Language learning motivation and CLIL
Is there a connection?

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Language learning is multifaceted, and within Second Language Acquisition (SLA) research, motivation is one of the most frequently studied aspects. The impetus of the current study is to further explore second language learning motivation as well as its impact on the language acquisition process within the context of Content and Language Integrated Learning (CLIL). This study uses Dörnyei’s (2009) framework of the L2 Motivational Self System from which the Motivational Factors Questionnaire (MFQ) has been created and validated by Ryan (2009). This study was conducted at the high school level in Sweden and includes students enrolled in CLIL programs (N = 109) and non-CLIL programs (N = 68) at three different schools. In this paper, the subcategories of the MFQ are analyzed using one-way ANOVAs with CLIL/non-CLIL, L1, and gender as the independent variables. The results indicate that there are differences in attitudes and motivation of CLIL vs. non-CLIL students.

Swedish abstract at end.

Keywords: motivation, content and language integrated learning (CLIL), second language acquisition (SLA), motivation, L2 Motivational Self System, gender

1. Introduction

Within the field of Second Language Acquisition (SLA), motivation has consistently been shown to be a major factor in explaining learner success (Dörnyei, 2009). The impetus of the current study is to further explore the intricate phenomenon of language learning motivation as well as its impact on the language acquisition process within the context of Content and Language Integrated Learning (CLIL). This study uses the Motivational Factors Questionnaire (MFQ) that was created and validated by Ryan (2009), stemming from Dörnyei’s (2009) framework of the L2 Motivational Self System (L2MSS) as an instrument to measure participants’
language learning motivation. Although the main focus of this study was regarding the motivational profiles of CLIL and non-CLIL students at the beginning of Grade 10 (the first year of high school in the Swedish system and the start of CLIL for CLIL students), we also examined motivation in light of gender and students’ first language (L1). This study fills a gap in the literature because by being the first stage of a longitudinal study, it investigates the motivation of CLIL and non-CLIL students prior to CLIL students’ exposure to CLIL. This paper focuses on the first stage of data collection, which took place at the beginning of the CLIL experience. As part of a larger study, this paper is purely focused on the results of the motivational data.

The study was conducted in Sweden, a country where the level of L2 English proficiency is generally considered to be relatively high (European Commission/SurveyLang, 2012), and the use of the English language in society is prolific (Sundqvist, 2009; Sylvén, 2013). It is also an interesting context from the point of view of multilingualism, as approximately 15% of the inhabitants are born outside of Sweden (Nygren-Junkin, 2008).

CLIL is by and large modelled on Canadian immersion education. However, while immersion education is governed by a fairly detailed framework of regulations (e.g., Johnson & Swain, 1997), CLIL can be seen as an umbrella term for a multitude of educational situations where a language other than the students’ L1 is used as the medium of instruction (Marsh, 2002, see also Tedick & Cammarata, 2012). Some scholars argue that immersion can be considered as a program model under the CLIL umbrella (Cenoz, Genesee, & Gorter, 2013), while others claim that there are so many differences between these approaches that they should be kept apart (Lasagabaster & Sierra, 2010). As there are yet no firm parameters defining CLIL, we adhere to the view that “immersion education can be considered a particular form of CLIL” (Cenoz et al., 2013, p.13).

Thus, the implementation of CLIL throughout Europe is diverse (Sylvén, 2013). In some CLIL renderings, cultural perspectives are placed at the forefront (Coyle, 2007), while others put more emphasis on the “two-for-one” idea, i.e., achieving language proficiency while studying the content of a school subject (Nikula, 2007). CLIL is widespread in Europe; however, without sufficient baseline data of learners prior to the CLIL experience, it is very difficult to draw any conclusions about the actual effect of CLIL per se. Given the lack of baseline data, studies such as the present are important in contributing to our understanding of CLIL. Specifically, this study explores the relationship of CLIL status, first language, and gender to language learning motivation.
2. CLIL — A brief overview

Most CLIL studies indicate overwhelmingly positive outcomes, some of which specifically address the acquisition of the target language (TL), typically English (Lasagabaster & Ruiz de Zarobe, 2010; Lorenzo, Casal, & Moore, 2010). The CLIL classroom seems to offer possibilities of authentic communication and in general to “provide a more open context” (Llinares & Whittaker, 2010). However, as Breidbach and Viebrock (2012) point out, many of these results need to be interpreted with caution, as very limited information is offered about informants’ background characteristics (cf. also Bruton, 2011).

From the Swedish perspective, the results of studies that involve CLIL are not nearly as positive as those found in other European countries. In the first large-scale study on CLIL in the Swedish context, Washburn (1997), for instance, found that CLIL students assessed themselves as more confident about their proficiency in English and that they also performed better on some measures (fluency in writing and speaking) than their non-CLIL peers. However, in reference to the informants’ overall level of proficiency in English as measured in the study (including listening and reading comprehension, grammar and vocabulary tests, English compositions and oral tasks), Washburn points out that “the most striking aspect of the results from this study may be the extent to which the groups [CLIL and non-CLIL] are indistinguishable” (Washburn, 1997, p. 319). Additionally, in a longitudinal study, Sylvén (2004) investigated the vocabulary proficiency among CLIL and non-CLIL students and found that in spite of English being used as the medium of instruction in several subjects for the CLIL groups, it was rather the amount of exposure to English outside of school that was decisive for CLIL students’ superior level of vocabulary proficiency.

There are several factors that may explain these rather controversial research results regarding TL proficiency among Swedish CLIL students. One such factor most certainly has to do with the fact that Swedish adolescents are already quite proficient in English when they start high school. The European Survey on Language Competences among 9th graders (age 14–15) (European Commission/SurveyLang, 2012) reports that Sweden scores highest of all countries in English reading and listening comprehension, and comes in second place (after Malta) in writing (Erickson, 2012). Among the Swedish participants, more than 60% reached the Common European Framework of Reference (CEFR) B2 level,¹ in comparison with the Spanish students where approximately 60% were at pre-A1 or A1 level in reading and listening skills. One influential factor on the proficiency level in Sweden is the fact that English abounds in Swedish society (Sylvén, 2007; Sylvén & Sundqvist, 2012). For instance, English-produced TV-shows and films are subtitled, not dubbed (as is the case in, for instance, Spain), English is regularly
used in ads and the media, and English is often used as a lingua franca in inter- and multinational companies. In fact, there is an ongoing debate on whether English should be considered an L2 rather than a foreign language (FL) in Sweden (Hyltenstam, 2004).

Thus, it is likely that the English developmental differences of CLIL and non-CLIL students would not be as salient in Sweden as in other European contexts; however, approximately 20% of all high schools in Sweden are estimated to use some form of CLIL (Nixon, 2000). If the outcomes are not the desired ones, what is it that makes CLIL so popular? The answer to that question may have something to do with learner motivation, a perspective to which we now turn.

3. CLIL: Motivation, gender, and L1

Motivation is a driving force for learning to take place, and in particular with regards to the learning of an L2 or FL (Dörnyei, 2009). Dörnyei’s L2MSS (2009), is a theoretical model which describes motivation as being composed of three aspects: the ideal L2 self (who one wants to become as a language learner), the ought-to L2 self (who external influences dictate one should become as a language learner), and the L2 learning experience (effects of previous experiences on language learning). This framework is rooted in the ‘possible selves’ concept in social psychology (Markus & Nurius, 1986); essentially, the possible selves concept states that all learners have a current self, and that they are working towards a future self. There is a strong visualization component to the ideal L2 self, and this future self guide has been shown to be essential for language learning; the ought-to L2 self can also be a strong motivator, but has been shown to not be as influential to language learning success as the ideal L2 self (e.g. Csizer & Lukacs, 2010; Lamb, 2012: Thompson & Erdil, 2015). Although several questionnaires have been developed from the L2MSS, based on the previous findings regarding the lack of influence of the ought-to L2 self, the questionnaire used in the current study is the Motivational Factors Questionnaire (MFQ, Ryan, 2009), which does not use the construct of the ought-to self. Instead, this questionnaire focuses on the latent variables of language learning interest and attitudes, environmental factors, and specific types of motivation (instrumentality and the ideal L2 self). The MFQ also includes other latent variables related to motivation: anxiety and Willingness to Communicate (WTC) in the L1 and L2. (See Ryan, 2009, for a complete list of the factors included.)

Research on CLIL students has typically described them as having a more positive attitude towards school and being more motivated than their non-CLIL peers. For example, Åseskog (1982) found that CLIL students had a more positive attitude
towards language learning as compared to non-CLIL students. Additionally, Sylvén (2004) concluded that “attitude and level of motivation appear to be crucial factors in the acquisition of English vocabulary” (p. 220). Lasagabaster and Sierra (2009) revealed that CLIL students showed significantly more positive attitudes towards English as an FL than did EFL students. The authors suggest that this might be a result of the more meaningful opportunities to use the TL in the CLIL classroom as opposed to the EFL classroom. Additionally, in the German context, CLIL students maintained motivation over time, whereas non-CLIL students did not (Fehling, 2008). In sum, it appears that CLIL students are more motivated than non-CLIL students. However, the motivational profile of the students who choose or do not choose CLIL has not been investigated in any of these studies.

With regards to gender distribution in CLIL classes, there is typically a much higher percentage of female students than male students in CLIL (San Isidro, 2010; Sylvén, 2004), making the gender perspective highly relevant for a study such as the current one. While research into gender and language learning is extensive (e.g., Norton & Pavlenko, 2004) and fairly consistently shows that girls are more positively inclined to language learning than boys (for a recent review, see Ullman, Miranda, & Travers, 2008; see also Byram, 2000 and Kobayashi, 2002), studies including the motivational aspect are less frequent. Among existing studies, Baker and MacIntyre (2000), in a study of high school immersion education in Canada, saw that non-immersion boys were those with the least positive attitude towards learning the TL, in this case French. Similarly, Kissau and Wierzalis (2008) found that males had a significantly lower desire to learn French than females in a southwestern Ontario school district.

Furthermore, it is worth noticing that the proportion of students with an L1 other than Swedish is higher in CLIL groups compared to non-CLIL groups. In the present study, 23% of the CLIL students have another L1 than Swedish (compared to approximately 16% in the general Swedish population), whereas the figure in the non-CLIL groups is only 4%. Similar figures are reported in Sylvén (2004). Although research into the role of students’ L1 in opting for CLIL or non-CLIL in Europe is scarce, Dagenais, Day, and Toohey (2008) report that speakers of another L1 than English or French in Canada may view immersion education as an opening for future career possibilities, an idea that may extend to the Swedish context. It is also possible that the overrepresentation of non-Swedish L1 speakers in CLIL programs can be explained by what Maillat (2010) refers to as the mask effect, which is a “pragmatic inhibitor that allows the L2 learner to concentrate all her cognitive resources on the communicative task at hand and to overcome the L2 bottleneck” (p. 55). From a non-majority L1 perspective, this means that the students are on par with their majority L1 peers with regards to the language used in the classroom (everyone is functioning in an L2).
As evidenced above, there is support for some relationship between CLIL and motivation. However, are students who choose CLIL programs more motivated to learn the TL before they enroll in CLIL? The present study examines student motivation from three distinct perspectives: CLIL vs. non-CLIL, gender, and L1 status. As the first stage in a longitudinal study, the results below are from before the students have had the CLIL experience. To our knowledge, this has not been investigated before; therefore, we believe our contribution is an important advancement of the body of knowledge in connection with both CLIL and motivation research.

4. The study

4.1 Context

The current study is part of a longitudinal research project, Content and Language Integration in Swedish Schools (CLISS). The project aims at investigating CLIL in the Swedish context from a number of perspectives, including investigating students’ proficiency and progress in written, academic Swedish and English, and comparing CLIL practices across national contexts. In Grades 10–12 in Swedish high schools, students (age 16–18) have the option to choose among a number of programs, some of which are specifically designed to prepare them for higher education. The participants (N = 177 for the current study) are enrolled in such university-oriented programs in three Swedish high schools. One of the schools is an international school in one of the larger Swedish cities; the other two are situated in medium-sized cities. All three schools use the same curriculum, and are, therefore, comparable. At one of the schools, English is used as the medium of instruction in all subjects except Swedish. At the two other schools, English and Swedish are officially used to an almost equal extent throughout the school day. Enrolling in the CLIL curriculum is voluntary, and even though the decision process may be complex (e.g., Foster, 2010; Wesely & Baig, 2012), it is fair to assume that in the Swedish context it is the individual student who makes the choice (Washburn, 1997). Empirical data for the CLISS project consist of interviews, classroom observations, vocabulary tests in English and Swedish, free written production in English and Swedish, and questionnaires collected during three school years, thus covering these students’ entire time in high school. In this part of the study, 177 out of 205 students responded to the MFQ questionnaire, with a response rate of 86%.

The setting of the study in the Swedish context is particularly interesting given the fact that Sweden, even though officially a monolingual country (Sveriges Riksdag, 2009), is inherently multilingual. Statistics show that in high school, as many as 18% of the students either come from a country other than Sweden or...
have parents who are immigrants to Sweden. This means that, on average, almost one out of five students in any given classroom has an L1 other than Swedish (for an overview, see Nygren-Junkin, 2008). However, as mentioned above, it appears as though students with an L1 other than Swedish often are overrepresented in CLIL programs (see, e.g., Sylvén, 2004).

It is important to note that this paper represents the results of baseline data of the participants at the onset of the CLIL program or regular classes (non-CLIL). Upon the completion of the CLIL program in high school, data will be collected again from these same students. After that data collection, a comparison of the data presented in the current study (at the very beginning of CLIL education) and data collected at the end of CLIL education will be made, indicating the change in motivation over the years spent in the CLIL program. To date, such a study has not been conducted. The research questions are as follows:

At the onset of high school, are there differences in the motivational profiles of:

1. CLIL versus non-CLIL students?
2. L1 speakers of the majority language (Swedish) versus L1 speakers of other languages?
3. Male versus female students?

4.2 Participants

At the time of the study, all of the students were in their first year of high school (school year 10), which was also the first year of CLIL for the CLIL students. There were 109 CLIL students and 68 non-CLIL students. Of the participants, 148 have Swedish as their L1 and 29 have an L1 other than Swedish. Of the participants with an L1 other than Swedish, there was a variety of other L1s reported. One hundred and nineteen females and 58 males participated. All of the data were collected from intact classes; as such, all students were asked to complete the questionnaires. Thus, the numbers for CLIL and non-CLIL, gender, and L1 status could not be controlled. Table 1 below summarizes participant characteristics.

Table 1. Participant characteristics

<table>
<thead>
<tr>
<th>L1</th>
<th>Gender</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>CLIL Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swedish</td>
<td>Not Swedish</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>CLIL</td>
<td>84 (77%)</td>
<td>25 (23%)</td>
<td>80 (73%)</td>
</tr>
<tr>
<td>109 (62%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-CLIL</td>
<td>65 (96%)</td>
<td>3 (4%)</td>
<td>39 (57%)</td>
</tr>
<tr>
<td>68 (38%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals (N = 177)</td>
<td>149</td>
<td>28</td>
<td>119</td>
</tr>
</tbody>
</table>
4.3 Instrument and procedures

Participants completed a Swedish version of the MFQ, as well as a background questionnaire about their L1, gender, and CLIL status, among other information. The MFQ was taken from Ryan (2009) and consists of 18 pre-determined factors.4 (See the Appendix for a sample question from each factor.) The MFQ and the background questionnaire were constructed and completed online with SurveyMonkey (http://www.surveymonkey.com/). The MFQ survey contains 100 items, and all items were provided in both Swedish and English (the translation into Swedish was done by one of the authors and checked for accuracy by a university EFL teacher). Participants were instructed to evaluate each item on the MFQ by using three separate six-point Likert scales. For the first twenty questions, participants were asked to respond to questions using the following scale: not at all (1) to tremendously (6). Next, there were seven situations for which the participants had to choose how often they would initiate a conversation in their L1 or in English: I never initiate conversation at all (1) to I always initiate conversation (6). Finally, for the last question type, the participants were asked to respond to statements using the following choices: strongly disagree (1) to strongly agree (6). The data were analyzed using SPSS version 20.0 using three separate one-way ANOVAs with CLIL status, L1, and gender as the independent variables and the 18 pre-determined factors of the MFQ as the dependent variables. Participant responses to the grouped items in the 18 factors were summed and averaged so as to be used as the dependent variables. For example, the factor “interest in foreign languages” contains questions 55, 66, 85, 92, and 97. If a participant answered 5 for question 55, 6 for question 66, 6 for question 85, 5 for question 92, and 6 for question 97, that participant’s score for “interest in foreign languages” would be 5.6. The same procedure was performed for every factor for every participant.

5. Results

5.1 CLIL versus non-CLIL students

As can be seen in Tables 2 and 3, the results indicate that CLIL students have a greater interest in foreign languages, more positive attitudes towards learning English, a stronger ideal L2 self, more English self-confidence, and a higher willingness to communicate (WTC) in English. Non-CLIL students are more ethnocentric and have higher English anxiety. Two additional factors approach significance: CLIL students have a more positive attitude towards the L2 community as well as a higher intended learning effort.
Table 2. Descriptive statistics for ANOVA results: CLIL versus non-CLIL

<table>
<thead>
<tr>
<th></th>
<th>CLIL</th>
<th></th>
<th>Non-CLIL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>F5: Interest in foreign languages</td>
<td>4.76</td>
<td>0.80</td>
<td>4.38</td>
<td>0.95</td>
</tr>
<tr>
<td>F8: Ethnocentrism</td>
<td>2.23</td>
<td>0.68</td>
<td>2.71</td>
<td>0.90</td>
</tr>
<tr>
<td>F10: English anxiety</td>
<td>2.78</td>
<td>1.11</td>
<td>3.28</td>
<td>1.27</td>
</tr>
<tr>
<td>F11: Attitudes towards learning English</td>
<td>4.88</td>
<td>0.77</td>
<td>4.23</td>
<td>0.99</td>
</tr>
<tr>
<td>F14: ideal L2 self</td>
<td>5.29</td>
<td>0.79</td>
<td>4.81</td>
<td>0.88</td>
</tr>
<tr>
<td>F15: Lack of L2 self-confidence</td>
<td>2.55</td>
<td>0.77</td>
<td>2.95</td>
<td>1.11</td>
</tr>
<tr>
<td>F17: WTC in English</td>
<td>3.94</td>
<td>0.91</td>
<td>3.35</td>
<td>1.09</td>
</tr>
</tbody>
</table>

Table 3. ANOVA results: CLIL versus non-CLIL

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>F</th>
<th>η²</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>F5: Interest in foreign languages</td>
<td>1, 175</td>
<td>7.285</td>
<td>0.040</td>
<td>.008**</td>
</tr>
<tr>
<td>F8: Ethnocentrism</td>
<td>1, 175</td>
<td>15.972</td>
<td>0.084</td>
<td>.000***</td>
</tr>
<tr>
<td>F10: English anxiety</td>
<td>1, 175</td>
<td>7.724</td>
<td>0.042</td>
<td>.006**</td>
</tr>
<tr>
<td>F11: Attitudes towards learning English</td>
<td>1, 175</td>
<td>23.484</td>
<td>0.118</td>
<td>.000***</td>
</tr>
<tr>
<td>F14: ideal L2 self</td>
<td>1, 175</td>
<td>15.908</td>
<td>0.083</td>
<td>.000***</td>
</tr>
<tr>
<td>F15: Lack of L2 self-confidence</td>
<td>1, 175</td>
<td>8.212</td>
<td>0.045</td>
<td>.005**</td>
</tr>
<tr>
<td>F17: WTC in English</td>
<td>1, 175</td>
<td>15.233</td>
<td>0.080</td>
<td>.000***</td>
</tr>
</tbody>
</table>

Note: * p < .05; ** p < .01; *** p < .001

In addition to the significant results presented in Tables 2 and 3, the non-significant results for the factors of “cultural interest,” “travel orientation” and “parental encouragement” are also important to note. Implications of these non-significant results are further deliberated in the discussion section.

5.2 L1 speakers of Swedish versus L1 speakers of other languages

The summary of the statistically significant results (Tables 4 and 5) is as follows: those students whose L1 is a language other than Swedish have a greater fear of assimilation and have a higher intended learning effort, whereas L1 Swedish speakers have a higher WTC in their L1. Regarding the issue of WTC in the L1, the questionnaire was worded as to ask the participants to consider the answers regarding their own L1 (as opposed to Swedish). Also, with results approaching
significance, the L1 Swedish speakers are more ethnocentric than the participants whose L1 is other than Swedish.

Table 4. Descriptive statistics for ANOVA results: Swedish L1 versus other L1

<table>
<thead>
<tr>
<th></th>
<th>Swedish L1</th>
<th>Other L1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>F7: Fear of assimilation</td>
<td>3.17</td>
<td>0.86</td>
</tr>
<tr>
<td>F16: WTC in Swedish</td>
<td>4.23</td>
<td>0.69</td>
</tr>
<tr>
<td>F18: Intended learning effort</td>
<td>4.48</td>
<td>0.82</td>
</tr>
</tbody>
</table>

Table 5. ANOVA results: Swedish L1 versus other L1

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>F</th>
<th>$\eta^2$</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>F7: Fear of assimilation</td>
<td>1, 175</td>
<td>4.065</td>
<td>0.003</td>
<td>.045*</td>
</tr>
<tr>
<td>F16: WTC in Swedish</td>
<td>1, 175</td>
<td>6.657</td>
<td>0.002</td>
<td>.011**</td>
</tr>
<tr>
<td>F18: Intended learning effort</td>
<td>1, 175</td>
<td>4.583</td>
<td>0.054</td>
<td>.034*</td>
</tr>
</tbody>
</table>

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

The distribution of Swedish L1 students and students with another L1, including a division of the CLIL and non-CLIL programs, is shown in Table 1, and as can be seen by the group numbers, almost all of the non-Swedish L1 students opted for the CLIL program, an aspect that is further elaborated in the discussion section. Because of the low numbers in the non-CLIL, non-Swedish L1 group (N = 3), a between-group analysis of the four-way group structure did not reveal any information that was not found in the overall analysis.

5.3 Male versus female students

The summary of the statistically significant results (Tables 6 and 7) is as follows: females have more English cultural interest, more interest in foreign languages, more international empathy, a stronger travel orientation, higher English anxiety, more intended learning effort, and they perceive more parental encouragement. However, males have higher L2 self-confidence.

Unlike the four-way group division for the Swedish L1 versus non-Swedish L1 analysis, the four-way group division for gender did yield balanced groups. Because of this, an analysis of the four groups did provide further insights into the research questions. As research has shown that females tend to be more motivated toward language learning in general (Byram, 2000; Ullman et al., 2008), it is relevant to note that the above results regarding lack of L2 self-confidence and English anxiety showed that females have less L2 self-confidence and are more anxious.
about using English than are males. A further analysis explored if this anxiety and lack of L2 self-confidence is only gender-related, or if the choice to enroll in a CLIL program is also relevant. As such, the participants were re-grouped into four groups: CLIL females, CLIL males, non-CLIL females, and non-CLIL males.

In Table 8, the descriptive statistics obtained for the factor “lack of L2 self-confidence” are shown, with the four-way group division for CLIL/non-CLIL and gender. As is evident, the non-CLIL females exhibit the least L2 self-confidence, followed by the CLIL females and the two groups of males, with the CLIL males showing the most L2 self-confidence. The ANOVA analysis showed that significant differences existed between the groups (F[1, 175] = 17.768, p < .001), and a Tukey post-hoc test further illustrated the specific group differences. The differences are significant between (a) CLIL females and CLIL males (p = .05), with CLIL females showing higher anxiety between the two groups; (b) CLIL females and non-CLIL
females \( (p < .001) \), with the non-CLIL females showing higher anxiety; and (c) non-CLIL females and non-CLIL males \( (p < .001) \), with the non-CLIL females showing higher anxiety. Interestingly, the difference in lack of L2 self-confidence between CLIL males and non-CLIL males was not significant \( (p = .808) \).

**Table 8.** Lack of L2 self-confidence per group and gender

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th></th>
<th>Male</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>CLIL</td>
<td>2.68</td>
<td>.78</td>
<td>2.20</td>
<td>.64</td>
</tr>
<tr>
<td>Non-CLIL</td>
<td>3.36</td>
<td>1.08</td>
<td>2.40</td>
<td>.90</td>
</tr>
</tbody>
</table>

In Table 9, the descriptive statistics obtained for the factor “English anxiety” are displayed in the four-way group division for CLIL/non-CLIL and gender. Like the ANOVA for the factor “lack of L2 self-confidence,” the ANOVA for the “English Anxiety” factor also showed significance \( (F[1, 175] = 27.893, p < .001) \). A Tukey post-hoc test revealed that the outcome for the factor “English anxiety” mirrors the one obtained for lack of L2 self-confidence, with the non-CLIL females having the highest anxiety, followed by CLIL females, non-CLIL males and CLIL males. There are significant differences between (a) CLIL females and CLIL males, with females exhibiting higher anxiety than the males \( (p < .001) \); (b) CLIL females and non-CLIL females, with non-CLIL females showing higher anxiety \( (p = .004) \); and (c) non-CLIL females and non-CLIL males, with non-CLIL females exhibiting higher anxiety \( (p < .001) \). As can be seen by the mean figures in Table 9, the non-CLIL males have a higher level of anxiety than the CLIL-males; however, this difference is not significant \( (p = .162) \).

**Table 9.** English anxiety per group and gender

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th></th>
<th>Male</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>CLIL</td>
<td>3.04</td>
<td>1.06</td>
<td>2.05</td>
<td>.92</td>
</tr>
<tr>
<td>Non-CLIL</td>
<td>3.67</td>
<td>1.22</td>
<td>2.63</td>
<td>1.10</td>
</tr>
</tbody>
</table>

Both of the latent variables “lack of L2 self-confidence” and “English anxiety” have a relationship to the choice to enroll in a CLIL or a non-CLIL program. It can be seen that overall, those students who choose to enroll in a CLIL curriculum have more L2 self-confidence and are less anxious. With these results in mind, let us now turn to the discussion of these results and their implications.
6. Discussion and implications

This study is part of the larger CLISS project, for which motivation data were obtained from CLIL (N = 109) and non-CLIL (N = 68) students in their first year of high school (grade 10); for the CLIL students, it was also the first year of CLIL instruction. Our data yielded insightful results regarding the difference in motivation between CLIL and non-CLIL students, as well as females (N = 119) vs. males (N = 58) and students with L1 Swedish (N = 148) versus students with other L1s (N = 29).

RQ1 investigated whether or not there are differences in motivational profiles between CLIL and non-CLIL students. Our results indicate that there indeed are such differences on a number of factors from the MFQ. Statistically significant differences were found on the factors “interest in foreign languages,” “ethnocentrism,” “English anxiety,” “attitudes towards learning English,” “ideal L2 self,” “L2 self-confidence,” and “willingness to communicate in English” (Table 3). These results confirm earlier findings about CLIL students (Lasagabaster & Sierra, 2009), but they also support what some researchers (e.g., Bruton, 2011; Sylvén, 2004) have suspected might be the case, namely that CLIL students begin with a more positive attitude toward learning English, less anxiety about using the language, and are more willing to communicate in English. All of these factors are conducive to language learning and are key in explaining the significant upper-hand that CLIL students have already before CLIL starts, as indicated in Swedish research regarding overall TL proficiency (Sylvén, 2004; Washburn, 1997). It should, once again, be pointed out that these data were obtained at the very outset of the CLIL program, in other words, before the actual CLIL classes had begun. Our results underscore the necessity of controlling for motivational factors a priori, and in so doing avoid overstating “the positive effect of CLIL on motivation” (Lasagabaster, 2011, p. 8), when motivation, in fact, is not necessarily an effect of CLIL but potentially an inherent trait of CLIL students. This does not mean, however, that CLIL for certain individuals cannot boost motivation (Fehling, 2008), but we need to be careful when making claims about causality. In sum, our data reveal that CLIL students are significantly more motivated on a number of factors in the MFQ than are non-CLIL students; these results cannot be attributed to CLIL at this stage of the project, but rather to previous experiences.

Noteworthy is the fact that there is no difference between groups for the factor “willingness to communicate in the L1.” This means that it is not necessarily students with a more outspoken personality that opt for CLIL, but rather that it is those students who have a positive attitude towards using the TL. Furthermore, it is revealing that the CLIL students have higher scores for the factor “ideal L2 self” and they also have greater L2 self-confidence. Statements pertaining to the
“ideal L2 self” include “The things I want to do in the future require me to speak English,” “Whenever I think of my future career, I imagine myself being able to use English,” and “When I think about my future, it is important that I use English.” Thus, it is clear that students with a pronounced international outlook on life and future careers chose to enroll in CLIL programs. Indeed, one of the most common arguments in the marketing of CLIL to future students is that it will facilitate a future international career (e.g., Lasagabaster, 2011, p. 7).

Items included for the “lack of L2 self-confidence” are, among others, “learning a foreign language is a difficult task for me,” “I always feel that my classmates speak English better than I do,” and “I worry that the other students will laugh at me when I speak English.” It is no surprise that the CLIL students score significantly lower on this factor, indicating that they indeed feel confident about using the TL in the CLIL class. It would have been surprising if this had not been the case, given that the choice between CLIL and non-CLIL is voluntary. Also notable is that CLIL students are less ethnocentric and have a greater interest in foreign languages than their non-CLIL peers. The factor of ethnocentrism includes statements such as “I don’t trust people with different customs and values to myself” and “I am not very interested in the values and customs of other cultures.” A low score on this factor should be interpreted as the respondent being less ethnocentric, and the CLIL students show signs of being significantly more open-minded towards people of other customs and cultures. That the CLIL students further show a greater interest in foreign languages in general, and not only in English, indicates that students opting for CLIL are those who are interested in language learning in general.

Other than the results with statistically significant differences, the results for some of the factors where no such difference was shown also offer telling insights. For instance, the factor “cultural interest,” with questions such as “Do you like the pop music of English-speaking countries?” and “Do you like English TV programs?” shows no significant difference between the groups, suggesting that the cultural aspect is not necessarily more prioritized by CLIL than non-CLIL students. Bearing in mind the significance of English-language culture in Sweden, this is not a surprising finding. Virtually every adolescent growing up in Sweden listens to music with lyrics in English and watches TV-programs in English (Sylvén, 2007; Sylvén & Sundqvist, 2012). “Travel orientation,” with statements such as “Studying English will be useful when I travel overseas” and “Learning English is important to me because I would like to travel internationally,” is another factor where no significant differences were detected between groups. This is probably explained by the fact that travelling abroad is widespread in the Swedish population, and in order to be able to make oneself understood, proficiency in at least English is a prerequisite. More of a surprise is the fact that “parental encouragement” did
not turn out as a dividing factor between CLIL and non-CLIL students. In several studies, parents’ level of education seems to play a pivotal role for school success, including in CLIL contexts (Lim Falk, 2008; Sylvén, 2004). However, “parental encouragement” does not necessarily equal “parents’ level of education,” and the explanation to the non-existent difference between groups on this factor may also be that all L1 Swedish speakers need to learn English, and parents of CLIL and non-CLIL students alike probably encourage their children to study English.

In response to RQ2, we found that those students whose L1 is a language other than Swedish have a greater fear of assimilation and have a higher intended learning effort. Additionally, L1 Swedish speakers have a higher WTC in their L1 and are more ethnocentric than the participants whose L1 is a language other than Swedish. These results could perhaps indicate some interesting trends insofar as the socioeconomic perspective of those who live in Sweden who speak an L1 other than Swedish. The Sweden of today, in fact, is quite different than the Sweden of the past: “Sweden … has gone from being a relatively homogenous society around the middle of the 20th century to becoming an increasingly multi-ethnic, multicultural and multilingual society” (Nygren-Junkin, 2008, p. 271). In 2013, approximately 16% of Swedish residents were not born in Sweden (http://www.migrationsinfo.se/migration/sverige/). Although immigrant status does not necessarily have a one-to-one correspondence to L1, it can be assumed that at least a portion of those with immigrant status also have an L1 other than Swedish. In the current study, 29 out of 177 participants (16.4%) have an L1 other than Swedish, making this sample a comparable sample to the general Swedish population.

Since 2009, Sweden has a language law stipulating that Swedish is the “official” language of Sweden (Sveriges Riksdag, 2009), and Swedish is a compulsory school subject. Sweden also has a Home Language Instruction (HLI) program, which dates back to a 1976 parliament vote, requiring public schools to provide instruction in the L1 of the student if requested by the parents (Hyltenstam & Tuomela, 1996). In fact, “The history of HLI in Sweden goes back longer than in most other countries in the western world” (Nygren-Junkin, 2008, p. 283). With the institutional support given to the maintenance and instruction of languages other than Swedish, it is especially interesting that several significant differences were found in our data. Starting with the factor “fear of assimilation,” the non-Swedish L1 speakers were found to have a greater fear of assimilation than the Swedish L1 speakers. Responding to statements such as “As a result of internationalization, there is a danger that people may forget the importance of their cultures” and “As a part of international society, people must preserve their languages and cultures,” the non-Swedish L1 speakers have likely already begun to experience the loss felt as they fight to hold on to their L1 and L1 culture. The fear of losing one’s L1 is perhaps not salient for someone unless he or she has already begun to experience
such a loss. If these feelings can be felt even in a society where HLI is supported in the public school system, it can be assumed that those feelings would be even stronger in a society where few resources are allocated for language maintenance.

Thus, it is also not surprising that there would be a significant difference with the intended learning efforts of the non-Swedish L1 speakers and the Swedish L1 speakers. With questions in this factor such as, “I am working hard at learning English” and “It is extremely important for me to learn English,” the non-Swedish L1 participants have likely recognized the importance of language learning in general because of having to learn Swedish in the past. The statement found in the “fear of assimilation” factor, “Using English in front of people makes me feel like an outsider in my own country,” suggests that the non-Swedish L1 participants also have a greater sociolinguistic awareness than the Swedish L1 participants. It can be assumed that they have at some point been scolded or ostracized when speaking their L1, making them realize the importance of using the language of the speech community. Thus, even though they are putting forth significantly more effort to learn English than their L1 Swedish peers, they are hesitant to use English in a situation where Swedish would be socially preferable. These results also fit logically with the findings that L1 Swedish speakers have a higher WTC in their L1, further supporting the concept that those participants who have an L1 other than Swedish are perhaps careful about using their L1 in a public space.

Finally, with results approaching significance, we found that L1 Swedish speakers are more ethnocentric than their non-Swedish L1 speaking peers. By virtue of the fact that these students with L1s other than Swedish are living in a society with a language and culture different from their own, they have had to adapt to a different cultural perspective in order to survive. They have had to learn to trust those with different customs and cultures than their own (topic of question 30) and have also had to learn to respect values and customs of other cultures (topic of question 47). This is not the first study to find such results; there have been other studies to link an L1 other than that of the target culture to less ethnocentrism. For example, Dewaele and Stavans (2012) found that those who used a greater number of languages scored higher on the open-mindedness portion of the Multicultural Personality Questionnaire, and those possessing a high level of more languages also had a greater amount of cultural empathy. The results of the Dewaele and Stavans’ study are similar to the results of the ethnocentric portion of the current study. Thus, even though Sweden provides a relatively high level of scholastic support for those whose L1 is other than Swedish, there are undeniably differences in the motivational profiles of L1 Swedish and non-Swedish L1 students. These results also help in explaining the overrepresentation previously discussed regarding non-native Swedes in Swedish CLIL programs (Sylvén, 2004).
The results obtained in the analysis based on students’ L1 should be of interest to CLIL programs in general. CLIL may be seen as a safe arena in which all participants have one aspect in common — the language of instruction and communication that is not the L1 of either of the groups involved (cf., Maillat, 2010). From an immigration/integration policy point of view, CLIL may thus be a way of promoting the integration between young majority L1 speakers and speakers of other L1s.

Concerning gender differences in the motivational profile (RQ3), our results indicate several factors with a statistically significant gender difference: “cultural interest,” “interest in foreign languages,” “international empathy,” “travel orientation,” “English anxiety,” “lack of L2 self-confidence,” and “intended learning effort.” The results illustrate that females are more culturally interested, have a greater interest in learning foreign languages, have more international empathy, are more travel oriented, have a greater intended learning effort, but are more anxious about actually using English and have a significantly lower degree of self-confidence in their view of themselves as users of the L2. Most of these results are corroborated in previous research (e.g., Baker & MacIntyre, 2000). Previous studies indicate that females have a greater interest in learning foreign languages, perhaps as a result of societal expectations. Research seems to indicate that male students have less of an interest in learning foreign languages, perhaps because of the external pressures from society (i.e. only girls should study language); thus, school systems and teachers need to design activities to promote language learning in both genders.

The higher levels of English anxiety and the lack of L2 self-confidence among girls may be explained by adolescent girls perhaps being more worried about correctness in their language use than are boys. It should, again, be pointed out that the results are based on self-reported values, and the present paper does not include triangulation with actual L2 performance. When we investigate these results in a more detailed manner, however, they show that females who opt for CLIL rather than non-CLIL programs have a greater degree of L2 self-confidence and are less anxious about using English than their non-CLIL peers at the outset, that is, before CLIL has commenced. This indicates that the females who choose a CLIL program are more confident in their L2 English use, and that those who choose the non-CLIL strand are those with a lower self-esteem with regards to their self-assessed abilities in their L2, English.

7. Conclusion

The CLISS project, of which the present study is a part, is a longitudinal study spanning three years of data collection. This article has reported on the results from the initial round of the MFQ. In the students’ third, and final, year of high
school, another round of the MFQ will be administered, and using the results from that round of data collection and comparing them with the ones obtained in the first round of data collection reported on here, we will be able to delve further into detailed analyses of differences in motivational profiles from various perspectives. We will also be in a better position to make claims about causality vis-à-vis the motivational effects of CLIL. In the results above, there were several factors with no difference between CLIL and non-CLIL students. For instance, the “cultural interest” factor showed similar results for both groups, and it remains to be seen whether this changes or not during the course of the participants’ three years in high school. Another factor of interest to follow is “travel orientation,” for which it may be hypothesized that CLIL students may become more international in their general approach to their future lives and careers than do non-CLIL students.

In sum, our data illustrate that CLIL students are more motivated on a number of factors than are non-CLIL students. These results are not an effect of CLIL, but rather of previous experiences, personality traits, and interests, and we should be careful in suggesting that CLIL, in fact, leads to higher motivation, more positive attitudes, and thereby a higher L2 self-confidence. However, since the current study is a baseline study, it is also possible that although CLIL students start the program quite motivated, the CLIL program itself could also be a source for further motivation. Change of motivation over time in CLIL is an area ripe for future study.

Additionally, the cause of motivation merits further research, for instance in programs where CLIL is not a choice made by students, but rather is obligatory for everyone. It is also crucial to continue to compare such cohorts with comparable non-CLIL cohorts. Our results further indicate that for speakers of non-majority L1s, CLIL may be an educational arena on which everybody has equal footing. This, in turn, could be a convincing argument from the point of view of integration. Finally, the trend that CLIL seems to attract more females than males is further corroborated in this study, and while the females seem more motivated on a number of factors, the boys are more confident in and less anxious about their L2 English use. Educators could use this confidence to strategically enhance the males’ language learning motivation to encourage them to develop a more positive attitude about learning foreign languages as a whole. Over time, purposeful discussions on the topic could help reduce the gender bias in language learning. Using the results from this study as a starting point, a more in-depth understanding of the impact of CLIL in Sweden and elsewhere can be achieved.
Notes

1. The Common European Framework of Reference (http://www.coe.int/lang-CEFR) is a tool to facilitate comparison of language guidelines and syllabi across national contexts in a transparent and comprehensive manner. It details language proficiency in six levels, A1, A2, B1, B2, C1 and C2, where C2 indicates native-like competence.

2. The CLISS project is funded by the Swedish National Research Council, grant number 2010-5376.

3. Arabic (N = 3), Serbian, (N = 2), Albanian (N = 2), Kurdish (N = 2), Norwegian (N = 1), Icelandic (N = 1), Amharic (N = 1), Tagalog (N = 1), Hebrew (N = 1), Tigrinya (N = 1), German (N = 1), Syrian (N = 1), Lithuanian (N = 1), Finnish (N = 1), Swahili (N = 1), French (N = 1), African (the response provided by the participant) (N = 1), Turkish (N = 1), and Persian (N = 1). Additionally, one participant indicated bilingualism in Arabic and Swedish and one in Swedish and English. Three participants who stated that Swedish was not their L1 did not provide an L1 in the space allocated.

4. List of factors in the MFQ with the number of questions in parentheses: cultural interest (6), attitudes towards the L2 community (8), instrumentality (10), international contact (4), interest in foreign languages (5), international empathy (3), fear of assimilation (4), ethnocentrism (5), travel orientation (4), English anxiety (6), attitudes towards learning English (6), milieu (6), parental encouragement (4), the ideal L2 self (6), L2 self-confidence (5), willingness to communicate (WTC, in the L1 and English, 8 ea.), and intended learning effort (8).

References


Maillat, D. (2010). The pragmatics of L2 in CLIL. In C. Dalton-Puffer, T. Nikula, & U. Smit (Eds.), *Language use and language learning in CLIL classrooms* (pp. 39–60). Amsterdam: John Benjamins. DOI: 10.1075/aals.7.03mai


**Appendix**

**Sample questions from the 18 factors from the MFQ**

*Cultural interest*: Q2. Do you like the pop music of English-speaking countries?

*Attitudes towards the L2 community*: Q3. Do you like the people of the United States?

*Instrumentality*: Q33. English ability would help me get a better paying job.

*International contact*: Q41. I think that English will help me meet more people.

*Interest in foreign languages*: Q55. If I planned to stay in another country, I would study the local language.

*International empathy*: Q87. Studying English is important to me because I would like to become closer to other English speakers.

*Fear of assimilation*: Q42. As a result of internationalization, there is a danger that people may forget the importance of their cultures.

*Ethnocentrism*: Q30. I don't trust people with different customs and values to myself.

*Travel orientation*: Q7. Would you like to travel to English-speaking countries?

*English anxiety*: Q43. If I met an English speaker, I would feel nervous.

*Attitudes to learning English*: Q37. Learning English is really great.

*Milieu*: Q40. Hardly anyone cares whether I learn English or not.

*Parental encouragement*: Q58. My parents encourage me to speak English.

*Ideal L2 self*: Q59. I often imagine myself as someone who is able to speak English.

*L2 self-confidence*: Q48. Learning a foreign language is a difficult task for me.

*WTC (L1/English — how likely would you be to initiate communication in the following situations?)*: Q23/31. Talking a small group of strangers

*Intended learning effort*: Q31. I am working hard to learn English.

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