Standard Deviation as well as minimum and maximum values are added.

Motivation	Grade	Mean	SD	Min.	Max.
General Motivation (GMot)	1 st secondary (non-CLIL)	5.1855	1.1553	1.00	7.00
	4 th primary (CLIL)	5.5052	1.2278	1.00	7.00
Intrinsic Motivation (IMot)	1 st secondary (non-CLIL)	4.6326	1.5233	1.00	7.00
	4 th primary (CLIL)	5.3396	1.4944	1.00	7.00
Extrinsic Motivation (EMot)	1 st secondary (non-CLIL)	6.2504	1.1930	1.00	7.00
	4 th primary (CLIL)	6.0754	1.3181	1.00	7.00

Table 3. Means of general, intrinsic and extrinsic motivation

A Wilcoxon rank sum test is performed to detect no significant differences between the two groups in GMot (p-value = 0.057), IMot (p-value = 0.001), nor in EMot (0.612).

RQ2. Receptive vocabulary knowledge

The second research question attempts to examine the size of receptive vocabulary knowledge. Table 4 presents the descriptive statistics for results on the 2K VLT for the two groups, in which the different word estimates obtained by them are included. These results mean that the average receptive vocabulary size of both groups is within the 1,000 frequency level. However, the difference is big: while the group of 1st secondary learners recognizes 779 words from the band of the first 1,000 most frequent words in English, the 4th primary CLIL group recognizes 471.26. Being the time of instruction the same in both cases and independently of the type of instruction, i.e., CLIL vs. non-CLIL, the 1st secondary group overcomes the 4th primary group in receptive vocabulary size.

A Wilcoxon rank sum test identifies that these differences in receptive vocabulary size are significant (p-value = 5.186e-12).

Groups	Min.	Max.	Mean	SD	Word estimates
1 st secondary (non-CLIL)	1	24	11.69	4.57	779.54
4 th primary (CLIL)	1	17	7.07	3.67	471.26

Table 4. Descriptive statistics: 2K VLT

RQ3. Connection between the level of motivation towards EFL and the scores obtained by the students in each group in the 2K Vocabulary Levels Test

Following, we explain the results obtained by each of the groups with regard to the possible relationship between level of general motivation, intrinsic and extrinsic types and the results of the 2K Vocabulary Levels Test.

A Lilliefors (Kolmogorov-Smirnov) normality test was performed with the 1st secondary data. Normal distribution cannot be accepted concerning any result (VLT: p-value = 0.0025; GMot: p-value = 5.989e-08; p-value = 2.37e-08; EMot: p-value < 2.2e-16). Spearman correlation test is used. The correlation between the 2K VLT and the different types of motivation is significant in each case (GMot: p-value = 2.816e-09; IMot: p-value = 1.275e-05; EMot: p-value = 2.397e-06). In the three cases the relationship is positive. Figure 1 shows the positive correlation between general motivation and receptive vocabulary.

In the analysis of the VLT results by the 4th primary (CLIL) group, a Shapiro-Wilk normality test is performed. The normality can be accepted (p-value = 0.06). Yet, no normal distribution is identified in the motivation results. By means of a Spearman

correlation test, we identify no significant relationship between the 2K VLT and the GMot, IMot, and EMot. In all cases the p-values are higher than 0.05: GMot (p-value = 0.16) (Figure 2), IMot (p-value = 0.23), and EMot (p-value = 0.13). Table 5 displays the results for both groups:

Groups	GMot		IMot and 2K VLT		EMot and 2K VLT	
	rho	p-value	rho	p-value	rho	p-value
1 st secondary (n=304)	0.33	2.816e-09	0.24	1.275e-05	0.26	2.397e-06
4 th primary CLIL (n=58)	0.19	0.16	0.16	0.23	0.20	0.13

Table 5. Correlation GMot, IMot, EMot and 2K VLT

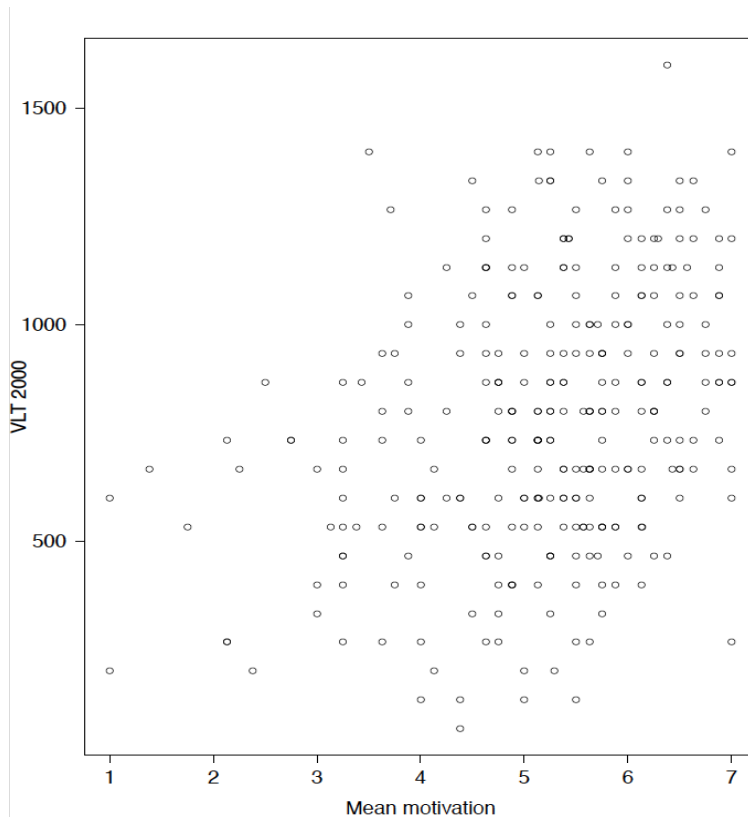


Figure 1. 1st secondary: positive correlation 2K VLT - GMot (p-value < 0.05, cor = 0.33)

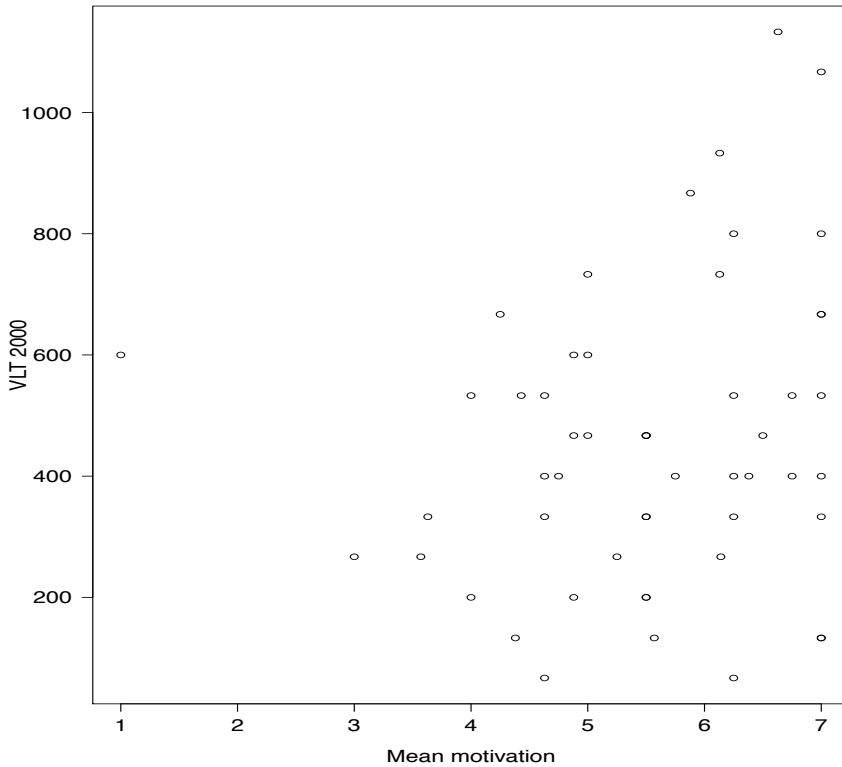


Figure 2. 4th primary: no correlation 2K VLT - GMot (p -value > 0.05, $cor = 0.19$)

5. DISCUSSION

According to our first research question on what levels of GMot, IMot and EMot are identified in the two groups of learners, a high coincidence in the percentage of the number of participants at each of the three levels of GMot is found. In both cases, more than half of the students were highly motivated, followed by around 35% of students motivated at level 2. Only around 5% of the students were motivated at level 1.

To give a wider understanding of the results on motivation, the results obtained with the same students in two further unpublished studies should be mentioned: Fernández Fontecha under review a; and Fernández Fontecha under review b. In general, the distribution of 1st secondary non-CLIL students per levels of motivation improves in the next two years, when the motivation of a sub-sample of 186 students is explored at 2nd secondary education (level 3 = 65%, level 2 = 32%, level 1 = 2%)

(Fernández Fontecha under review a), and at 3rd secondary (level 3 = 71%, level 2 = 25%, level 1 = 3%) (Fernández Fontecha under review b). Yet, one should be cautious in interpreting these results since the 1st secondary education sample (N = 304) doubles the number of participants of the 2nd and 3rd secondary education samples. We also observe an improvement in the distribution of the 4th primary CLIL students when they move up a grade (5th primary CLIL, N = 55): level 3: 76%, level 2: 13%. No students reported low motivation (Fernández Fontecha under review a).

With respect to the means of the different types of motivation, there are no significant differences between the groups. However, certain trends can be identified. In both groups the EMot is higher than the IMot. If we consider the differences between groups, the 4th primary CLIL group surpasses the 1st secondary non-CLIL group in GMot (5.50 vs. 5.18) and IMot (5.33 vs. 4.63) but not in EMot (6.07 vs. 6.25). In general, these results coincide with results of research on types of motivation and age (Doiz, Lasagabaster and Sierra 2013), according to which younger learners are more intrinsically motivated than older learners, who are more instrumentally motivated.

The second research question addresses the learners' size of receptive vocabulary knowledge, i.e. number of words learners know receptively. This size is bigger in the 1st secondary non-CLIL group.

Being the time of exposure to EFL the same in our two samples, the superiority of the 1st secondary non-CLIL group may imply that the educational level or the age (cognitive level) is determining learners' receptive vocabulary knowledge. Our evidence is in line with Canga Alonso (2013), who explores the receptive vocabulary knowledge of some sub-groups of the participants of our study in the following year, i.e., in 5th primary CLIL and 2nd secondary education. He identifies that with the same time of L2 exposure, the 2nd secondary group surpasses the 5th primary CLIL group in receptive vocabulary size. This is a statistically significant difference.

These results contradict those obtained in other 2K VLT studies where the type of instruction – or the time of L2 exposure – is also having some role in receptive vocabulary knowledge (Table 1). Thus, the 5th primary CLIL group in Canga Alonso's (2013) research slightly surpasses a 6th primary non-CLIL group in a study by Agustín Llach and Terrazas Gallego (2012). Yet, Agustín Llach observes that a group of 4th primary non-CLIL graders outstrips a sub-sample of the same 4th primary CLIL graders of our study, although the difference is not significant. Further studies replicating these results are needed.

As for the connection between level of motivation towards EFL and the learners' scores in the 2K Vocabulary Levels Test, our third research question, there exists a significant positive correlation between both for the 1st secondary group, which indicates that the higher the learner's GMot, IMot or EMot, the higher his/her receptive vocabulary size is, or vice versa. However, although positive, the correlation is not big, which implies that other variables could be affecting this result. It is interesting to mention here that, while no link was identified between the

receptive vocabulary size and motivation of 186 2nd secondary graders – a sub-sample of our 1st secondary group – a significant correlation was found between both variables in the same 186 students in 3rd secondary grade (Fernández Fontecha and Terrazas Gallego 2012).

As regards the 4th primary CLIL learners, we found no significant relationship between their 2K VLT outcomes and their GMot, IMot, and EMot. Yet, in the study conducted by Fernández Fontecha (under review a), a significant correlation was identified between both GMot and the results of the 2K VLT, although no relationship was perceived between the 2K VLT and the two types of motivation in a group of 55 students out of the 58 primary CLIL students of the present sample in 5th primary grade.

Hence, no conclusive evidence can be adduced of the connection between receptive vocabulary knowledge and motivation. Following Tseng and Schmitt (2008), one of the reasons behind these findings may be the fluctuating nature of vocabulary and motivation.

6. CONCLUSION

This study has contributed to furthering the understanding of L2 achievement in CLIL and non-CLIL instruction. For that purpose, we have explored the relationship between motivation and receptive vocabulary knowledge of two groups of students of different grades (4th primary CLIL and 1st secondary non-CLIL education). The number of hours of EFL instruction is the same in both groups of learners, although not their age. While the primary group is aged around 9-10 years old, the secondary education group is aged around 12-13 years old.

As regards motivation towards EFL, high motivation levels and quite similar distribution patterns across levels are identified in both groups. Complementary research reports that the general motivation of each group increases in the following years. A follow-up study is needed to explore the moment at which this increasing tendency changes: whether, as Lasagabaster (2003) notes, after secondary education, or at any other point of language learning.

On the other hand, with respect to the results in receptive vocabulary acquisition, the secondary non-CLIL group obtains better results in the 2K VLT. This result may lead to several conclusions. On the one hand, given the same hours of exposure to English as a foreign language, this finding suggests that the learners' age or their cognitive level may affect the result. On the other hand, in order to adduce some kind of conclusive evidence of which effect the type of instruction is having on the findings, further studies are needed that cancel out the effect of learners' age. To cope with this difficulty, different data gathering times could be planned in CLIL and non-CLIL groups of learners of the same age to even out instruction times.

As for the link between motivation and receptive vocabulary size, a significant connection is found between both in the secondary group, although it is small and therefore other variables can be influencing this result. In the primary group, no connection is identified. These results do not serve to establish a trend in studies that combine these two variables. A variety of results are obtained in this regard. No link is identified in a sub-sample of the 1st secondary group, but it is observed in the same group in 3rd secondary grade (Fernández Fontecha and Terrazas Gallego 2012). The same lack of a clear tendency is noted in the 4th primary CLIL group, which in 5th grade shows a connection between general motivation and 2K VLT (Fernández Fontecha under review a).

Longitudinal studies are needed to identify evolution of relationship of motivation and vocabulary as two dynamic and fluctuating processes (Tseng and Schmitt 2008), which involve a myriad of aspects to look upon. Derived from this investigation, it would be interesting to explore the behaviour and evolution of the relationship between motivation and the different types of vocabulary, since existing research conducted with students in the same year points to differences in motivation and receptive vocabulary (Fernández Fontecha and Terrazas Gallego 2012) and productive vocabulary (Fernández Fontecha 2010). Further research in this line should also incorporate other instruments to measure motivation and related aspects, such as Dörnyei's (2005, 2009) L2 Motivational Self System or the Willingness To Communicate test by MacIntyre et al. (2002).

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