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Author: Katarzyna Papaja

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*To fear or not to fear CLIL:
Some remarks on the role of anxiety in a CLIL classroom*

Katarzyna Papaja

University of Silesia, Poland

<https://orcid.org/000-0003-2808-443X>

katarzyna.papaja@us.edu.pl

Abstract

This study aims to explore the relationship between content and language integrated learning (CLIL) and language learning anxiety, namely the impact of CLIL on students' anxiety in different cultural contexts. As a part of a larger research project, this study is conducted at the secondary school level in the Netherlands, Germany, and Poland and includes students enrolled in CLIL programs. The participants completed a questionnaire based on scales already used by Gardner (1985), Schmidt and Watanabe (2001) and Lasagabaster and Doiz (2017), which is a measure of affective factors. The learners' responses were measured on a 5-point Likert scale covering the range: strongly disagree; rather disagree; don't know; rather agree; strongly agree. The responses were transformed into numerical values ranging from 1 to 5 for statistical analysis, thereby allowing the comparison of anxiety over time and among the participants under investigation.

Keywords: anxiety; CLIL; affective factors; individual differences; SLA

1. Introduction

A lot of research was conducted on the importance of affective factors in FL classroom (Schmidt, Borjae, & Kassabgy, 1996; Schmidt & Watanabe, 2001; Ushioda, 2001); however, still not enough in the context of CLIL in which affective factors have a significant role. Content and language integrated learning (CLIL) has been

defined as “a dual-focused educational approach in which an additional language is used for the learning and teaching of both content *and* language” (Coyle, Hood, & Marsh, 2010, p. 1). Additionally, in a CLIL classroom, a foreign language acts as a medium of instruction.

CLIL programs have become very popular worldwide since having knowledge only of a foreign language is not enough in the world in which communication at an advanced level is indispensable. Intrinsic motivation, which refers to the enjoyment of the activity itself, in the present case, learning English in CLIL classes is a significant factor, which leads to the feeling of success (Ushioda, 2001). Anxiety or “the lack of confidence in oneself as a learner, uneasiness, frustration, self-doubt, apprehension and tension which are specifically related to language learning situations” (Arnold & Brown, 1999, p. 9, cited in Turula, 2013, p. 256) has been considered as a factor having a negative impact on learning. The sources for anxiety in the language classroom as well as in a CLIL classroom are multiple, such as testing, communication apprehension, peer evaluation, the fear of being laughed at, the learner’s personality, the teacher’s teaching styles, the learning context itself, the process of learning a FL and, perhaps most importantly, the instructor’s support to the students (Marcos-Llinás & Juan-Garau, 2009). Furthermore, CLIL learners are exposed to a huge amount of content material in a foreign language, which might cause fear.

The aim of the article is to present the research results on the impact of CLIL on students’ anxiety in different cultural contexts, namely in the Netherlands, Germany, and Poland. CLIL is believed to create a high-anxiety learning environment due to the fact that studying an already complex subject in a foreign language is demanding, however, there might be other factors influencing the level of anxiety, therefore, the study was conducted in cultures which substantially differ. The implementation of CLIL practice in the Netherlands, Germany, and Poland took place in a variety of ways, which is going to be described later in the article. In order to collect the data, a questionnaire based on scales already used by Gardner (1985), Schmidt and Watanabe (2001) and Lasagabaster and Doiz (2017) was designed. The questionnaire was conducted among secondary school learners in the countries mentioned above. The study is a part of a project devoted to the impact of CLIL on affective factors.

2. Language anxiety

Language anxiety is an affective reaction to second language communication. MacIntyre and Gregersen (2012) describe language anxiety as “the feelings of worry and negative, fear-related emotions associated with learning or using a language that is not an individual’s mother tongue” (p. 103). Horwitz, Michael

and Horwitz (1986) define language anxiety as “a distinct complex of self-perceptions, beliefs, feelings, and behaviours related to classroom language learning arising from the uniqueness of the language learning process” (p. 128).

Numerous studies were indicating that a high level of anxiety is correlated with a lower level of language achievement (Bailey, Onwuegbuzie, & Daley, 1999; Horwitz, 1990; MacIntyre & Gregersen, 2012). The debilitating effect of language anxiety on foreign language achievement has been observed with different target languages and at various proficiency levels (Horwitz, 2001). Furthermore, there is evidence that language anxiety negatively influences the whole cognitive process that is its input, processing, and output stage. During the input stage, when the language items are introduced, anxiety may influence the frequency of requests for sentence repetition (while listening) or the number of re-readings needed to comprehend a text. The processing stage involves organization, storage, and assimilation of the new language data. At this stage, anxiety affects the time necessary to learn new vocabulary or apprehend a message. At the output stage, anxious students tend to underperform when tested. They report ‘blinking out’ or ‘freezing’ and not being able to recall previously memorized material (MacIntyre & Gardner, 1989; MacIntyre & Gregersen, 2012).

Studies regarding the relationship between foreign language anxiety and foreign language performance have been carried out across the world, examined the effect of language anxiety on different language skills, and studied the interrelations between various native and target languages. Despite the contextual differences, multiple studies confirm the adverse effect of foreign language anxiety on achievement. The current research supports the claim that language anxiety is an essential factor in foreign language education (MacIntyre, Gregersen & Mercer, 2016; Olivares-Cuhat, 2010; Oxford, 2016) and it has a predominantly negative impact on language performance compared to other affective variables (Gardner, Tremblay, & Masgoret, 1997).

Taking into consideration the complexity of the foreign language anxiety, it is vital to differentiate between its various kinds and manifestations. The onset of foreign language anxiety research was marked by the debate whether the language anxiety is fostering or hindering the foreign language learning process. Thus, the first distinction to be made is between facilitating anxiety and debilitating anxiety. Studies of foreign language anxiety as a general concept have been followed by the investigation of anxieties associated with specific language learning skills. Researchers have delved both into productive (speaking, writing) and receptive skills (listening, reading) in order to identify and address potential stressors.

Speaking activities are often cited as the most anxiety-invoking. This intuitive judgment is widely supported by research results (Horwitz et al., 1986; Koch & Terrell, 1991). Given the emphasis put on oral communication in modern foreign language

education, it is not surprising that the predominant body of research is focused on speaking anxiety. Students struck by speaking anxiety tend to speak less, utter shorter and less complex sentences and report recall difficulties (Phillips, 1992).

Foreign language reading anxiety is defined as frustration and apprehension experienced due to failure to comprehend a written message in a foreign language (Capan & Karaca, 2013). Studies of foreign language reading anxiety support the view that it is a distinctive type of language anxiety (Saito, Garza, & Horwitz, 1999; Sellers, 2000; Wu, 2011). Besides, the research shows evidence of a detrimental effect of reading anxiety on the ability to recall the content of the text (Sellers, 2000).

In order to interact successfully in a foreign language, the interlocutor must be able to understand the conversation. When the listening comprehension is impaired due to low foreign language proficiency, it may profoundly impact the listener's stress level. Students are prone to get stressed when faced with various accents, fast speech, unclear pronunciation, unfamiliar vocabulary, and complex syntax (Vogely, 1998).

Although the research on foreign language listening anxiety is scarce, preliminary evidence begins to emerge that this is a distinct type of language anxiety. The existing studies point out the negative correlation between language proficiency and listening anxiety. In other words, the more proficient the learner, the less listening anxiety he or she experiences (Elkhafaifi, 2005).

The least developed research area is the study of writing anxiety. Published research papers produced mixed and ambiguous results. Nonetheless, available empirical data substantiates the claim that foreign language writing anxiety is a distinct phenomenon (Cheng, 2002; Cheng, 2004; Cheng, Horwitz, & Schallert, 1999). The two interesting findings of Cheng's previous study (2002) were that the foreign writing anxiety seemed to amplify over the time of study and that there was no significant correlation between anxiety related to writing in the native language and second-language-specific anxiety. Due to the lack of a dedicated tool, researchers, for some time, relied on the Second Language Writing Apprehension Test (SLWAT) to measure foreign language writing anxiety. It is a version of the Daly-Miller Writing Apprehension Test, which was modified to meet the requirements of second language studies (Cheng et al., 1999). To overcome this issue, Cheng devised a more specific tool to measure foreign language writing anxiety – the Second Language Writing Anxiety Index (SLWAI).

Interestingly, interrelations were discovered between skill-specific anxieties. Capan and Karaca (2013), for instance, found out a correlation between foreign language reading anxiety and foreign language listening anxiety. Students with high reading anxiety reported similar levels of listening anxiety. The researchers link that interrelation to the fact that both reading and writing are receptive language skills.

3. Language anxiety and CLIL

Numerous research has been conducted on the role of affective factors in CLIL (Amengual-Pizarro & Prieto-Arranz, 2014; Heras & Lasgabaster, 2015; Seikkula-Leino, 2007), however, not much research has been conducted on the impact of anxiety in a CLIL context. As for the language anxiety, it was reported by Muñoz (2002) that CLIL tends to be “a relatively anxiety-free environment” (p. 33). However, Pihko (2010), who conducted a questionnaire study among Finnish secondary schools CLIL students, claims that CLIL might cause the feeling of anxiety if students feel that their foreign language skills are under evaluation. In other words, the CLIL learners, despite their positive attitude to CLIL feel anxious because to certain extend their foreign language skills are neglected. Maillat (2010), on the other hand, when providing the analysis of the data gathered from the research conducted on CLIL and non-CLIL classroom interaction discusses the filter that CLIL students use when talking about the content in a foreign language. This filter is called “the mask effect” which reduces anxiety level and facilitates L2 learning. However, it is not clear what differences there are between CLIL and non-CLIL students. It cannot be the case that only CLIL students use “the mask”. When analysing L2 classroom activities, it can be easily noticed that students are often given tasks in which they can hide one’s real identity. Therefore, it is vital to mention another research on language anxiety in CLIL and non-CLIL classrooms in Sweden (Thompson & Sylvén, 2015). The data gathered from the research indicates that “CLIL students show clear signs of being less anxious about using L2 English before CLIL has begun, suggesting that CLIL is not necessarily a catalyst for reducing language learning anxiety” (Thompson & Sylvén, 2015, p. 20). Another interesting conclusion drawn from the research is that gender plays a significant role, especially in the case of affinity towards L2. However, no remarks concerning gender differences between CLIL and non-CLIL students have been mentioned. The next study worth mentioning is the research conducted by Doiz, Lasgabaster and Sierra (2014) who investigated CLIL and non-CLIL pupils attending grades 7 and 9 in the Basque Autonomous Community in Spain. The data showed that CLIL pupils were more motivated than non-CLIL pupils, and what is more, they experienced more anxiety in grade 7. However, no significant differences as far as anxiety is concerned were noticed in grade 9 between CLIL and non-CLIL pupils. The authors explain this phenomenon stating that CLIL pupils gradually become more accustomed to using English while learning content subjects. In another study conducted by Lasgabaster and Doiz (2017), the authors were investigating the same two age groups (from grade 9 to grade 10) for three years. As far as the non-CLIL group is concerned, the results showed hardly any changes over time, however, the

CLIL pupils reported more anxiety when using English in grade 10. These results completely contradict the previous results, however, the authors claim that the age factor might have had an impact on the level of language anxiety. Somers and Llinares (2018) conducted a study among secondary school CLIL learners enrolled in two bilingual tracks of differing intensity. The authors mainly concentrated on motivation, yet anxiety was also in focus. The results of the study show that most of the students feel more anxious in CLIL content classes than in non-CLIL classes, no matter how intensive the bilingual track was. The analysis of the answers to the open-ended questions shows that the CLIL students feel anxiety because of the more demanding teaching in CLIL lessons not because of the language itself.

Having analysed the literature available on anxiety in CLIL, it is visible that there is a significant gap in the research, and therefore, it is very essential to investigate this issue. Before discussing the data received from the current study, it is important to describe briefly the status of CLIL in the countries where the research was conducted.

4. CLIL in the Netherlands, Germany, and Poland

4.1. The Netherlands

The Dutch model for CLIL does not exist, or at least not in terms of precise Ministry of Education guidelines regarding the content of CLIL, its subjects or timeframe. The official position of the Inspectorate for Education and the Ministry of Education, Culture and Science is that up to half of the total number of lessons may be taught in English, that the Dutch curriculum must be followed, and that CLIL must not be costly to introduce or adversely affect language proficiency in Dutch. However, schools themselves, supervised and coordinated by the *Europees Platform voor het Nederlandse Onderwijs* (European Platform for Dutch Education), have developed a form of self-regulation by devising a standard for CLIL (van Wilgenburg, 2013).

CLIL begins from the basic secondary education (years 1 to 3 of lower secondary education). Subjects should include at least one social science, one natural science and one creative subject (including Physical Education). Extra lessons are sometimes given in English. CLIL is combined with the mainstream *gymnasium* (pre-university school). In years 1-3, 50% of the total number of hours is taught in the target language (English). In the *tweede fase* (upper secondary education, years 4 to 5 of HAVO and years 4 to 6 of VWO) all pupils choose a subject combination (van Wilgenburg, 2013).

In order to enter the CLIL programme, the pupil concerned needs to achieve a high (VWO) score for the CITO examination taken in the final year of primary

education. Additionally, he or she should have a positive VWO report from the primary school head. The majority of schools invite pupils who are applying for CLIL to a meeting with the selection committee at which motivation of the pupil is checked. The knowledge of English is tested if necessary (van Wilgenburg, 2013).

Pupils who have undertaken CLIL take the Dutch final examination and receive a regular VWO or HAVO diploma at the end of their school career. In that examination, CLIL pupils take their regular examinations in the Dutch language. There are several opportunities for pupils to obtain a further certificate – the Certificate of Basic Secondary Education (*Basisvorming*) or IBO Certificate of English (upper secondary level). Some schools allow their pupils to take additional examinations at the end of the third and fourth year – for example, an IGCSE (International General Certificate for Secondary Education), or an Oxford or Cambridge diploma. Secondary schools introducing CLIL with English as the language of instruction rely on their regular (Dutch) staff. Those interested are selected and trained, often during two years of in-service courses. Most schools first offer teachers a course in classroom management, followed by courses devoted specifically to the English language and to the most suitable approaches for teaching in either the Netherlands or the United Kingdom. Training is generally supported in school by teachers of English (van Wilgenburg, 2013).

4.2. Germany

Initially, CLIL programmes were mainly offered in secondary education – gymnasium, which offers learners the general university entrance qualifications. However, gymnasium is considered to be the top middle-class school; therefore it has been common knowledge that only more talented students may attend this type of education (ZydatiB, 2007). This situation led to many debates, and as a result, CLIL was also introduced in different types of schools – Realschule, Hauptschule (bottom secondary education) and primary schools. Nevertheless, CLIL in this type of schools does not exist as a mainstream education but instead takes an experimental nature.

CLIL learners in Germany can be divided into two groups: the first group of learners receives parts of their subject education in modern languages such as English, French or Spanish and the second group of learners whose German is the second or foreign language receives their subject education in German (Putsche, 2011). The second situation is prevalent in Germany due to the political and social situation. There are a lot of immigrants in Germany for whom German is the second or foreign language, and therefore they need to be provided with a particular kind of education in German. Even though the social situation has changed in Germany within the last few years, it is important to remember that CLIL

in Germany has always been offered in foreign languages to monolingual, German-speaking learners but it does not mean that it cannot be offered to multilingual learners who might also be very successful in this type of education.

As for the subjects being taught in CLIL, at the very beginning, this kind of approach was implemented as an additive late partial immersion starting with one subject in Grade 7 (Krechel, 1999). Then other subjects were added or substituted in the following years. In other cases, selected topics were taught in a foreign language over a certain period of time. After the German-French Treaty in 1963, there was strong pressure on introduction of social sciences-related subjects into the CLIL curriculum. As it was mentioned before, one of the aims of CLIL was to strengthen international relations; therefore, the choice of this kind of subjects can be justified. Subjects such as natural sciences, art, music, drama, and physical education were introduced much later, but some of them did not pass the experimental stage in many places. Maths has not been very popular as a subject being taught in CLIL in Germany due to its difficulty and a non-linguistic nature, which does not require language diversification in comparison to other subjects such as history or geography.

The last significant issue concerning CLIL education in Germany, which should be mentioned at this point, is teacher education. Unlike in many European countries, future German teachers are provided with dual education, namely they receive formal training in at least two subjects. They might study French and geography and will receive formal qualifications to teach French, geography or geography in French. Due to this type of education, it is not difficult to find well-trained CLIL teachers who are able to teach at the highest quality. As a result of this type of education, more than 700 schools are offering CLIL education in various forms.

4.3. Poland

Before the year 2002, pupils who wanted to learn in bilingual classes had to have a very good command of the second language and pass a diagnostic test. In some schools, there was an additional class "0 class" in which the learners could improve their second language skills. In order to be accepted into "0 class", the candidates did not have to know the second language very well. "Intensive second language learning guaranteed the development of second language skills, especially writing and reading" (Multańska, 2002, p. 90). Education in bilingual classes lasted 4 or 5 years depending on the existence of the "0 class". After the introduction of the educational reform, the programme of the "0 class" was introduced into lower secondary schools which had bilingual classes. The program was supposed to be covered within three years (Act. Nr. 61 from 21st May 2001). Bilingual subjects are introduced in lower secondary schools in 2nd grade and

are continued until 3rd grade. The pupils have 4 hrs (45 min) of mathematics, 2 hrs (45 min) of biology, physics or history and 1hr (45 min) of geography per week. As noticed by Wierzbicka-Drozdowicz (2005, p. 242), the pace of learning is slower due to the age of the pupils.

Taking into consideration the secondary schools, which have bilingual classes, all the subjects except for Polish, history of Poland, geography of Poland and additional foreign language can be taught through the second language. Additionally, the learners should be provided with 6 hrs (45 min) per week of the second language during the whole period of their secondary education (Art. Nr. 61 from 21st May 2001). The most common subjects, which are taught through a second language, are mathematics, physics with astronomy, chemistry, biology, history, geography, and computer sciences (Czura, Papaja, & Urbaniak, 2009). The most popular CLIL language is English; however, there are schools where content subjects are taught in German, French, Spanish, and Italian.

CLIL learners can take all content subjects in Polish, or they can decide to take such subjects as biology, history, chemistry, physics and astronomy, geography, and mathematics both in Polish and in a foreign language. The bilingual final secondary school exam (matura exam) in content subjects is set on the standard level, and it follows the attainment requirements applying to Polish-medium matura exam, which is obligatory for all graduates of secondary schools who wish to continue their education at universities or higher education.

CLIL teachers are usually content subject teachers who have a language certificate (CAE or CPE). No special teacher training institutions are preparing CLIL teachers. In some higher institutions, CLIL has become part of a general course in FLT methodology, but this is a marginal phenomenon. Locally, some in-service training is offered. Several conferences and workshops have been organized to help teachers obtain some practical knowledge of teaching methodology, and some advice and support in organizational matters.

5. The current study

The current study aims to determine the level of anxiety of the Dutch, German, and Polish learners from the perspective of specific CLIL requirements imposed in these countries. The following research questions were addressed:

1. Do the CLIL learners feel more tense and nervous in CLIL classes than in regular English classes?
2. What are the factors, which have an impact on the anxiety of the CLIL learners?
3. What are the differences between the CLIL learners as far as nationality is concerned?
4. How does the level of anxiety change within the whole period of CLIL education?

The study was motivated by the gap in the literature concerning anxiety in the CLIL context as well as by the study conducted by Lasagabaster and Doiz (2017) on the importance of affective factors in the CLIL context. Furthermore, CLIL may be apprehended differently depending on the socio-cultural settings and educational policies of particular countries (Coyle, 2008). Therefore, the study was conducted in three countries, which agreed to take part in the project. The data presented in this article belongs to a larger project regarding the impact of affective factors on CLIL among which motivation, anxiety, global orientation, effort/expectancy and parental encouragement were investigated. Throughout the period of CLIL education (three years) the above-mentioned affective factors were measured among secondary school participants coming from three different countries, namely the Netherlands, Germany, and Poland. All the participants who took part in the project started their CLIL education in secondary school. In order to collect reliable data, three schools were chosen in which the subjects taught in English were nearly the same (apart from Poland, where the participants learnt biology and not history in English). In the Dutch school, the participants had two hours of geography, two hours of history and three hours of maths per week for two years. In the last year of CLIL education instead of three hours of maths per week they had two hours. In Germany, the participants of the study had three hours of geography, two hours of history and two hours of maths per week for the period of two years. In the last year of CLIL education instead of three hours of geography per week they had two hours. As for the Polish participants of the study, they had two hours of geography, and three hours of maths per week for the whole period of CLIL education. All the participants of the study had an additional six hours of English per week for the whole period of CLIL education.

5.1. Participants and procedure

A total of 132 CLIL learners participated in the study: the Netherlands: 42 (29 females; 13 males); Germany: 46 (23 females; 23 males); Poland: 42 (22 females; 20 males); All of them were learners of secondary schools in which CLIL is offered in various content subjects. Table 1 contains the detailed information concerning the students' age at the beginning, in the middle and at the end of the CLIL programme as well as the subjects learnt in English and the diagnosed level of English at the beginning of CLIL education is presented.

The research was conducted between September 2015 and May 2018 and the participants were asked to fill in the same questionnaire three times – at the beginning of their CLIL education, in the middle and at the end. The questionnaire was conducted in English.

Table 1 Basic information concerning the research participants

	Dutch students	German students	Polish students
Age of the students at the beginning of the CLIL programme	15-16 years old	15-16 years old	16-17 years old
Age of the students in the middle of the CLIL programme	16-17 years old	16-17 years old	17-18 years old
Age of the students at the end of the CLIL programme	17-18 years old	17-18 years old	18-19 years old
Subjects learnt in English	geography, history, maths	geography, history, maths	geography, biology, maths
Diagnosed level of English at the beginning of the CLIL education	B1+	B1	B1

5.2. Data collection instrument

The questionnaire was based on scales already used by Gardner (1985), Schmidt and Wanatabe (2001). It was divided into three sections: personal information, five-point Likert scale questions measuring the level of motivation, anxiety, global orientation, effort/expectancy and parental encouragement, open-ended questions concerning advantages and disadvantages of studying subjects in English.

The learners' responses were measured on a 5-point Likert scale covering the range: strongly agree; rather agree; don't know; rather disagree; strongly disagree. The responses were transformed into numerical values ranging from 1 to 5 for statistical analysis (1 – strongly disagree, 2 – disagree, 3 – I don't know, 4 – agree, 5 – strongly agree). In the current analysis, two categorical predictors were selected: nationality and time. For the purpose of this article, only data concerning language anxiety will be discussed; therefore, only five statements concerning anxiety have been selected:

1. I feel more tense and nervous in CLIL classes than in regular English classes.
2. I feel nervous when I have to talk about specific content subjects in English because I cannot express what I mean.
3. I feel nervous when I have to talk about specific content subjects in English because of the mistakes I make.
4. I feel that the other students speak much better English during the CLIL classes than I do.
5. I feel overwhelmed with the amount of material I have to learn in the CLIL classes.

6. Data analysis, results and discussion

As far as the analysis of the obtained data is concerned, the results are going to be presented in the form of charts illustrating the subsequent discussion.

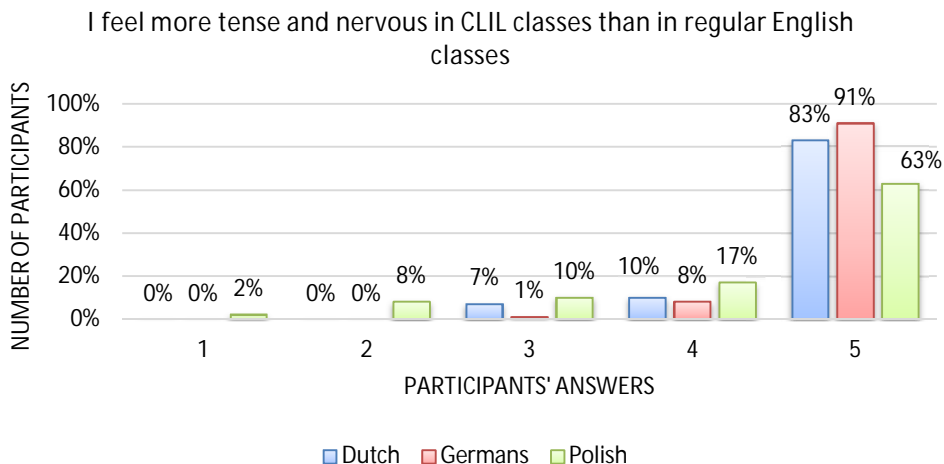


Figure 1 CLIL anxiety (September 2015)

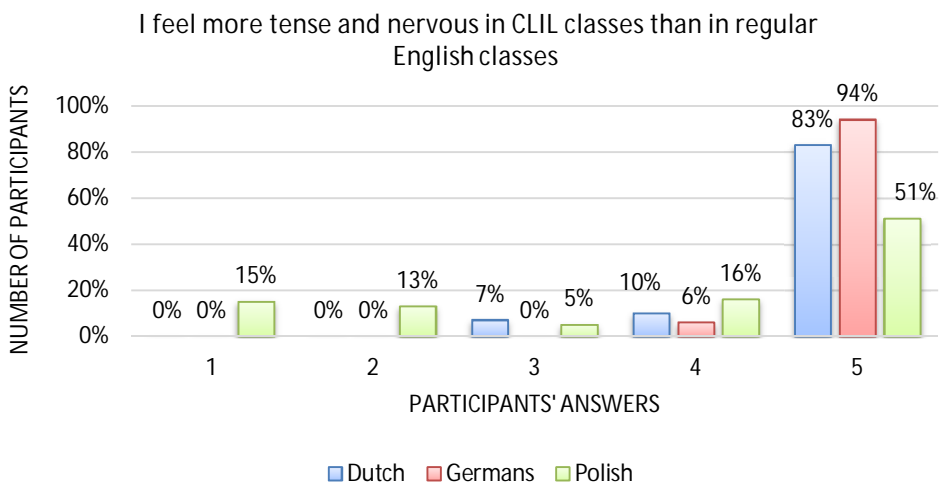


Figure 2 CLIL anxiety (January 2017)

When analysing the data from September 2015 (see Figure 1), most of the German and Dutch participants (91% and 83%, respectively) strongly agree with the statement that they feel more tense and nervous in CLIL classes than in regular English classes. The Polish participants also feel tense and nervous but not as much as the other participants under investigation. The data does not differ much in January 2017 (see Figure 2); however, the Polish participants tend to be less nervous and tense than before (51%). A significant difference can be noticed in May 2018 (see Figure 3). All the participants of the study tend to feel less nervous and tense than

in the previous years (Germans: 71%; Dutch: 46%; Polish: 35%). What is also worth noticing is that quite a significant percentage of the participants strongly disagree or disagree with the statement at the end of their CLIL education.

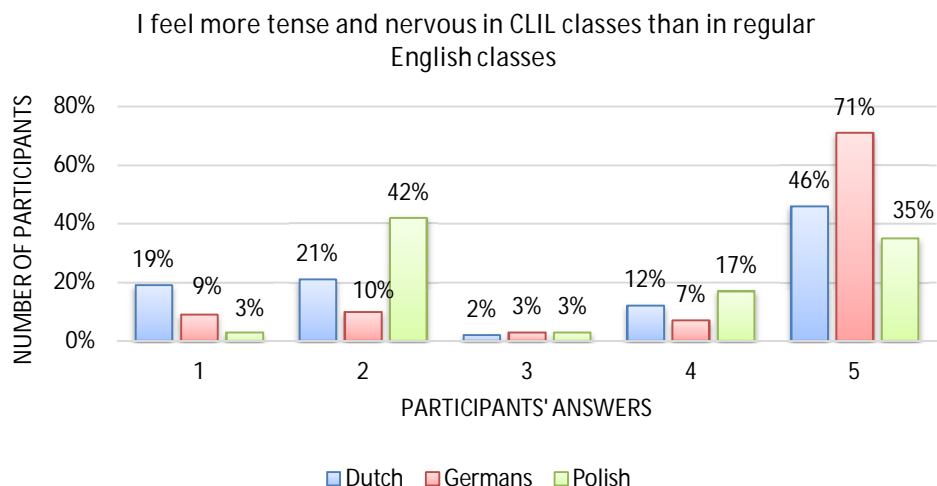


Figure 3 CLIL anxiety (May 2018)

It is quite difficult to say why the German and the Dutch participants tend to be more nervous and tense during CLIL classes than the Polish ones. I believe that the willingness to perform very well in CLIL might cause a feeling of anxiety, which does not mean that the Polish participants do not will to perform very well. In the case of the Dutch, the results are more surprising as their level of English as diagnosed before entering the CLIL education was higher in comparison to the other participants of the study. What is more, they should be used to listening to and using English in various contexts as the language is present everywhere. However, as Somers and Llinares (2018) claim the level of anxiety may not be linked to the level of English but rather to the CLIL subjects themselves, which might be the case when looking at the data collected from the Dutch participants.

To sum up, the participants under investigation seem to be nervous and tense at the beginning of their CLIL education which might stem from the fear of ambiguity which "refers to the way an individual (or group) perceives and processes information about ambiguous situations when confronted by an array of unfamiliar, complex, or incongruent cues" (Furnham & Ribchester, 1995, p. 179). The situation changes when they get familiar with CLIL, which can be seen from the data obtained in May 2018 (see Figure 3).



Figure 4 Speaking anxiety (September 2015)



Figure 5 Speaking anxiety (January 2017)

The data in Figure 4 and Figure 5 does not differ significantly. Most of the Germans, the Dutch and the Polish strongly agree that they tend to be nervous when they have to talk about specific content subjects in English because they cannot express what they mean. The percentage is the following: the Germans 94%; the Dutch 86% and the Polish 82% (September 2015); the Germans 91%; the Dutch 85% and the Polish 83% (January 2017).

As for the data obtained in May 2018 (see Figure 6), a remarkable change can be noticed. 51% of the German participants strongly agree with the statement, 39% of the Dutch and 61% of the Polish. It is also worth noticing that quite

a significant number of the participants do not agree with this statement or do not agree in May 2018 (see Figure 6).



Figure 6 Speaking anxiety (May 2018)

As for the differences between the participants of the study, they all tend to have problems with expressing specific content in a foreign language, which seems to be understandable, as the learners have to face a completely new situation. All the participants of the study had studied the content subjects in junior high school in their languages so when they started their secondary school education apart from getting used to the new teachers and colleagues they had to get used to the subjects being taught in a foreign language. This situation might have led to anxiety, especially that in CLIL classes, the focus is on communication. Bearing in mind that the CLIL learners have to talk about specific content in a foreign language that might cause an additional barrier. As Horwitz et al. (1986) and Koch and Terrell (1991) claim, speaking activities are the ones to cause a lot of language anxiety. When looking at the data obtained in May 2018 (see Figure 6), one can notice an implicative decrease, which is a very positive sign.

When looking at the data from September 2015 (see Figure 7) and January 2017 (see Figure 8), gradual changes can be noticed. In September 2015, 83% of the Dutch participants strongly agreed with the statement while in January 2017 (see Figure 8) the number dropped to 73%. In the case of the German participants, 71% strongly agreed with the statement in September 2015 (see Figure 7) and 63% in January 2017 (see Figure 8). There is no significant change as far as the data regarding the Polish participants is concerned. The difference is only in 1% between the years 2015 and 2017.



Figure 7 Fear of making mistakes (September 2015)

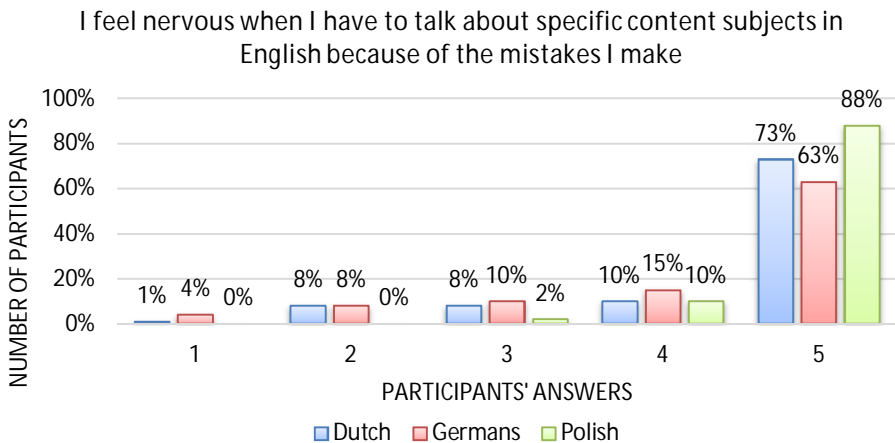


Figure 8 Fear of making mistakes (January 2017)

Nevertheless, a considerable change can be observed in May 2018 (see Figure 9). Only 45% of the Dutch participants are afraid of making mistakes, 37% of the German participants and 74% of the Polish ones.

The fact that the number decreases in the case of the Dutch and German participants might be linked to self-confidence, which is also connected with the data presented below (see Figures 10-12). From the cultural point of view, once the Germans are familiar with a particular subject, they feel confident and are not afraid of making mistakes (Schmidt, 2004). From the study conducted by Gold, Wallage and van Dyck (2016), the authors conclude that the Dutch tend to represent "error-management culture, which leads to learning from errors, but it may also stimulate innovation, innovative thinking and formulating new goals"

(Gold et al., 2016, p. 28). In the case of the Polish participants, Rogińska (2016) in her research conducted on speaking anxiety concludes that “the fear of making mistakes might be due to the intimidating nature of the Polish people” (Rogińska, 2016, p. 93) which might also be the explanation of the above-presented data. On the other hand, Hüttner, Dalton-Puffer, & Smit (2013) who investigated CLIL learners in one of the technical colleges claim that CLIL encourages positive feelings towards the L2 English in terms of learners losing their fear of using English and making mistakes which is due to the fact that within time English is perceived as a communicative tool which might also be the case in the current study.



Figure 9 Fear of making mistakes (May 2018)

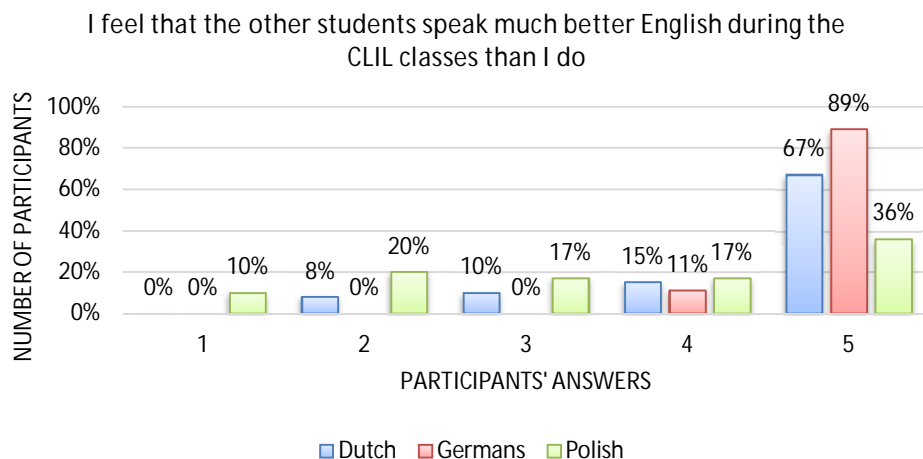


Figure 10 Fear of speaking worse than others (September 2015)

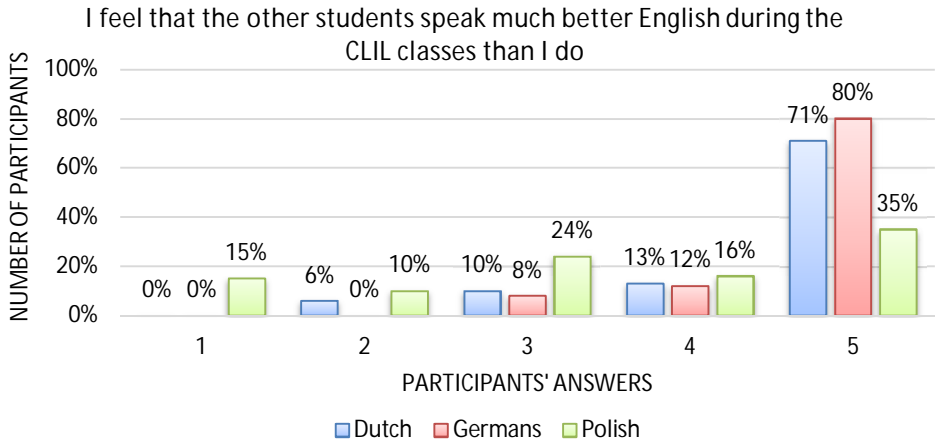


Figure 11 Fear of speaking worse than others (January 2017)

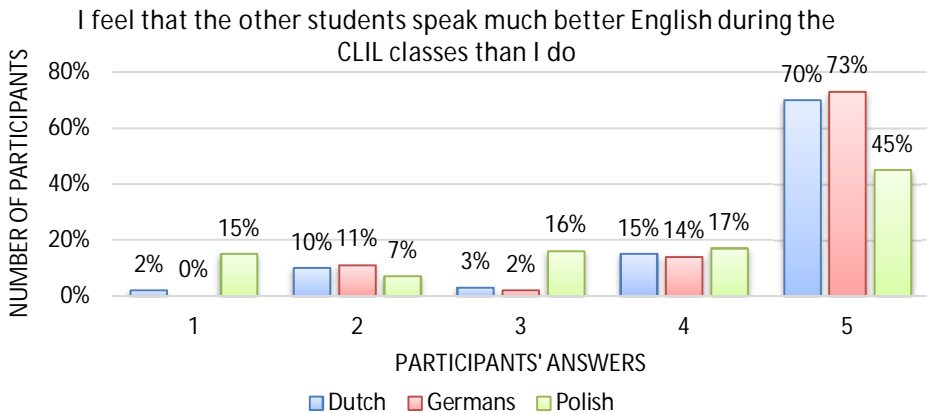


Figure 12 Fear of speaking worse than others (May 2018).

When analyzing the data from September 2015 (see Figure 10), January 2017 (see Figure 11) and May 2018 (see Figure 12), no significant changes concerning the time can be noticed. As for the data regarding differences between the participants under investigation, most of the German participants strongly agree that they feel that other students speak much better during the CLIL classes than they do (September 2015: 89%; January 2017: 80% and May 2018: 73%). Most of the Dutch participants also tend to strongly agree with this statement (September 2015: 67%; January 2017: 71% and May 2018: 70%), but still, the number of the participants who strongly agree with this statement is lower. On the contrary, the Polish participants are not that sure about this statement, and the data seems to be scattered.

However, it is quite surprising that only 36% of the Polish participants strongly agree with this statement in September 2015 (see Figure 10), 35% in January 2018 (see Figure 11), and 45% in May 2018 (see Figure 12).

The data suggests that the Germans are the least confident as far as speaking in CLIL is concerned. Similar results were obtained from the Dutch participants who also do not feel very self-confident. The results go in tandem with the data obtained in the Swedish context (Thompson & Sylvén, 2015). All these countries are culturally very close as indicated by Hofstede (2011), and probably this is why the data does not differ that much. On the one hand, the data obtained from the Polish participants is surprising as they are often expected to be much less confident due to their difficult past (Lewicka, 2015). On the other hand, the data was collected among young people whose perception of the world might be much different.

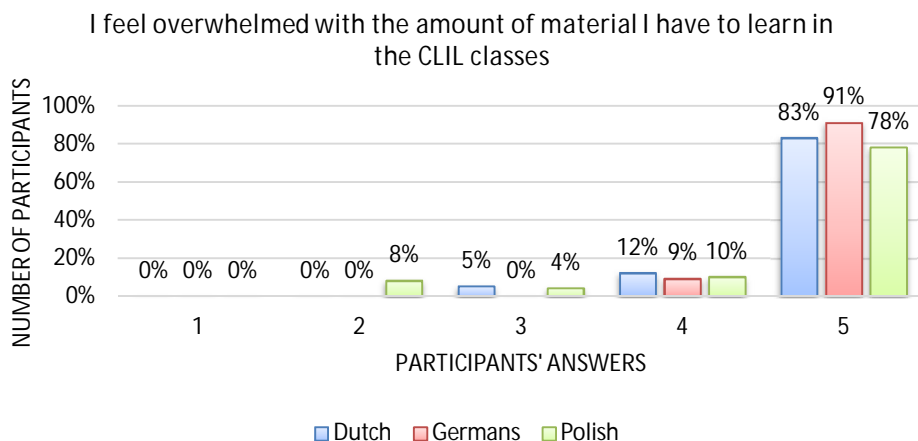


Figure 13 The feeling of being overwhelmed with the amount of material in CLIL (September 2015)

A significant number of the participants from all countries under investigation strongly agree with the statement that they feel overwhelmed with the amount of material they have to cover in the CLIL classes. At this stage, it should be pointed out that all the participants of the study started their CLIL education in secondary schools, so they were able to judge whether they felt overwhelmed with the amount of the material in CLIL classes or not based on their experience from junior high school. However, the interpretation of the above data would be more relevant if it was possible to compare the opinions from CLIL and non-CLIL students from the secondary level, but unfortunately, the non-CLIL students were not the subject of investigation in this project. The data obtained from the CLIL participants is not surprising as these students need to devote more time

to studying the content and what is more, sometimes even study the content twice (Marsh & Marsland, 1999). Such a situation can be observed in Poland where the CLIL students finishing secondary education have to take their final examinations in Polish, CLIL examinations are only optional.

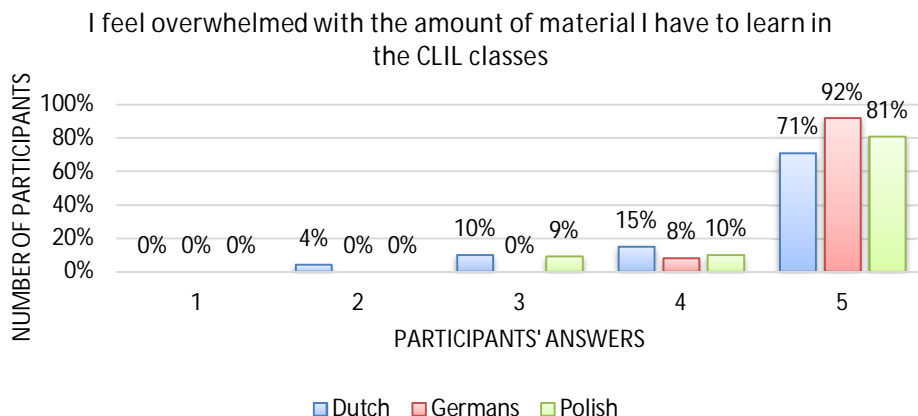


Figure 14 The feeling of being overwhelmed with the amount of material in CLIL (January 2017)

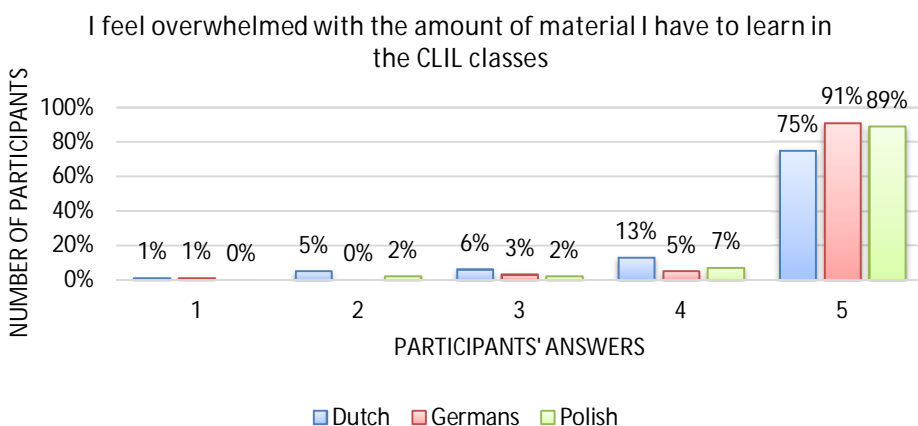


Figure 15 The feeling of being overwhelmed with the amount of material in CLIL (May 2018)

There are no significant differences in the data as far as time is concerned. 91% of the Germans strongly agree with the statement in September 2015 (see Figure 13), 92% in January 2017 (see Figure 14), and 91% in May 2018 (see Figure 15). In the case of the Dutch participants, 83% strongly agree with the statement in September 2015, 71% in January 2017, and 75% in May 2018. 78% of

the Polish participants agree with the statement in September 2015, 81% in January 2017 and 89% in May 2018.

No particular changes can be noticed among participants when looking at the countries they come from. Most of them feel overwhelmed with the amount of the material to be covered in the same way because "CLIL requires an understanding of the strategies that are essential for CLIL, such as having a three-way focus on content, language and learning skills" (Mehisto, Marsh, & Frigols, 2008).

7. Conclusions and implications

To conclude, the results of the current study indicate that the CLIL approach has a negative impact on anxiety and that the CLIL learners feel more tense and nervous during CLIL lessons than regular English lessons. The results of the study do not go in tandem with the data obtained by Muñoz (2002), who claims that CLIL does not influence language anxiety. However, in the current study, most learners feel more tense and nervous in CLIL classes than in regular English classes at the beginning of their CLIL education; however, their tension slightly decreases within the time. The results are similar to the ones obtained by Doiz et al. (2014) who claim that CLIL learners are more anxious. Nevertheless, they compared the CLIL learners with the non-CLIL learners, which is not the case in the current study as non-CLIL learners were not under investigation. As for the differences between the participants, the Germans tend to feel the most tense and nervous while the Polish feel the most relaxed. Most learners feel nervous when they have to talk about specific content subjects in English because they cannot express what they mean at the beginning of their CLIL education, but again their tension slightly decreases within the time, and the Germans tend to feel the most nervous when they talk about specific content subjects in English because of some difficulties in expressing their thoughts.

As for fear of making mistakes, most learners feel nervous when they have to talk about specific content subjects in English because of the mistakes they make at the beginning of their CLIL education. Yet, their tension slightly decreases within time. In the case of the mistakes, the Polish tend to feel the most anxious and worrying about making mistakes. Quite a significant number of all the learners feel that other students speak much better English during the CLIL classes than they do at the beginning of their CLIL education, and the data does not change much. Among all the participants under investigation, the Germans and the Dutch tend to feel that other students speak much better English during the CLIL classes than they do, on the contrary, the Polish tend to feel more confident. Finally, nearly all the learners feel overwhelmed with the amount of material they have to learn in the CLIL classes, which is not surprising when taking into consideration the arguments presented above.

Even though the data obtained in the current study indicates that CLIL has a negative impact on anxiety, it is essential to notice that in most cases, the level of anxiety decreases. Most of the learners are anxious at the very beginning of their CLIL education, which is understandable as CLIL is still a novelty in many countries. Bearing in mind the fact that the level of anxiety slightly decreases within time, it would be advisable to implement effective strategies in the CLIL classroom that would help to reduce it. The strategies might be the following:

- cooperative learning strategies;
- opportunities to develop speaking skills in small groups;
- providing CLIL learners with the necessary vocabulary to be used during the lesson;
- building a positive teacher-learner and learner-learner relationship;
- individual approach;
- keeping a diary/journal;
- reducing the number of tests;
- allowing the learners to switch to L1 from time to time;

An additional factor worth implementing into the education is to offer the learners CLIL at all educational stages, which is already the case in all the countries mentioned above. The data shows that the anxiety level decreases within time, so the learners should be exposed to CLIL at the early stage of their education.

This study fills a gap in the research on language learning anxiety in the CLIL context. However, more research is needed in this field. It would be worth comparing the level of anxiety between CLIL and non-CLIL learners in all the countries mentioned above bearing in mind the cultural and educational differences. It would also be highly recommended to investigate the level of anxiety at all stages of the CLIL education – from primary to secondary level.

Nevertheless, the current study described above is only a part of a longitudinal study of the affective factors in CLIL. The second part of this study is based on interviews conducted with the participants adopting retrodictive qualitative modeling proposed by Dörnyei (2014). In that study, salient English learner archetypes will be established with the help of a focus group consisting of teachers. The motivational trajectories of student representatives of these archetypes over three years will be established and interpreted through the lens of complex dynamic systems theory. The results of this qualitative study will reveal a lot of interesting data on language learning anxiety, which will complement the data presented above.

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