ISTANBUL SABAHATTİN ZAİM UNIVERSITY

INSTITUTE OF SOCIAL SCIENCES

DEPARTMENT OF ENGLISH LANGUAGE TEACHING

PSYCHOLINGUISTIC DEVELOPMENT AND CONTENT AND LANGUAGE INTEGRATED LEARNING (CLIL) ACROSS EARLY CHILDHOOD

MA THESIS

Mert ATEŞ

Istanbul

July, 2019

ISTANBUL SABAHATTİN ZAİM UNIVERSITY

INSTITUTE OF SOCIAL SCIENCES

DEPARTMENT OF ENGLISH LANGUAGE TEACHING

PSYCHOLINGUISTIC DEVELOPMENT AND CONTENT AND LANGUAGE INTEGRATED LEARNING (CLIL) ACROSS EARLY CHILDHOOD

MA THESIS

Mert ATEŞ

Supervisor

Asst. Prof. Dr. Emrah Görgülü

Istanbul

July, 2019

Sosyal Bilimler Enstitüsü Müdürlüğüne,

Bu çalışma, jürimiz tarafından Eğitim Bilimleri Anabilim Dalı, Eğitim Yönetimi Bilim Dalında YÜKSEK LİSANS TEZİ olarak kabul edilmiştir.

Danışman Dr. Öğr. Üyesi Emrah GÖRGÜLÜ .....

Üye Dr. Öğr. Üyesi Özlem ZABİTGİL GÜLSEREN .....

Üye Prof. Dr. Arda ARIKAN .....

Onay

Yukarıdaki imzaların, adı geçen öğretim üyelerine ait olduğunu onaylarım.

.....

Prof. Dr. Ömer ÇAHA

Enstitü Müdürü

AUTHOR'S DECLARATION

I hereby declare that this thesis named "**Psycholinguistic Development and Content and Language Integrated Learning (CLIL) across Early Childhood**" is entirely my own work, in my own words, and that all sources used in researching it are fully acknowledged and all quotations properly stated. It has not been submitted, in whole or in part, by me or another person, for the purpose of obtaining any other degree or award. I understand and accept the ethical implications of my research.

Signature

Mert ATEŞ

Istanbul, July 2019

Dedicated to the children of the world

ACKNOWLEDGEMENT

I wish to express, first and foremost, my deepest gratitude to my thesis advisor Asst. Prof. Dr. Emrah Görgülü for the excellent guidance and priceless encouragement throughout all stages of this thesis. Without his supervision and feedback, this thesis would not be completed.

Secondly, I would like to extend my thanks to my thesis committee Prof. Dr. Arda Arıkan and Asst. Prof. Dr. Özlem Zabitgil Gülseren for their valuable remarks on this research.

Besides, many thanks go to my dear mother, Nejla Ateş, who constantly encouraged me, listened to me, and even gave me some ideas while writing this current thesis. I also want to say that I am where I am right now thanks to my father, Murat Ateş, who has always supported me in any issue. Additionally, I am grateful to my brothers, Oğuz Ateş and Uğur Ateş for their invaluable help and support to complete this thesis.

Last but not least, I would like to send my thanks to my dear flatmate, Gökhan Gül, for encouraging me to complete my graduate studies all the time.

Mert ATEŞ

ABSTRACT

PSYCHOLINGUISTIC DEVELOPMENT AND CONTENT AND LANGUAGE INTEGRATED LEARNING (CLIL) ACROSS EARLY CHILDHOOD

Master's Thesis, English Language Teaching

Supervisor: Asst. Prof. Dr. Emrah Görgülü

July-2019, 125 Pages + xiv

This experimental study investigated the relationship between CLIL (Content and Language Integrated Learning) and psycholinguistic development across early childhood in Turkey. This study also aimed to find out about both content and language teachers' attitudes towards CLIL and CLIL's effects on the students' success and their language improvement as well as the impacts on their motivation to learn the target language. The observations were conducted implementing the CLIL approach explicitly in the classroom settings. The mean differences of the observation forms, questionnaires, intrinsic motivation inventory, pre-tests and the post-tests were analysed through the independent sample t-test on SPSS (Statistical Package for Social Sciences 25.0.) for the experimental and the control groups. The results of the study showed that the performance of the group which was exposed to CLIL was more positive in terms of success, motivation and psycholinguistic development. Additionally, the study showed that the teachers who applied the CLIL approach in their classroom practice thought that the CLIL is effective in teaching and learning a target language. Overall, the outcomes of this research suggested that the students exposed to the CLIL approach were getting more successful, motivated and improved psycholinguistically and teachers were having positive attitudes to apply CLIL. Further research is required to reveal better insight about the possible associations between the CLIL approach and psycholinguistic development in the ELT setting during a longer process.

Key terms: Psycholinguistics, Psycholinguistic Development, Success, Motivation, Content and Language Integrated Learning (CLIL), Early Childhood.

ÖZET

ERKEN ÇOCUKLUK DÖNEMİNDE PSİKOLİNGUİSTİK GELİŞİM VE İÇERİK VE DİL BÜTÜNLEŞİK ÖĞRENME YÖNTEMİ

Mert ATEŞ

Yüksek Lisans, İngiliz Dili Eğitimi

Tez danışmanı: Dr. Öğretim Üyesi Emrah Görgülü

Temmuz-2019, 125 Sayfa + xiv

Bu çalışma Türkiye'deki Erken Çocukluk Döneminde Psikolinguistik Gelişim ve İçerik ve Dil Bütünleşik Öğrenme Yöntemi arasındaki ilişkiyi araştırmıştır. Bu çalışmanın aynı zamanda hem dil öğretmenlerinin hem de diğer ders öğretmenlerinin İçerik ve Dil Bütünleşik Öğrenme Yöntemine karşı olan tutumları ve bu öğrenme metodunun öğrencilerin başarılarında, dil gelişimi üzerinde olan etkileri ve motivasyonunu nasıl etkilediğini bulmayı amaçlamıştır. Gözlemler, İçerik ve Dil Bütünleşik Öğrenme Yöntemi uygulanarak açık bir şekilde gerçekleştirilmiştir. Gözlem formlarının, anketlerin, içsel motivasyon ölçeklerinin, ön ve son testlerin ortalama farklılıkları deney ve kontrol grupları için SPSS (Sosyal Bilimler için İstatistik Paketi 25.0.) üzerinde bağımsız örneklem t-testi ile analiz edilmiştir. Araştırmanın sonuçları İçerik ve Dil Bütünleşik Öğrenme Yöntemi daha uzun süre maruz kalmış gruptaki öğrencilerin performanslarının başarı, motivasyon ve psikolinguistiksel açıdan daha pozitif olduğunu göstermiştir. Ayrıca, bu çalışma İçerik ve Dil Bütünleşik Öğrenme Yöntemini uygulayan öğretmenlerin bu öğretim metodunun hedef biri dili öğretme ve öğrenmesinde daha etkili olduğunu düşündüğünü göstermiştir. Genel olarak, bu araştırmanın sonuçları İçerik ve Dil Bütünleşik Öğrenme Yöntemine daha fazla maruz kalan öğrencilerin daha başarılı, motivasyonu yüksek ve psikolinguistik olarak daha gelişmiş olduğu ve öğretmenlerin bu metodu uygulamaya karşı olumlu tutum sergilediklerini ortaya koymuştur. Daha uzun bir süreç boyunca, İngilizce öğretiminde İçerik ve Dil Bütünleşik Öğrenme Yöntemi ve ruh dilbilimsel gelişim arasındaki olası ilişkilerin daha iyi anlaşılmasını sağlamak için daha fazla araştırma yapılması gerekmektedir.

Anahtar terimler: Psikolinguistik, Psikolinguistiksel Gelişme, Başarı, Motivasyon, İçerik ve Dil Bütünleşik Öğrenme Yöntemi, Erken Çocukluk

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER 4

LIST OF FIGURES

LIST OF ABBREVIATIONS

CBI: Content Based Instruction

CEFR: The Common European Framework of Reference for Languages

CLIL: Content and Language Integrated Learning

EMI: English Medium Instruction

L1: First Language

L2: Second Language

PD: Psycholinguistic Development

CHAPTER I

INTRODUCTION

In today's world, educational systems are getting internationalized as many schools try to find and apply one world-wide approach in their teaching systems in order to be a part of this international trend. This is one of the main reasons why education systems need to have greater importance to foreign language educations as it is vital to provide people with good qualified education "in a globalized world in which linguistic effects are gaining more and more importance" (Doiz & Lasagabaster, 2017). Therefore, like many countries, Turkey is also doing its best so as to reach this competition because almost many institutions "are in competition with each other to add new English-medium programs to their bodies, making English Medium Instruction (EMI) a common phenomenon" (Atlı, 2016: 1). Thus, especially in English language education, some approaches and methods have been tried many times in very different contexts. Among these approaches used at the schools, Content and Language Integrated Learning (CLIL) is one of the most chosen approaches because of its natural effect on the students' developments in terms of the content and language. Additionally, the core reason why CLIL is so common is that "it is an authentic approach as it gives importance to both teaching content and language" (Marsh, 2000). Marsh (2002) also stated that CLIL is an approach integrating "both language and non-language content in a form of continuity by not asking to be preferred one over another". It aims to focus on two fundamental aspects of the language; "firstly, language as a tool for the learning and teaching of both content and language" (Coyle, Marsh & Hood, 2010); secondly, "its adaptability and dimension of situational and contextual variables" (Coyle, 2008). In spite of this increasing trend, not so much attention has been given to prove which approach is the best in foreign language education. In addition to this little effort to focus on the approaches and their effects, many scholars are against teaching the content through a foreign language due to some concerns and problems discussed in the following chapters. Additionally, while this current thesis is giving an overview of CLIL from an international perspective, it also focuses on the implementations of CLIL in Turkey. However, although Turkey is one of the countries that accepted CLIL as a language approach in all the schools in 2010, the most interesting thing is that there

are no enough studies done on the applicability and effectiveness of CLIL. Therefore, this is study is needed to be conducted to contribute to the relevant literature in this context.

In a nutshell, the acronym CLIL was coined by David Marsh and according to him, teaching the content through a target language brings many positive consequences in both language teaching and learning. Nevertheless, this idea can be very interesting and effective for many situations. Additionally, it is still needed to be considered from different perspectives to find a better condition to apply even if there is an increasing accumulation of knowledge on CLIL. In this case, this present study aims to look at CLIL from a psycholinguistic aspect in Turkey.

1.1. Statement of the Problem

Since the world is changing every single minute, the education system in language teaching is also shaped according to the needs of the learners and teachers. Therefore, new approaches and methods are appearing almost every day, but there are some approaches and they are still popular even if they were stated years ago. Among these, CLIL is one of the most studied and chosen approaches in language teaching and for this study, English teaching and learning will be taken into account. Inasmuch as both language and content teachers have been complaining about insufficient learning and outcomes for many years even if they exert so much effort, CLIL is thought of as a solution for many teachers who suffer from many different problems. Therefore, studies based on CLIL should be looked from different perspectives to get ideas for filling the gap between inputs and outcomes. In addition to this, this current study has importance because it aims to look at CLIL from a very important and unique aspect. Also, CLIL has been studied and applied in many European countries since the beginning of 1990s, it should be done in Turkey, too because English is taught as a second language in the schools in Turkey for many years. In short, this present study is implemented in actual classrooms in Turkey and it gives information about teachers' attitudes towards CLIL, its impact on students' motivation which is always at the heart of learning, the effect on students' success as well as their language development and lastly, but mainly focusing on the psycholinguistic development of the students.

1.2. Purpose of the Study and Research Questions

This study investigates the relationship between CLIL and psycholinguistic development in language learning of the first grade EFL students at one of private schools in Turkey. This study also has different aims like finding out about both content and language teachers' attitudes towards CLIL and CLIL's effects on the students' success and their language improvement as well as the impacts on their motivation to learn the target language. Through this research, the aim is to contribute to the related literature by showing how CLIL, psycholinguistics, motivation and success are working in harmony as indicating the findings of the current study. In the other words, the following questions will be answered;

Research Questions

1. If the students are exposed to CLIL at a very early age, does it bring any differences in learning a language? If so, what are they and how are these students' psycholinguistic development compared to a group of students who are not exposed to it at early ages?
2. Does CLIL affect students' motivation in language learning?
3. Does CLIL play a role in students' success?
4. What are the teachers' perceptions and attitudes towards CLIL?

1.3. Significance of the Study

Since the importance and demand for second language learning is dramatically increasing all around the world, the studies which were done on the applicability of approaches and new methods in language learning should be conducted because they help many instructors and learners to find the best way to learn and teach a foreign language. Therefore, this present research is going to be done in order to show how one of the most common language learning approaches which is CLIL is applied in the first grades and how it has a relation with the learners' psycholinguistic development. Additionally, this current study is not limited to this, but also it aims to find out about teachers' perceptions, students' motivation and their success.

1.4. Scope of the Study

The scope of this study will be limited to the first grade students registered at one of the private primary schools in Antalya in Turkey during the first semester of the Academic Year 2018-2019.

1.5. Limitations of the Study

Since this study focuses on young learners' motivation and language development from a psycholinguistic perspective, the present study has a few limitations regarding the method, time and tools and sample size.

This research was designed as an experimental study with one experimental group and one control group. Although the participants in both groups have been learning English, the experimental group has been exposed to CLIL 9 more months than the control group. Additionally, the curriculum of both groups was the same during the observation, but the teachers were not. Therefore, this might be a limitation since every teacher has their own personality and way of teaching.

This study is also limited to the first grade students at one of the primary schools in Antalya in Turkey during the first semester of the Academic Year 2018-2019. Thus, this study is limited to only 3 months of application of CLIL. In addition to this, the name of the school and the names of the students or teachers are not shared because the school management does not give any permission for this. Therefore, students will be mentioned like 'student 1'. However, the consents from the school management were taken for the sake of the study. Because of not having a full-given permission from the school management and some hesitations on students' actual performance, lessons which were observed during the first semester of the Academic Year 2018-2019 were not videotaped.

1.6. Definition of the Terms

Content and Language Integrated Learning (CLIL): "A dual-focused educational approach in which an additional language is used for the learning and teaching of both content and language" (Coyle et. al., 2010, p. 1).

Psycholinguistics: "The study of psychological aspects of language. Experiments investigating such topics as short-term and long-term memory, perceptual strategies,

and speech perception based on linguistic models are part of this discipline" (Explore Encyclopedia Britannica).

Psychology: "Psychology is the study of the mind and behaviour, according to the American Psychological Association. It is the study of the mind, how it works, and how it affects behaviour" (Nordqvist, 1).

Motivation: "Motivation is the word derived from the word 'motive' which means needs, desires, wants or drives within the individuals. It is the process of stimulating people to actions to accomplish the goals" (MSG Management Study Guide).

Second Language: "a language other than the mother tongue that a person or community uses for public communication, especially in trade, higher education, and administration" (Collins Dictionary).

Foreign Language: "Any language other than that spoken by the people of a specific place" (Your Dictionary).

CHAPTER II

LITERATURE REVIEW

2.1 Introduction

This chapter is an overview of the studies which were based on CLIL from different perspectives such as historical, educational, motivational and psycholinguistic.

2.2. Content and Language Integrated Learning (CLIL)

2.2.1. CLIL and Motivation

In these years, CLIL is "a widely researched approach to foreign language learning and teaching" and according to Fontecha, "one of the pillars of CLIL is the concept of motivation" (2014: 23). The researcher also stated that there are many studies that focus on the exploring motivation within CLIL; nevertheless, "there has not been much discussion about the connection between motivation, or other affective factors, and each component of foreign language learning" (Fontecha, 2014: 23). Therefore, there seems to be a need to do study in order to "determine whether there exists any kind of interaction between the number of words learners know receptively and their motivation towards English as a Foreign Language (EFL)". In order to do the study, the researcher has chosen the participants from the 2nd grade (183 students) and 5th grade (55 students). Almudena used Vocabulary Levels Tests by Schmitt, Schmitt and Clapham (2001). The study showed that there is a crucial connection between the levels of motivation of the students and the implementation of CLIL. Additionally, as soon as the impact of the time of exposure to the target language is cancelled out, it reveals how vocabulary size is. In addition, there is a correlation between the mean general motivation and receptive vocabulary size only in the case of CLIL students. Generally, it can be said that motivation is linked to a need of communication and the use of the vocabulary is increasing (Fontecha, 2014: 23).

As a result, a number of important limitations should be considered. Firstly, the present research was not designed to "determine which of the two variables, age or type of instruction, is playing a bigger role in results on motivation and vocabulary learning" (Fontecha, 2014: 27-28). Additionally, this research paved the way towards "enhancing our understanding of the interrelation between a type of vocabulary

learning (receptive), and motivation" and so it contributes to the scarcity of research on vocabulary learning and affective factors" (Fontecha, 2014: 28).

When one considers motivation in the language learning process, every piece of this process such as teachers' self-efficacy, students' expectations, environmental conditions and teachers' content and language knowledge must be considered. Therefore, in order to show how CLIL is playing a crucial role in motivating the teachers as well as the students, Banegas (2018) carried out a study. In this study, the researcher mainly focused on ESP (English for Specific Purposes) because ESP "can be taught with a view to reinforcing content and language integrated learning (CLIL)" (Banegas, 2017: 1). The aim of the study was to see how CLIL and ESP could be complementing each other and the researcher would find answers for the following research questions; "Can a CLIL-enhanced ESP course improve student-teachers' language as well as content learning?" and "Can student-teacher motivation be enhanced if ESP modules contribute to subject matter knowledge?" (Banegas, 2017: 4). In order to conduct this study, "in an initial Geography teacher education programme in southern Argentina" a group of students and teacher who did not feel motivated to learn because of the lack of subject matter knowledge and their proficiency of English (Banegas, 2017: 9). Therefore, the researcher carried out an action study and applied the CLIL approach to the group of the unmotivated students and teachers. During the implementation, Dario observed the classes, asked the participants to keep diaries and had interviews at the end. After collecting the data from these three info-sources, the study was concluded. The study's findings indicate and highlight that the participants started to feel much more motivated during the implementation process. In addition to this, they responded that they feel much more confident in learning and using both content knowledge and the target language. As a conclusion, it can be seen that CLIL based applications played a crucial role in motivating, supporting the learning process and gathering much more knowledge in terms of the content and language.

In learning a language, there are always musts which should be and one of them is motivation because motivation is always "at the heart of education and language teaching" (Altınkamış, 2009). Additionally, motivation is required because it is thought of as a key to success and lack of motivation in a classroom will bring many

negative consequences and unwanted situations. Therefore, motivating students and teachers is another demanding requirement for students and especially for teachers because they have to provide different techniques, methods and approaches and they also should follow the newest developments in their area. However, there are some ways to create a motivating atmosphere for learning and teaching. CLIL is one of them according to Altınkamıs (2019) who conducted a case study on relation between CLIL and motivation in language learning in Turkey. CLIL motivated students because the students practiced content and target language and students also felt much more confident in the use of target language when they are already aware of the content. Therefore, Altınkamıs did his study at Sarıhamzalı Primary School in Seyhan, Adana and the participants were the researcher's fifth grade students (25 female and 30 male students). In his study, he did not only focus on the motivation and CLIL's effects on it but also he aimed to find out how students perceive CLIL activities. In his study, he used Intrinsic Motivation Inventory (IMI), classroom observation checklist and informal interviews as data collection instruments. When looking at the consequences of the study, it can be seen that motivation has been playing a very important role during the learning process. Additionally, CLIL is a way to motivate and meet the students' emotional needs as well as to improve their language and content knowledge. As a conclusion, having much more student-centred methods and activities are much more motivating both for the teacher and the students.

As stated above, motivation is always needed when a well-organized learning atmosphere is wanted. Therefore, Çınar (2018) wanted to look at the students' motivation as well as CLIL's effect on motivation in Turkey. She also aimed to investigate the effectiveness of CLIL in students' grammar and vocabulary learning in their classroom practices. Furthermore, she aimed to answer the following research questions; "To what extent do CLIL-based lessons have impact on the following; students' motivation, grammar scores and vocabulary development?" and How do students and instructors perceive CLIL-based lessons?" (Çınar, 2018: 6). In order to implement the study, she used 19 students and one instructor of an intermediate level preparatory class. As a data collection tool, she used different ways such as, pre-test, post-test, pre- and post-motivation questionnaire and the journals which were prepared by the participants. When she concluded her study, the

study revealed that the application of the CLIL approach has a significant impact on building the motivation and it had a very positive effect on the students' grammar scores and vocabulary improvement. Additionally, she added that if someone needs to teach or learn grammar and vocabulary, CLIL is much more effective than other approaches.

2.2.2. CLIL and Success

In the last 10 years, the use of CLIL in teaching a foreign language has become much more popular because of "the interest in educating bilingual children". Therefore, Mariño (2014) did a study in Colombia so as to present a case study that aimed to investigate how some of the aspects of a content-based English class can be considered in order to implement "CLIL at CBS to contribute to the education offered to these students" (Mariño, 2014: 151). Additionally, the researcher wanted to do this study because "they would need to integrate content and language even if classes are taught in English at CBS, so they meet CLIL criteria" (Mariño, 2014: 163). The researcher supported her study with "the latest theoretical constructs of CLIL from representative authors such as Coyle, Hood, and Marsh (2010), among others" (p. 151). The data were collected from six videotaped classes from fifth grade, a class observation form, a student questionnaire, an informal interview, a teacher's journal and other documents such as the teacher's lesson plans. When the results were analysed, it could be seen that the classes which were observed "met several positive standards" such students' attendance and willingness to learn (p. 151). Thus, these points may be very useful to implement CLIL at school as language methodology and assessment.

Kusmayadi and Suryana (2017) did a research on CLIL in terms of factual writing skills and students' attitudes towards the implementation of this method. They thought CLIL is worth investigating since it is applied to many issues and used as a medium of instruction almost all over the world. In this study, they came up with two main objectives to find whether the CLIL method was effective to improve students' factual report writing skill, and examining students' attitude towards the implementation of this method. Therefore, in order to find the correct answers for these two objectives, they implemented pre-test, post-test and questionnaires. Before applying the tests, they had 2 different groups (experimental and control group)

including 60 students of eleventh-grade social class of a state senior high school in Kuningan. They applied the tests to collect some information for the first objective and the questionnaire was done to learn students' attitudes about the process. When looking at the results taken from the pre-test and post-test, it was seen that CLIL had a significant effect on the development of students' writing skills and the researchers also indicated that CLIL played an important role in being creative while doing writing activities. Lastly, when analysing the questionnaires from the students, it portrays that CLIL had a very positive effect on the students in the learning process. Finally, it can be said that CLIL is not only helpful to improve writing skills but also to motivate the students during the learning process.

Many attempts have been made in order to fill the gap between what is expected to be learnt and what is happening in reality and the projects on language learning and teaching curricula are one of them. Therefore, Korosidou and Eleni (2016) thought that their project would be helpful for learning both the target language and the content and they carried out a project called "It's the same world through different eyes": a content and language integrated learning project for young EFL learners" (Korosidou & Griva: 116). In this project, their focus was equally on EFL (English as a foreign language) and content development. For the purpose of the project, they "made a mini-syllabus with the stories being at the core of the design" (Korosidou & Griva, 2016: 119). The objectives of this project are to "i) develop the students' receptive and productive skills in EFL, ii) develop their sensitivity towards diversity and iii) enhance their citizenship awareness" (Korosidou & Griva, 2016: 116). Since the project was designed to find out how the implementation and the estimation of the feasibility of a pilot CLIL project was useful for learning a target language and the content, the data was collected during and after the completion of the interventions. The collected data showed that "the principals of story-based, task-based, and game based learning had a positive impact on the target-language and the content knowledge" (Korosidou & Griva, 2016: 120). Additionally, students' speaking skills seemed to improve thanks to their participation in "a variety of inquiry-based, creative, and interactive-cooperative activities" and they became more confident because they had the chance to be familiar with topic, which is the natural result of CLIL approach (Korosidou & Griva, 2016: 127). In addition to this, it was observed that the CLIL implementation helped the students to gain cultural

awareness since the activities and stories are designed for this purpose. Last but not least, it also showed that the materials for the application of CLIL can "present examples of good practices from materials developed for the specific educational context, as well as recommendations for the development and distribution of further CLIL materials and further practices for teachers around the world" (Korosidou & Griva, 2016: 127).

One important aspect of CLIL-based foreign language learning in instructional settings is increasing vocabulary knowledge. In other words, a research is concerned with how CLIL affects vocabulary learning. "Noticing an apparent shortage of data-driven quantitative research on vocabulary growth in this field of CLIL is, therefore, problematic" (Gierlinger & Wagner, 2016: 37). Thus, Gierlinger and Wagner aimed "to revisit language growth in CLIL classrooms to find out whether new production data match concepts such as frequency effects in teachers' input (Ellis, 2013) and extra-mural factors" (Sylvén, 2007; 2013) (Gierlinger & Wagner, 2016: 53). When looking at the methodology part, CLIL is exclusively applied "through modular projects". The CLIL teachers who attended the study "carried out around 5-7 CLIL projects extending for up to 4 weeks each throughout the school year. The overall contact time resulted in either 60 or 80 additional hours of CLIL teaching" (Gierlinger & Wagner, 2016: 43). In the current study, there were two classes one of which was exposed to different conditions. For example, in the study, students were encouraged to use English, but it was forbidden to switch the code. Additionally, while one class used the English books, another one used the materials by teachers. These materials were not systematically enhanced. In addition to these, the teacher in CLIL class 1 was a language and subject teachers while the ones in CLIL class 2 were only subject specialists. (Gierlinger & Wagner, 2016: 45)

For the data collection, three different tools were used in terms of receptive vocabulary students' attitudes and their progress. There were two major findings and the first one was that CLIL students fail to outperform the controls in terms of overall receptive vocabulary growth. "However, the frequency analyses of teachers' input revealed that CLIL exposure actually centred mainly on the 1,000 most frequent words of English (k1)" (Gierlinger & Wagner, 2016: 53). Second, the CLIL specific vocabulary growth might exist in "more significantly in the area of subject specific

vocabulary, which was not covered by the testing tool" (Gierlinger & Wagner, 2016: 54). Thirdly, visible increasing receptive vocabulary knowledge within CLIL may only be supposed "after a certain critical mass of treatment exposure" (Gierlinger & Wagner, 2016: 55). Therefore, a period of 5-6 months of project-based exposure of CLIL may be failure to reach such a critical mass and thereby prove less effective. As a result, the findings are puzzling but "maybe also pioneering for the moment" (Gierlinger & Wagner, 2016: 55). Thus, some recommendations from the present study can be obtained for the further studies.

CLIL helps the learners not only to learn the topic thorough a new way but also to improve their language abilities. Therefore, the application of the CLIL approach is tickling the minds with many increasing questions such as "How can we use CLIL more efficiently?", "How will it be much more appropriate to apply it in different departments?" (Yufrizal, et. al., 2017: 135). Therefore, Hery Yufrizal, Huzairin and Basturi Hasan (2017) did a study to find out whether project based content language integrated learning has a significant effect on the speaking skills of the students who are studying at the science department of the University of Lampung. In order to collect the data, the researchers administered English proficiency test before and after the implementation of CLIL and the number of the students who participated in the study was 88. Additionally, it was also necessary to know that the application of CLIL was done in Mathematics study program since the researchers wanted to see the CLIL approach in different subjects. When looking at the results, it can be seen that the application of CLIL in Mathematics worked very well and the researchers added that the CLIL approach was not only helping the students to improve their language skills, but also to engage with the group activities, presentations and friendships. Inasmuch as CLIL's positive effects on the students can be observed from the application of all activities, from both the group and individual activities which students worked on (Yufrizal, et. al., 2017: 137).

Gao and Cao (2015) started their study as emphasizing the importance of language teaching and learning through the CLIL approach. However, when they pointed at the importance of it, they noticed that in Europe most of the CLIL studies focus on language knowledge and language skills and most of them were carried out on primary and secondary levels, not in the upper levels. Therefore, the researchers

wanted to change this perspective and included much upper levels in a very different context, especially in the education of EAP (English for Academic Purposes). They carried out the study among the doctoral students of science in China and in order to collect the data for the study, they applied two questionnaires and a number of class observations. After the collection of the data process, the findings were analysed in details and it was seen that the CLIL approach was effective for various reasons. Firstly, this approach can be used because of its dual-focus. For example, the students who participated in this study did not only learn the content but also improved their language skills and knowledge. Secondly, class activities such as group work, pair work, class presentations as well as task-based course activities (translation, paper writing, paper analysis and rewriting practice) played a very vital role in motivating the students to engage the content and to integrate disciple content and language (Gao & Cao, 2015: 113-122). In addition to these reasons, the four factors such as content, language, culture and cognition which must be taken into consideration in the CLIL application have been given great importance by the students. As a conclusion, it can be said that the CLIL application in adult learners' classrooms is as effective as it is in the classrooms of other levels. Additionally, the increasing ability to integrate content and language as well as critical thinking patterns and cultural awareness in EAP writing strongly contributes to the learners' improvement (Gao & Cao, 2015: 113-122).

There are many studies which were done on the CLIL approach, but it is not so possible to see the studies done in upper levels in terms of the effectiveness of CLIL. Thus, Manafe (2018) wanted to carry out a study whose focus was on discovering students' progress in both content and language skills in content and language integrated learning lessons at an Indonesian higher education context. In this study, since the researcher aimed to evaluate students' improvement, Manafe applied two different tests; pre-tests and post-tests. The pre-test was done to see what the students already knew and the post-test was applied to learn how successful CLIL was in improving the students in terms of content and language. Additionally, he conducted interviews with six students in order to learn their ideas about the process of implementation. When looking at the data collected in this study, it showed that the students' mastery of Mathematics as the content subject and their English developed during the application of CLIL. In addition to this, the findings showed that most of

the students made significant progress in content subject in comparison to their achievement in language proficiency. Of course, their language skills got improved, but not as much as their content knowledge according to the results gathered from the post-tests and this brought about a question in the minds, "Why was not CLIL effective in developing the language skills in this case?". Therefore, the researcher conducted interviews with six students and they admitted that their failure in their progress was due to their inadequate level of English (Manafe, 2018: 2-3). They believed that the process helped them learn the target language, but it was not still enough to show their success in the tests. Actually, this study is important because it is almost impossible to find any study to show the inefficacy of the CLIL approach. As a conclusion, in the study, it was seen that students' knowledge of content was much better than their knowledge of English due to their inadequate level of the target language at the end of the study (Manafe, 2018: 1-6).

Anothet study was done by Esther Nieto Moreno de Diezmas (2018). The researcher wanted to look at CLIL in terms of its contributions towards the acquisition of cross-curricular competence as focusing on digital competence development. In the methodology, she had two different groups of 2nd year students in compulsory secondary education, aged 13-14. In order to get the data, she implemented tests and the tests were about two core dimensions of digital competence: the informational digital competence and the communicative digital competence. The results showed that students "significantly outperformed their peers in both dimension of digital competence: communicative competence and digital competence" because they had better results when compared to their mainstream peers thanks to the natural features of CLIL approach (Nieto Moreno de Diezmas, 2018: 76). Inasmuch as new technological developments "seem to be more integrated in the CLIL classroom than in mainstream education" and CLIL methodology provide "a more productive space for learning digital skills than traditional teaching" because CLIL is more learner-centred than other teaching methodologies (Nieto Moreno de Diezmas, 2018: 82). Lastly, CLIL seems "to be conductive to learning linguistics and cognitive skills and these seem to have been transferred to different context, such as digital environments". Additionally, CLIL focuses on 21st century skills and it creates a learning atmosphere which is" a catalyst for improving" educational places and it has "a multiplier effect". As a conclusion, one can argue that CLIL students have more

chances than non-CLIL students in terms of adapting and learning two core dimensions of digital competences: communicative competence and digital competence.

Since the studies which are done on CLIL's effects in higher levels such as from the undergraduate students' perspectives are not so available, Elisabet Arnó-Macia and Guzman Mancho-Bares (2014) wanted to conduct a study in a higher level in Catalonia (Spain). The researchers answered the following questions; "What is the status of CLIL and ESP courses in the three degrees?", "For the CLIL classes observed, are there any expected linguistic outcomes?", "Are they explicitly mentioned in the course syllabi?", "Is there an explicit focus on language in classroom discourse?", "Does participants' language proficiency become an issue in the classes observed?" and "What are lecturers' and students' views on the implementation of CLIL, and the role assigned to language?", "What are their views on CLIL versus ESP?" (Arnó-Macia & Mancho-Bares, 2014: 65). In order to answer these research questions, they observed the classes, students' attendance in classroom and teachers' methods and styles and then they wanted to get much more information about students and teachers' attitudes towards the implementation. That's why they applied questionnaires to the learners and teachers. When looking at the findings, it can be understood that overview of the role of language in the CLIL context is a little bit disappointing, because of the low proficiency of the learners and a lack of a clearly defined policy on the integration of language and content. Additionally, the syllabi for the CLIL courses had three different references to general communication skills, oral production skills and theoretical ESP content in the Law course. What's more, since the Accounting and Law classes were based on lecturing rather than oral use of the language, there was little attention to different usages of language such as reading, speaking etc. Finally, the questionnaires showed that the attitudes of the teachers were mainly referring negativity of CLIL implementation, but the learners stated that they felt eager to use the target language; English and this motivation appeared thanks to the natural consequences of CLIL approach. As a conclusion, it can be said that CLIL might not be working well in Law and Accounting departments due to several reasons stated above, but still its positive effects on the students could be observed anyway (Arnó-Macia & Mancho-Bares, 2014: 63-72).

Pladevall-Ballester and Vallbona (2016) conducted a study in Spain. Their aim was to show the impacts that exposure to CLIL had on the development and achievement of English as a foreign language receptive skills in primary context. Also, it can be said that they would answer the following research questions; "Are there any differences in the achievement and development of reading and listening skills between the EFL and EFL+CLIL groups after one and two academic years of CLIL implementation?" and "Are there any differences in achievement and development between the EFL and EFL+CLIL groups taking into account the students' level of English reading and listening skills at the start of the study?" (Pladevall-Ballester & Vallbona, 2016: 39). Therefore, they had two different groups of very young students and one of them got exposure to EFL sessions and an additional CLIL hour per week while the other one was exposed to only EFL lessons. In total, they had 287 primary school students (138 students – EFL+CLIL and 149 students – EFL) and in order to test students' abilities objectively and get pure data, the researchers used the Cambridge Young Learners' Test (YLE). However, so as to "analyse the data longitudinally; four data collection times were organized during two academic years" (Pladevall-Ballester & Vallbona, 2016: 40). After implementing CLIL lessons in the experimental classes and collecting the data gradually, at the end of study, the results showed that there was no huge difference between control group and experimental group in terms of the 2 main skills (reading and listening) which were taken into consideration. With regard to their language developments, both control group and experimental one were successful. In contrast to the CLIL approach's beneficial effects on the development of language skills of the learners, this study showed that with less input and implementation of the CLIL in the classroom may not be useful and successful in primary contexts and "longer and more intensive exposure might be needed" for better results.

As being discussed in the analysis of the previous studies based on the efficiency of the CLIL approach, there are not as many studies as to indicate CLIL's effects in higher education. Thus, the researchers, Chostelidou and Griva (2013) conducted a study in higher education in order to contribute. In their study, they aimed to "provide insights into experimental research on a CLIL project for reading skills development in the context of Greek tertiary education" (Chostelidou & Griva, 2013: 2169). They applied their study in higher education to evaluate the CLIL approach's

impacts on the development of the learners' language proficiency, especially on their reading skills and the content of the target discipline. So as to carry out their study, the researchers gathered the data from the interviews and administrating a CLIL test. In their study, they had two different groups; experimental and control group. One group was exposed to CLIL while another one was not. During the implementation of the study, they had observations and a CLIL test. As usual, they came across with the common results revealed in the studies done on CLIL's effects on language improvement. The results indicated that the performance of the experimental group was obviously higher than the control group even if they had the same amount of the exposure of reading activities. They also showed that the linguistic competence which was used by the students in the experimental group was better than another one. As a result, it can be pointed that CLIL is not only effective on the development of the students' proficiency, but also on their self-efficacy in the usage of the target language.

Goris, Denessen and Verhoeven started their study by emphasizing the importance and popularity of the CLIL approach all over the world, especially in Europe because as they stated in their study, CLIL was not a way to learn the language, but also to have much more effective knowledge in the content. Therefore, they wanted to look at the CLIL approach from a different perspective and in this case, they aimed to find whether CLIL was playing a considerably important role in learners' international orientation and their EFL confidence. In other words, the study looked at the contributions to building pupils' confidence and international orientation because they hoped to find the answers for the following questions; "Are pupils who have chosen to follow CLIL in grammar schools in the Netherlands, Germany and Italy more internationally orientated and more confident in their EFL skills than their mainstream peers at the outset of the CLIL programme?" and "Does CLIL contribute more to pupils' international orientation and EFL confidence than main-stream education in the course of the first two years at grammar school in these three countries?" (Goris, Denessen, Verhoeven, 2017: 4). So as to implement their research, the study was "undertaken with 11 groups of 12-15-year-olds at 'grammar' school in the Netherlands, Germany and Italy and involved 231 pupils": 123 participants were exposed to CLIL and 108 mainstream students (Goris, Denessen, Verhoeven, 2017: 1). In the study, as being said, there were two different groups and

one group got exposed to CLIL and another one didn't. When looking at results, it is possible to see that both experimental group and mainstream group showed a positive attitude towards language development, international orientation and EFL confidence. However, a small added value was observed in the CLIL intervention over the control group and the researchers added that this was a very small-scale study. Therefore, there may have any different results if the same study can be applied in bigger scales.

There are various ways for teaching a target language since these ways differ from each other in terms of age, level, cultural background and learners' needs. Especially when it comes to talk about the methods used in teaching for pre-primary education, it can be seen that there are many, but the most common and effective one is storytelling because "storytelling is a receptive and productive educational resource in which social values, content and language are linked and integrated" (Lopez Tellez, 1996), (Hearn, Garces, 2005), (Miller, Pennycuff, 2008: 47). Therefore, Esteban (2015) wanted to look at language learning process using an approach which refers to storytelling and CLIL. In this study, the researcher aimed to elaborate the complex process of "delivering effective CLIL lessons through storytelling" and to create a curriculum that pre-primary teachers need to apply so as to support learners' linguistic improvement and acquisition of content knowledge (Esteban, 2015: 47). According to this study's results, it can be seen that storytelling can be taken into account as a perfect way to teach contents and language with some specific criteria emphasized for the sake of the learners' future improvement. Using a specific CLIL framework creates an opportunity to learn curricular subjects in a foreign language with different strategies, resources and materials. Teaching contextual or cultural content through storytelling can be a valuable and important experience for very young learners, because they are motivated to use new language in a motivated and communication based way. Additionally, "practical structure that can assist teachers in effectively employing stories in their CLIL teaching" have been defined and emphasized and implemented on the pre-school education, but this study was done in very narrow scale (Esteban, 2015: 51). Therefore, this study calls for further studies and implements in young leaner classrooms and in bigger scales.

It is frequenly seen that the difference between CLIL and non-CLIL learners is studied a lot in terms of language development. Pérez and Basse (2015) conducted a study so as to show whether there was a difference between CLIL and non-CLIL students in terms of the number of the errors made by the learners. In other words, the researchers wanted to find the answers to the following questions; "Do primary CLIL students make fewer errors in the writing and speaking sections of the KET exam than non-CLIL students?", What are the most frequent types of errors made by CLIL and non-CLIL students in those sections of the KET exam?" and "Does register influence the types of errors made by CLIL and non-CLIL students? That is, do the errors made in writing section of the exam differ from those of the speaking section?" (Pérez & Basse, 2015: 12). The study was done in Spain in 2015 and the researchers had two different groups of the students aged between 11 and 12. One group was exposed to bilingual education while another one was not. In the data collection part, they used Cambridge Key Test (KET) for finding and indicating errors and it should be known that the researchers only focused on the students' oral and written productions rather than other skills. Later, when looking at the collected data, it can be seen that, CLIL students made 169 errors in written texts while non-CLIL students made 175. In addition to this, CLIL students made 124 errors in spoken texts and non-CLIL students made 151 errors. Thus, as answering the first research question, it can be stated that there was a statistically significant difference between these two groups in terms of the number of errors. To answer the second and third question, it can be seen that there were four types of errors; substance errors, text-grammar errors, text-lexis errors and discourse errors and these types of errors were mainly made by non-CLIL students, but the most frequent one in both groups was grammar errors. As a conclusion, it can be said that bilingual education system had a very positive impact on the learners in improving their language skills truly.

The idea, "the earlier and more the leaner is exposed to the target language the more efficiently language is learnt and used properly" never disappears in the related lieterature. Thus, there are more studies which were done on the facilitative role of negotiation of meaning in adults than children and thus little is known about children's language learning process. In order to fill this gap, Gordo (2017) implemented a study in Spain and they wanted to answer the following research

questions; “Do CLIL and EFL children negotiate for meaning while completing a picture-placement task with age- and proficiency- matched peers?” and “If so, are there any differences regarding learning context (CLIL vs. EFL) or age (8-9 vs. 10-11)?” (Gordo, 2017: 45). 40 students participated in this study and they were divided into groups: 3rd primary education (8-9 year olds) and 5th primary education (10-11 year olds). They also divided these two groups according to their EFL and CLIL exposure and thus it can be said that there were 10 students from each group (EFL-CLIL) in two main groups (3rd and 5th primary education). As a task, the researchers used Picture Placement; they recorded and took videos to examine the students while applying the task. After the application of the task, the researchers concluded their study. When looking at the results, it can be observed that CLIL leaners tended to use the target language more than EFL leaners. In addition to this, in both contexts older children negotiated less and used their mother tongue than younger leaners. In a nutshell, the study showed that when the learners were exposed to the target language earlier and more, they became more successful.

Even if there are many studies which were done on the effectiveness of the CLIL approach in general language learning process, there is little information about the linguistic impact of the CLIL approach. Therefore, Pérez-Vidal and Roquet (2015) implemented a study in Spain in order to reveal whether there was an effect concerning linguistics through a CLIL process. To conduct their study, the researchers had two groups of students who were getting Formal Instruction (FI) and CLIL education and their ages range from 13 to 14. These two groups were different from each other because one of them was exposed to FI and CLIL and another one was exposed to FI. For the data collection, they implemented pre-test and post-test to the participants. After the collection of the data, it can be seen that the group which got exposed to formal instruction and CLIL drew much more success than the other one. What’s more, the students’ skills such as reading, listening, speaking and writing did not improve at the same degree. In the FI + CLIL group, reading and grammar seemed to benefit the most while writing and listening were not that much. As a conclusion, CLIL has been playing a crucial role in improving reading and grammar rather than writing and listening.

2.2.3. Students and Teachers' Attitudes towards CLIL

Maiz-Arevalo and Dominguez-Romero (2011) did a study in Spain in order to collect some data about students' attitudes towards CLIL. The researchers said that this study was a natural result of the expansion of CLIL since English became a world language as "a consequence of the global use of English as a lingua franca" (Maiz-Arevalo & Dominguez-Romero, 2011: 1). This situation was not only affecting primary and secondary education but also university according to the researchers. However, it was also strongly emphasized that there was still a considerable lack of application of English as a medium of instruction in Spain. They also thought that it was needed to learn students' response to CLIL in tertiary education and they thus implemented a questionnaire to the students who studied in the department of Business Administration and Economics in order to present university students' response to CLIL implementation in the subjects offered by the mentioned departments at the Universidad Complutense de Madrid. It is also essential to know that the questionnaire focused on four main aspects; the students' own understanding of their progression of language skills, the development of individual learning strategies, the willingness to participate and self-motivate and finally the ability to obtain more disciplinary contents and therefore a successful final grade. (Maiz-Arevalo & Dominguez-Romero, 2011: 7)

Regarding their perception of language skills improvement, students' responses reflected that the two skills (listening and speaking) did not improve the most as opposed to writing and reading and this situation agrees with the previous studies which were done on CLIL. Secondly, regarding the learning strategies, "translation and asking the teacher were the two most favoured ones while the students were making the researchers surprised by "answering that they also employed more "interactive" and "metalinguistic" strategies like peer correction" (Maiz-Arevalo & Dominguez-Romero, 2011: 7). Lastly, the consequences of the study reported that there was a huge need for applying more interactive and metalinguistic activities "with the aim to encourage the use of less frequent learner strategies like peer-interaction". As a conclusion, it can be stated that the use of CLIL at the university has a positive effect on the students' language improvement as well as on their motivation.

The next study was done by Rubtcova et. al. (2018). This study was conducted with a different purpose because this time, students were asked to answers the questionnaires to state their feelings, attitudes and knowledge about CLIL. CLIL was very common as being known in today's world and it was also developed in Russia even if there were conflicts between Russia and West initiates, which could be really destroying the increasing development of English in Russia. When taking the background knowledge about the fate of English in Russia into consideration, it is possible to say that the results may be very interesting, especially from the students' perspectives. Thus, the questionnaires were applied to the CLIL and non-CLIL students so as to reveal possible differences between these groups of the students. When looking at the results, "the survey implicitly introduces Russian English as a language that reflects national identity and culture" and "they express a strong concern related to the lack of actions taken to preserve the Russian language and cultural attractions" (Pavenkova et. al., 2018: 142). Also, almost all participants express "strong concern towards the fate and the future of the Russian language" because using English in almost every topic, especially in academic environment and classroom interaction had bad effect on Russian language (Pavenkova et. al., 2018: 142). However, it also showed that studying English could bring economic benefits and financial sustainability. As a conclusion, it can be said that English is so demandable as much as it is problematic because of the political and socioeconomic problems and conflicts.

Another study based on teachers' attitudes, perceptions and experiences in CLIL was done by McDougald in 2015 in order to learn what the teachers think about CLIL in Colombia. This paper is an initial report on the "CLIL State of the Art" project in Colombia which refers to "data collected from 140 teachers regarding their attitudes toward, perceptions of, and experiences with CLIL". The term CLIL was used in this study to deal with teaching "contexts in which a foreign language is the medium for the teaching and learning" (McDougald, 2015: 25). When looking at the results, it can be seen that the data that was collected to reveal that "teachers presently know very little about CLIL, they are nevertheless actively seeking informal and formal instruction in CLIL" (McDougald, 2015: 25). Many of the participants are now teaching content subjects through English; "approximately half of them reported having had positive experiences teaching content and language together, though the

remainder claimed to lack sufficient knowledge in content areas" (McDougald, 2015: 25). In addition to this, almost every participant agreed that "the CLIL approach can benefit students, helping them develop both language skills and subject knowledge" (McDougald, 2015: 25). However, there is still significant ambiguity for CLIL in Colombia; "greater clarity here will enable educators and decision-makers to make sound decisions for the future of general and language education" (McDougald, 2015: 25).

In today's world, many English teachers prefer to use in their classes "to keep up with the current approach in language teaching" (Wahyuningsih, et. al., 2016: 1853). Wahyuningsih and his friends (2016) apparently wanted to look at CLIL from the perspectives of ESP (English for Specific Purposes) Teachers because "there is still a question on what kinds of attitudes ESP teachers have on the use of CLIL for teaching ESP" (Wahyuningsih, et. al., 2016: 1853). Therefore, the current study aimed at "reporting research findings on teachers' attitudes toward the use of CLIL approach in the teaching of English for specific purposes (ESP), in terms of teaching material, teaching method, teaching media, and assessment" (Wahyuningsih, et. al., 2016: 1853). The researchers applied questionnaires and had interviews with ESP teachers and when indicating the results, it can be seen that ESP teachers agreed that CLIL was very useful and effective to use and teach the topics very well. Nevertheless, they believed that there were some challenges in the application of CLIL, for example; the teachers needed to improve their proficiency level of English and to re-think the materials for teaching. As a conclusion, they also realized that only application of it was not enough for well-learning process, but also they had to be overcoming the possible problems which could be faced in terms of pedagogical components, English proficiency, material development and assessments.

Since CLIL and non-CLIL students are showing very statistical differences in terms of the improvement of language and their perspectives towards languages, Sylvén (2015) wanted to look at CLIL from students' perspectives in order to investigate the differences between CLIL and non-CLIL students. The study was done in Sweden and it consisted of three different steps to measure the data; questionnaires, interview, and observations. Also, the participants are one CLIL student and one non-CLIL student. Since "the aim of the study is to get direct access to the

informants' own perspectives, without the content being too directed through predetermined questions", it made the study different from the others (Sylvén, 2015: 251). In the study, the participants were asked to take photos indicating how they viewed L1 (Swedish) and the FL/L2 English. Later, they were asked to organize the photos thematically by the researcher, and then they were supposed to discuss the photos in terms of their thematic organization and the photos. They were also asked to elaborate why and how they saw the photos and to illustrate the respective language for them. Not surprisingly, the results again showed the same expected differences between the CLIL and non-CLIL students. The study reveals the important differences between the informants in their opinion on L1 and FL/L2 and the group of the students who were taught by CLIL saw the two languages as separate systems, and the non-CLIL student saw language rather the other way around. (Sylvén, 2015: 251)

When talking about the CLIL project, the effects of it on the students' emotions such and anxiety and enjoyment must be taken into consideration since the process is mainly centred by the students. Therefore, Smet and his friends (2018) wanted to look at classroom anxiety and enjoyment from CLIL and non-CLIL perspectives. This study is different from the others since the main purpose was to focus on "the comparison of two target languages (English and Dutch) in two educational contexts (CLIL and non-CLIL) at different instruction levels (primary and secondary education)." "Most research on content and language integrated learning focuses on English as a target language" whereas "the Belgian context calls for a comparison with the language of the "other" community, in this case Dutch" (Smet, et. al., 2018: 47). For the purpose of the study, a self-report questionnaire was applied and the data were collected from 896 pupils in total. The questionnaire was designed to "measure pupils' anxiety and enjoyment in the classroom, along with background characteristics" (Smet, et. al., 2018: 55). The results revealed that CLIL students were exposed to less anxiety than their non-CLIL counterparts and "English learners report significantly less anxiety and more enjoyment than Dutch learners" (Smet, et. al., 2018: 48). Thus, this suggested a crucial role of the target language and how it affected the students' anxiety and enjoyment in the process of learning a language and content. It also affected their target language perceptions and there may be need for further studies which could be done on the perceptions of the students. Finally,

the interactions with instruction level showed that while primary school students felt stronger emotions, “the effects of CLIL and English are much larger at secondary level” as “highlighting the importance of considering both positive and negative emotions in the study of second language acquisition” (Smet, et. al., 2018: 47).

Since the internalization of higher education gets much more competitive, Turkey is also trying to do its best in order to catch the high level. Therefore, the study was applied in a public university and the researcher, Atlı (2016) wanted to learn the students and lecturers’ perceptions and beliefs towards CLIL and she conducted her study at Faculty of Medicine English Medicine Program in since the courses were taught in English at this department. In this study, she wanted to answer the following question; “What do the students and lecturers think about CLIL?” and to learn how effective CLIL is in higher education system and also she divided her study into two sections (2016: 53). The researcher used Course Evaluation Form for CLIL, Questionnaire I and Questionnaire II as a data collection tool. The participants consisted of 34 freshmen, 56 second-year and 32 third-year students. She also wanted the students from different grades in order to learn how the perceptions were changing according to the grades which students were in. After the application of the data instruments, the findings were a little different from the other studies. Inasmuch as the findings revealed that the students were happy and satisfied with materials and activities which were done in their classes and they did not have any difficulty in content learning since they do double-practice through the CLIL approach. Furthermore, the students believed that CLIL motivated them to learn and support their studies in any way. Nonetheless, when it came to analyse quantitative comments from the students, the researcher saw that most of the students indicated some problems which occurred because of the insufficient lesson materials and ineffectiveness of the ways to teach the subject, for example the problems were caused because of the length and text-heavy structure of power-point presentations. Besides, the combination of culture, content, language proficiency and language of instruction were identified and the results also showed that insufficient of the activities are used in the lessons and the some of the lecturers’ proficiency level of English was not enough for the lessons and the students thought that if English was only language for instruction, it would be better for them to learn both target language and the content. In addition to students’ perceptions, the lecturers also had

very positive attitude towards CLIL and EMI in general. However, they did not bring different materials or believe that they needed more practice and training to teach the content through English even if they seemed very motivated to do. As an answer to the second research question, the study showed a very interesting result which did not refer that the more the students were exposed to CLIL throughout the years, the more motivated and better they were in their lessons in terms of their content and language knowledge. In the other words, there was no significant difference according to the year. After collecting the data and based on the findings from the first section, in the second part of the study, she aimed to solve the problems stated in the first section. Therefore, she chose 15 students from English Medicine Program who continued Compulsory English Language Program. During this time, they assigned a lecturer to deliver the lectures to English Medicine students in the Compulsory English Program twice a week. Among these students, 15 of them were chosen as a focus group. After delivering the lectures during 10 weeks, the focus group was given the same form to reflect their perceptions and ideas. Then, it was seen that the application of CLIL brought a huge difference between the students from the first section and the students from the second one. As a conclusion, this study enlightens the minds that CLIL can be very useful when all necessary parts are used in order. And this study also shows that the integration of CLIL pedagogy could develop EMI provision (2016: 108-122).

2.2.4. CLIL and Task Development

While many people address the importance of tasks in a specific topic, most of them also emphasize the types of the tasks and their evaluation. Therefore, Gándara (2016) proposed a new perspective to identify types of tasks in a CLIL classroom. He said that a task must be the combination of the participation of the students in the input of tasks and their participation in the output. This basically means that not only the students' roles in input but also in output must be taken into consideration because it will be possible to evaluate their performance and their roles in the learning process. Because of these reasons above, he carried out a case study so as to "address the statistical effects of the factor proposed in two variables: the amount of As-units (Foster, Tonkyn, &Wigglesworth, 2000) in the L2 produces in the classroom, and among them, the amount of initiating moves (Leech & Weisser, 2003)" (2016: 5).

For this case study, the researcher took video and audio recordings during eight CLIL Science lessons taught to intact class of ten students of grades 1 and 2, then he analysed the records. When looking at the results, it is possible to see that a new perspective to identify the types of tasks in a CLIL classroom was very effective and useful in terms of the roles of the students in input and output.

When planning to have a CLIL lesson, teachers are supposed to be more careful because in the CLIL approach, creating new and different materials is not easy. Another reason why materials are vital in CLIL process is that the integration of content and language requires much more attention to students' needs and their attitude towards the target language and topic. Additionally, teaching the input to the students in an enjoyable way is a must in the CLIL process. Therefore, the researchers Pérez and Malagón (2017) saw this necessity of creating materials in CLIL and they aimed to do a study which was based on the tips and the ways of creating materials. In their study, they mainly focused on creating materials with ICT for CLIL lessons and showing an easy way to prepare them since the teachers do not have enough time to do. In order to carry out this aim, they developed a lesson planning from the second course of Natural Science entitled "out bones" (Pérez & Malagón, 2017: 636). Additionally, while doing this lesson planning, they basically took vocabulary teaching and learning into consideration because learning vocabulary was always challenging for the learners. In this cooperative study, the researchers stated that those who wanted to have the tricks and tips for creating materials could freely download. The reason why this study was included into the literature review is to indicate the tips and possible ways of creating materials and to state that it is not easy to prepare for the CLIL teachers. As a conclusion, it can be said that the extra effort for CLIL materials should be taken into account and CLIL teachers need to improve their content knowledge as much as their language proficiency for material development.

Some people believe that CLIL is considered to be "particular pedagogic manifestation of the task-based approach" (Skehan, 1998: 276). Therefore, the researchers, Llinares and Dalton-Puffer wanted to look at the CLIL approach as applying different tasks in 2015. In the other words, the researchers examined "learners working on a range of naturalistic tasks following the rationale of CLIL

social science subjects in three European contexts (Austria, Finland, Spain)" (Llinare & Dalton-Puffer, 1998: 69). Additionally, they aimed to focus on the learners' use of interpersonal resources, specially the language of evaluation. They used "five ecologically viable task-types" (group-work discussions, individual interviews, oral presentation, whole-class discussions and role-plays) in order to analyse the students' evaluative language (Llinare & Dalton-Puffer, 1998: 69). After applying different tasks during the research process, in the results, it can be seen that whole-class discussion and role-play tasks were much more chosen tasks because they affected learners' evaluative language better than other options. Additionally, when the students engaged with different tasks, they improved their evaluative language as it was expected. As a conclusion, it is possible to say that when the learners had whole-class discussion and role-play methods were applied, their target language was improved in several ways.

2.2.5. CLIL and Teacher Training

Since teaching English to young learners of primary school age is getting engendered in more national curricula across Europe and other parts of the world, "deep reflection is required of those involved in teacher education as to how language teachers should be prepared for the reality of the primary educational context" because they do not trust themselves. So as to avoid and get rid of the possible pitfalls often appeared and caused when a new 'subject' is put in a curriculum, "such as isolation and disjuncture", teacher education must be considered twice especially for primary English language teachers, because the primary teacher education "needs to consider educational approaches that embrace the ethos of holistic, interdisciplinary learning which is at the heart of primary education" (Ellison, 2015: 59). Therefore, it is believed that one approach like CLIL where school subjects such science and history are taught through a foreign language (mainly in English) can be very useful in order to help the teachers to catch the current developments and changing in their curriculum. Therefore, Ellison (2015) wanted to do a study to measure how CLIL is helpful for the teachers' development in primary schools and she also wanted to see the possible contributions of CLIL "English language teacher education programmes given that its underlying principles and methodology focus on the combined development of Content, Communication, Cognition and Culture, all

vital elements in the primary curriculum" (Ellison, 2015: 59). This study was carried out using only CLIL approach because CLIL "obliges language teachers to look beyond language and address other essential learner needs". It also developed teachers' knowledge of curriculum and made them "aware of the responsibility to educate the 'whole' child develops their understanding of the cognitive and linguistic demands of this level of education, and the important role of language across the curriculum" (Ellison, 2015: 59). Additionally, CLIL created an atmosphere for language and content teachers and this situation helped them to work in harmony to achieve broad educational goals. In order to collect the data, the researcher observed and filled some observation scales. According to the results, the CLIL approach was playing an important role in motivating the teacher to catch the recent changes in their curriculum, to work with their partners in harmony, to teach more effectively than before. Lastly, CLIL in foreign language teacher education is a must if English language teachers in primary have to make a meaningful contribution to young learners in primary school contexts. (Ellison, 2015: 59).

As many methods and approaches have been getting intoroduced day by day, teacher's professional development starts to seem much more important than the methods applied since the application is more effective rather than the method. Therefore, Kewara and Prabjandee (2017) conducted a study on CLIL teacher professional development for content teachers in Thailand. Another reason why this study was a must to be done is that the new educational policy was mandated to encourage the content teachers to integrate English in their content classroom. Inasmuch as the policy created tensions and misconceptions among content teachers who were applying their traditional methods and that was a challenge for them. Changing a method which was very outmoded was always challenging and the teachers who came across with this situation had many difficulties to get familiar with new methods, CLIL in that case and to change their classroom language to English. In order to gather much data, the researchers applied a development course for 15 teachers and they observed 4 volunteer teachers' classrooms. The results collected after all these observations indicated that the teachers partly applied classroom language in English and the CLIL structure provided was not definite. The participants could not apply CLIL properly or switch their classroom language from Thai to English because of several reasons. The first reason was that teachers'

English proficiency was not enough to teach. The second one was that the participants did not believe that CLIL could be a very effective teaching method to teach both content and language. Lastly, they needed to spend much more time to improve their professional capacity because they had some difficulties in applying any different method from the traditional ones. As a result, it can be understood that before applying CLIL in the classrooms, teachers who are responsible for this must get some help to develop themselves in assessment, application of target language, proficiency of their second language and components of the target methods.

In the last two decades, there has been considerable research dealing with the impact of CLIL on language learning. Nevertheless, it is still not clear whether students are successful either because of the components and effectiveness of CLIL education or the time which is dedicated to the language learning process. Thus, Catalan and Llach conducted a study in order to learn whether CLIL or time was playing a role in improving the students' language skills in Spain in 2015. For the sake of the study, the researchers applied the study to 70 Spanish EFL learners in their 8^{th} and 10^{th} year of secondary education and they divided the students into two groups; CLIL and non-CLIL groups. Additionally, they used a lexical availability task consisting of ten prompts as a collection instrument and they implemented English to the groups with the same amount of time to reveal the answer for the main research question in this study. After the process of the application, they applied the lexical task to the students and concluded their study. The results drawn reveal that even if the students got the same amount of time, there is a statistically considerable difference between CLIL and non-CLIL groups. The CLIL group "retrieved a higher number of words than the non-CLIL group" (Catalan & Llach, 2015: 87). Nevertheless, both groups also showed some similarities regarding "the most and least productive prompts"; first word responses, word frequency and word level (Catalan & Llach, 2015: 95). As a conclusion, even if the students are dedicated to the same amount of time to be taught a language, there may be some important differences as well as similarities in terms of learning a language through the CLIL and non-CLIL process. In the other words, the amount of time may be thought of as ineffective in CLIL education because CLIL approach has itself a very important positive impact on the language learning process.

Teachers are not only the ones who transmit the information to the students but also the ones who create a different perspective for their students. This means that teachers combine their knowledge as well as their relational identity to deliver well-organized lessons, which is the heart of teaching. Thus, Pappa, Moate, Ruohotie-Lyhty and Etelapelto (2017) conducted a study to explain how CLIL teachers negotiated their pedagogical and relational identity and how identity agency was exercised in negotiating a more encompassing professional identity. They also aimed to answer these research questions; "How is CLIL teacher identity agency exercised at the classroom level?", "How is CLIL teacher identity agency exercised within the collegial community?" and "How do CLIL teacher negotiate their professional identity between its pedagogical and relational sides?" (Pappa, et. al. 2017: 63). For the data collections, they had thirteen thematic interviews which were analysed to indicate the bi-directional process of identity negotiation between personal and professional resources and social context at work. After having thirteen interviews, the findings showed that there is a highlighting connection between professional identity and agency and it was suggested that "identity negotiation is a process of working and sharing with others as well as individually" (Pappa, et. al. 2017: 61).

Teachers' pedagogical and background knowledge has been playing a crucial role in the teaching and learning environment since they are the ones who show the ways to learn. Therefore, the training programmes on teachers' development to support their self-efficacy are much more important and that's why Kassymova (2018) conducted a study based on the effect of CLIL-based training on Turkish EFL pre-service teachers' self-efficacy beliefs and attitudes towards CLIL in 2018 in Turkey. In this study, the researcher aimed to find the answers for the following research questions; "Does CLIL teacher training have an effect on Turkish EFL pre-service teachers' self-efficacy beliefs?", "What are the attitudes of Turkish EFL pre-service teachers towards CLIL?" and "How do Turkish EFL pre-service teachers reflect their CLIL understanding in planning CLIL-based lessons?" (Kassymova, 2018: 14). In order to collect the data, the researcher used Teacher Self-Efficacy Scale, attitudes questionnaire and semi-structures face-to-face interviews. Finally, CLIL-based lesson plans used in the training were analysed so as to reveal the participants' reflections of CLIL understanding. After collecting the data for the study, it was revealed that the CLIL-based teacher training has had an increasingly vital impact on

the Turkish EFL pre-service teachers' self-efficacy beliefs. In contrast to the first attitudes of the participants towards CLIL in the very beginning of training, their perceptions and attitudes turned out to be more positive. Additionally, again the misconceptions and the points which were misunderstood about CLIL and its 4Cs framework in planning lessons were removed and the participants well-understood the components of teaching a CLIL-based lessons. Finally, it can be said that this study showed how CLIL can be pedagogically effective in teachers' developments.

2.2.6. CLIL and L1 vs. L2 Usage

In contrast to the common belief, for some researchers, using L1 in the foreign language classroom can be really useful to overcome the possible problems which students come across during the learning process (Mayo& Hidalgo, 2017). Thus, in order to measure how true this hypothesis is, Mayo and Hidalgo (2015) did a study in Spain and they came up with the following research questions; "To what extent do young EFL learners use their L1 when carrying out a communicative task with age- and level-matched peers in the FL classroom?", "What functions does the L1 serve?", "Does the instructional setting (CLIL and MS) have an influence on the learners' L1 use?" and "Does L1 use, and the functions it serves, change over time?" (Mayo& Hidalgo, 2017: 136). In the study, they include 32 young Spanish EFL learners (ages 8-10) when "performing a two-way communicative task was analysed" (Mayo& Hidalgo, 2017: 136). The study took two academic years and consisted of different tasks to evaluate the students' level of communication. During the study, they applied and supported the learners with different tasks such as picture placement. They analysed the participants' L1 use and the function which it serves, the differences between two different settings which are mainstream foreign language lessons and CLIL lessons and the noticeable changes during the research time. Indicating the research's findings, it can be stated that "the facilitative role of the L1 which mainly served to assist learners as they coped with unknown vocabulary" (Mayo& Hidalgo, 2017: 132). Additionally, the CLIL students preferred to use their L1 "significantly less than mainstream learners, and, interestingly, the L1 was more frequently used the second time the learners carried out the task". As a conclusion, it is possible to say that the facilitative role of the L1 for completing the

tasks by the young EFL learners in foreign language contexts was observed in this study and this answers the questions which were addressed.

When CLIL is considered in terms of its effects on the improvement of the target language, it is a must to take L1's role and effects into account during learning process. Therefore, Temirova and Westall (2015) did a study and published its pre-results and some parts so as to study first and foreign language use in content and language integrated classrooms. Firstly, they "compiled a corpus for indirect observation of twenty YouTube videos featuring primary and secondary school CLIL lessons taught" in five different countries (Temirova & Westall, 2015: 217). Later, they gathered their data through the indirect and direct observations and when looking at the collected data, it can be seen that indirect observation revealed different and interesting results. In indirect observations, the results showed that L1 was mostly preferred in primary level while giving feedback and L2 was used in instruction. Additionally, L1 is used for classroom management. Thus, it can be said that the rate of use of both languages are the same in the primary level lessons. However, interestingly, L1 is less used in the secondary level lessons comparing to the primary ones. "There was only one instance of L1 use for feedback and two instances for instructional purposes" and L1 is not used in classroom management in the observed classes (Temirova & Westall, 2015: 219). In addition to this indirect observation process, direct observations were done to gather much more data. In direct observations, it can be seen that L1 and L2 use in the CLIL classrooms at the IES Benicalap showed very interesting results which refer to that L1 is used for feedback much more in comparison to L2. Additionally, L1 was preferred by the students for sharing ideas with each other, but when they talked to their instructors they aimed to use L2. Sometimes, they also translated some sentences or words into L2 for clearly understanding and the instructors who had greater fluency in English tended to use L2 in all purposes. Therefore, it can be stated that the proficiency of the teachers was also very important in the process of CLIL education. In a nutshell, L1 is still preferable at the lower levels in comparison to upper levels and this is because of the proficiency of the instructors and the way the students want communicate with their friends and so on.

2.3. Psycholinguistics

The term “psycholinguistics” was coined by a group of American scientists in CH. Osgood and T. Sebeka’s article in the USA although the problems which psycholinguists concern emerged and developed much earlier. For example, Noam Chomsky’s theory of generative grammar as a reference to the language science is earlier and the most effective one. However, the thing which psycholinguists deal with are different from others because psycholinguistics is “primarily a complex of sciences about nature and dynamics of cognitive processes” (Orazbekova & Burbekova & Isabekova, 788). Therefore, this part of the literature review will mainly focus on psycholinguistic development in terms of language development in early childhood and the brief summary of the theories based on the language development in early childhood.

Language acquisition is the process during which humans acquire the capacity to see, create and utilize words to get it and communicate. It includes the picking up of differing capacities involving language structure, phonetics, and a broad lexicon. Nevertheless, learning a first language is different and every normal young learner can do it without any help and formal education. Additionally, it can be said that language improvement is unique and complex, but children can manage to acquire the target language at a very rapid rate (Crain & Lillo-Martin, 1999). Even though children who are exposed to a language at a very early age, it differs in production, because children acquire language in some stages and some of the children get various stages at different times. Therefore, there is still no theory that can fully explain how language is acquired. Nevertheless, there are some known theories and concepts which were suggested by famous researchers such as Skinner, Chomsky, Piaget and others and this thesis will continue with a very brief summary of the most accepted and known language learning theories all around the world.

Behaviourist Theory: In 1957, B. F Skinner wrote a shocking writing and he proposed a different way to look at language learning. B.F Skinner's *Verbal Behaviour* (1957) is a functional analysis approach “to analyse language behaviour in terms of their natural occurrence in response to environmental circumstances and the effects they have on human interactions” (Dall, 734). Skinner's behaviour learning approach bases on the components which include “unconditioned and conditioned

stimuli and operant conditioning but particularly the elements of operational conditioning" (McLaughlin, 2010). Skinner strongly believed that language might be "treated like any other kind of cognitive behaviour" (Demirezen, 1988: 135). According to the behaviourist theory, language learning is a process of habit formation that includes "a period of trial and error where the child tries and fails to use correct language until it succeeds" (McLaughlin, 2010).

Social Interactionist Theory: Vygotsky's social interaction theory incorporates nurture arguments in that children can be affected by their environment "as well as the language input children receive from their care-givers". The interaction theory suggests that "language exists for the purpose of communication and can only be learned in the context of interaction with adults and older children" (Linden, 2007). To summarize, it emphasizes the importance of the environment and culture "in which the language is being learned during early childhood development because this social interaction is what first provides the child with the means of making sense of their own behaviour and how they think about the surrounding world" (Linden, 2007). According to Williamson (2008), children can finally use their own internal speech to indicate their own behaviour in the same way which their parents' speech once happens accordingly with their behaviour. Furthermore, Vygotsky also improved the concepts of *private speech* which is when "children must speak to themselves in a self-guiding and directing way initially out loud and later internally and the *zone of proximal development* which refers to the tasks a child is unable to complete alone but is able to complete with the assistance of an adult" (Linden, 2007).

Innateness Theory: Noam Chomsky's innateness theory states that "children have an inborn or innate faculty for language acquisition that is biologically determined". It can be said that the human species "has evolved a brain whose neural circuits contain linguistic information at birth and this natural predisposition to learn language is triggered by hearing speech". The child's brain can interpret what she or he is exposed to during the process (Linden, 2007). To summarize, humans are born with the capacity of using a language and it is being shaped according to what is exposed to. What's more, according to Chomsky, infants acquire grammar because "it is a universal property of language, an inborn development, and has coined these

fundamental grammatical ideas that all humans have as *universal grammar* (UG)" Chomsky, 1975).

Cognitive Theory: Jean Piaget was a Swiss psychologist that was known for his four important stages in cognitive improvement for the children, which involved the development of language. Piaget's cognitive theory means that children's language is the reflection of "the development of their logical thinking and reasoning skills in stages, with each period having a specific name and age reference" (Goodluck, 1991). There are four stages of Piaget's cognitive development theory which involve a different aspect of language acquisition:

- *Sensory-Motor Period* (birth to 2 years): Children are born with *action schemas* to *"assimilate"* data "about the world such as sucking or grasping". During the sensory-motor period, the language which children use is *"egocentric"* and they talk "either for themselves or for the pleasure of associating anyone who happens to be there with the activity of the moment" (Castella, 2010).

- *Pre-Operational Period* (2 years to 7): Children's language improves quickly and the improvement of their *mental schema* allows them quickly to *accommodate* new words and conditions. Children's language becomes *symbolic* as letting them talk beyond the *here and now* and to talk about things in different times and emotions (Castella, 2010).

- *Egocentrism:* "Involves *animism* which refers to young children's tendency to consider everything, including inanimate objects, as being alive". Language is thought of as egocentric "because they see things purely from their own perspective" (Castella, 2010).

- *Operational Period* (7 to 11 years) and (11 years to adulthood): Piaget state that this period consists of two parts; "the period of concrete operations and the period of formal operations". Their language use is changing from immature to mature and from illogical to logical. Additionally, they are able to *"de-center"* or see the things from different various perspectives. "It is at this point that children's language becomes *"socialized"* and includes things such as questions, answers, commands and criticisms" (Castella, 2010).

2.3.1. Psycholinguistics Development

Talking is like an action and "it is shaped by motives of many kinds" (Bock & Konopka & Middleton, 2006: 1). Therefore, when looking at spoken language in deep, it also requires to be studied in terms of psycholinguistic perspective because it is not only a way to learn the speakers' attention but also it is an option to have a closer look at the ways of thinking in the speakers' minds through the communication. Psycholinguistics focuses on "how different kinds of motives affect how people talk or, more broadly, how they convey information in language" (Bock & Konopka & Middleton, 2006: 1). That's why it is possible to see that in theory, the motives differ from each other in terms of what they intent to convey and in which ways they aim to be conveyed. Additionally, as Slobin says "thinking for speaking" which means that speakers first intend to speak, but just before the action they try to plan what they are going to say and how they want to reflect (1996). Thus, thinking comes first then speaking happens and this thinking part consists of a few different steps like message-making, finding words and creating structures. These steps are the main subject of psycholinguists and they are always in the core of the studies about psycholinguistics like in this thesis.

Language production is not always a readily clear topic that everybody can easily explain how it happens. Therefore, Pickering and Branigan (1999) wanted to point out that language production is happening in a different way in terms of syntactic priming contrary to the common sense. For the most of the researchers, people tend to repeat the types of the sentences which they use through their language production and they are more probably to "use a particular syntactic structure if that structure has recently been employed" (Pickering & Branigan, 1999: 136). Nevertheless, the recent study showed that "this tendency towards local syntactic consistency is at least partly the result of syntactic priming" (Pickering & Branigan, 1999: 136). Therefore, the researchers wanted to have a close look at this topic and after they studied the results in detail, they conclude that there is little attempt to study this with normal adults and there may be differences between the young and the elder. For example, language production is mainly done by repeating in young learners whereas it is total opposite in adults. As a conclusion, according to Pickering and Branigan, this kind of studies needs to be done with different age groups in order to say a certain thing.

During first-language and second-language lexical improvement has been found to be associated with phonological processing abilities in a very strong way, for example speech perception, phonological awareness, and phonological short-term memory. Additionally, lexical development "seems to be linked to attentional and executive skills such as auditory attention, flexibility, and response inhibition" (Drigas & Karyotaki, 2017: 219). Therefore, Drigas and Karyotaki (2017) wanted to conduct a study in 2017 and the purpose of this longitudinal study was to examine to what extent L2 vocabulary acquired during the early L2 education is linked to the same cognitive skills. In this study, the participants were 61 French-speaking 5-year-old kindergartners who enrolled in English classes and were administered "a battery of tasks assessing these three phonological processing abilities and three attentional/executive skills" (Drigas & Karyotaki, 2017: 219). Their knowledge of vocabulary was examined 1, 2, and 3 school years later. The results showed that multiple regression analyses indicated phonological processing skills, "phonological STM and speech perception, but not phonological awareness, appeared to underlie L2 vocabulary acquisition" (Drigas & Karyotaki, 2017: 219). Similarly, among the assessed skills, "auditory attention and flexibility, but not response inhibition, appeared to be involved during the first steps of L2 vocabulary acquisition in such an immersion school context" (Drigas & Karyotaki, 2017: 219). As a conclusion, it can be said that cognitive abilities underlying second-language vocabulary acquisition in an early second-language are getting much improved comparing to the other ages.

Another study was done by Haselow in 2018 and it indicates how psycholinguistics can be relevant for historical linguistics as giving centre stage to frequency in the use of language as a main factor in the language change. Recurrence of co-occurrence of phonetic shapes in straight strings causes linguistic 'compression', a cognitive process by which the shapes included undergo an increment within the degree of their shared association and come to be processed beneath a modern, all-encompassing meaning and hence by less bits of data than the initially compositional grouping. As a result, the pieces of sentence structure over time lose their compositional character. They come to create implications and employments that are not completely derivable from the implications and employments of the components parts. The method of linguistic compression is exemplified with information from the improvement of the general extender and stuff within the history of English and

appeared to be an illustration of how recurrence influences mental representation and causes the improvement of modern preparing schedules that show themselves in auxiliary changes.

Perez-Vidal and Roquest (2015) conducted a study in order to indicate how linguistic impacts are playing a role in CLIL science programme. The participants in this study had longitudinally a pre-test and post-test. Tests used to reveal the data on the type of tasks which were used both in FI (Formal Instruction) and CLIL. They showed "the productive and receptive skills of the learners". The sample consisted of 2 groups of bilingual Catalan/Spanish participants and English is L3 on this occasion. One group had FI and CLIL in the Science course while the other had FI only. When indicating the results, it is possible to see that "larger relative gains are obtained by the FI and CLIL programme"; nonetheless, "not in all domains and to the same degree: relative higher gains accrue in reading, as expected, but not in listening". In a similar way, participants' writing skills and especially "their accuracy shows higher relative gains, and so do their lexico-grammatical abilities". To summarize, in the CLIL programme analysed, reading and grammar seem to be useful the most.

Since psycholinguistics is a broad area, there are many studies which were done from different aspects of psycholinguistics. Boran (2018) did a study which is based on a psycholinguistic analysis of semantic transfer by Turkish learners of English. Thus, this study aims to examine "the proposition that second language learners tend to map second language (L2) lexical forms onto the existing semantic content of their first language (L1) translations rather than creating a separate semantic network for the second language" (Boran, 2018). To examine this, the participants were applied to three semantic judgement tasks. In the first one, they were asked to say if the English vocabulary can be used interchangeably or not. In the second task, they were given the words and asked to place them into appropriate sentences. And then, they were provided "a forward translation task (task two and three are involved in experiment 2)" (Boran, 2018). After the application of the tasks, the results revealed that "older foreign language learners bring their already developed conceptual and semantic systems which demonstrate that the participants are highly influenced by their native language" (Boran, 2018). Furthermore, a certain impact of context on the students' performance was observed in the results.

2.4 Conclusion

The main aim of this chapter was to introduce and elaborate on the issues of CLIL's roles in language learning process as well as psycholinguistic development in early childhood. The primary focus was on how CLIL and psycholinguistics play a crucial role in the field of education, and especially SLA and ELT. As a natural sequence of the thesis, the next chapter is going to give information about the methodology that has used in this study.

CHAPTER III

METHODOLOGY

3.1. Introduction

This chapter includes the research design, the setting and the participants, the data collection instruments, and the data analysis procedure with concluding comments in the end.

3.2. Research Design

The present study is designed as an experimental research study with a control and a treatment group. Both of the groups were randomly chosen among several classes. The duration of the experiment was decided as 12 weeks in total. Since the participants were very young learners of English, they were not informed about the study during the application of the research. Both experimental and control groups had the similar characteristics in terms of age and gender distribution and they were instructed according to the school curriculum which is based on the combination of several topics from different educational resources and the main features of the CLIL approach. However, the teachers were not the same. Furthermore, the experimental group has been exposed to CLIL for 9 months more than the control group although the participants in both groups have been exposed to the same amount of English. In other words, before the beginning of the study, both groups had 9 months of English education, but the experimental group was taught through CLIL and the control one was done by any method rather CLIL. Their curriculam was different during the first 9 months. After getting exposed to the same amount of English for 9 months, they started to get exposed to CLIL and the common curriculam together for 3 months and this study only focuses on the last three months as taking these details into consideration.

Since this research mainly aimed to find out how the CLIL approach is playing a crucial role in the development of English and how it is related to the psycholinguistic development, 4 class observations were done by way of the Observation Form. Additionally, this current study was not limited to this, but also it aims to find out about teachers' perceptions, students' motivation and their success. Therefore, both the content and the subject teachers were asked to complete

Questionnaires for the Teacher to reveal their perceptions towards CLIL and to fill Intrinsic Motivation Inventory (IMI) (Ryan, 1982) (see Appendices) presented in two languages, English and Turkish to show how the students' motivation changed throughout the implementation. Finally, to reveal the participants' actual improvement, a pre-test and post-test were administered to the students. The tools which were used to find out the aims which were stated above are provided in Appendices.

3.3. Setting and Participants

This study was conducted as an experimental research at a private primary school in Antalya in Turkey. The school's name is not shared due to the hesitations of the management department. However, the consent form was signed by the management and the head of the English department.

All the classrooms in the school are equipped with technological equipment such as laptops with the internet access, smart boards, alongside all the other necessary class wares. Various instructional materials and software programs are uploaded in all of the laptops in the classrooms.

The present study was conducted in the first semester of 2018-2019 academic years. The participants in the study were first grade students whose age ranged from 6 to 7. The control group was different from the experiment group in terms of the time of the exposure to the CLIL approach. Both of the groups were having the same extensive English education, twenty-four hours a week, during the experimentation process. The treatment was given to the both group in their main English courses.

3.4. Data Collection Instruments

In alignment with the focus of the present study, the Intrinsic Motivation Inventory (IMI) (Ryan & Deci, 2000) was adapted and used in both of the participating groups. The IMI is "a multidimensional measurement device intended to assess participants' subjective experience related to a target activity in laboratory experiments" (Intrinsic Motivation Inventory (IMI)). Concerning the validity and reliability of the IMI, strong support was found by McAuley, Duncan, and Tammen (1987).

This instrument assesses participants' interest/enjoyment, perceived competence, felt pressure and tension, perceived choice and value/usefulness and the targeted

activities were evaluated through a three-point point Likert scale (3- Yes, I agree 2- I partly agree 1- No, I don't agree). Forty-five items are listed in the original inventory. However, only twenty-five of them under five categories were used in the present investigation since some of them may be chosen and used depending on the need.

Secondly, the Observation Form was designed to show how students' psycholinguistic development is affected throughout the process. This form has two parts and the first part focuses on demographic information while another part consists of 15 different statements which were filled (Yes-No) by the researcher. Additionally, this observation forms were filled four times; in the beginning, at the ends of first, second and third months.

Thirdly, Classroom Observation Checklist is used in order to see how students' motivation and success improved during the implementation. This checklist was adapted from the study by Taylan Altınkamış and changed according to the current thesis. It has 8 categories, but in the current study it has only 7 and this checklist has been completed each week during the current research. It is also essential to know that the checklist was filled (1: Good, 2: Neutral, 3: Bad) by the researcher.

Fourthly, a questionnaire is designed to collect information based on the teachers' attitudes, perceptions and understanding in CLIL. It has two parts; the first part aims to get demographic information; the second part mainly focuses on the attitudes, perceptions and understanding in CLIL. Furthermore, the second part has 24 statements and they are divided into 4 sub-categories which mostly focus on the CLIL and its impact on teaching and learning, CLIL and cooperation, materials and L1 usage and Self-Efficacy.

Lastly, the Pre-test and Post-test are designed to learn students' improvement in detail. These tests consist of 4 parts: Part 1: Math, Part 2: Social Studies, Part 3: Science and Part 4: Language Arts. The pre-test was applied in the beginning to learn what they have already known and the post-test is applied to see how their knowledge would improve.

3.5. Data Analysis Procedure

After the permission was granted from the coordinator of the schools' English department, the tests were employed with the students in their classrooms both before the experiment, as the pre-test, and after the experiment, as the post-test. As the study was conducted in the first semester of the 2018-2019 academic year, the pre-test was employed in beginning of October, while the post- test was conducted in late December. During the research, observation forms, intrinsic motivation inventory and questionnaires for teachers were applied.

This study is divided into two sections based on the collected data. The data about students' psycholinguistic development have 11 independent variables of this study and they are psycholinguistic development, self-learning, self-determination, self-confidence, self-starter, pleasure, willingness to participate, attentiveness, intrinsic motivation (interest/enjoyment, perceived competence, pressure/tension, perceived choice, and value/usefulness) and pre, post-tests. The data about teacher's opinions towards CLIL have 4 different parts in which each of them has 6 items that are considered as independent variables.

Once the experiment and other data collection instruments had been completed, the obtained data were analysed using SPSS (Statistical Package for Social Sciences 25.0.) for Windows. The analysis was divided into two sections as the data. First, the control and experimental groups' descriptive statistics such as number of students in groups, mean and standard deviation were calculated for describing the data. After that, control and experimental groups were compared with the independent variables. The independent samples t-test was conducted to find out whether or not there are any significant differences between groups concerning the mean scores of the Likert-scale items. Second, teacher's data was analysed. Sociodemographic data of teachers and their opinions on CLIL are shown with descriptive statistics. In order to see if there is a significant relationship between sociodemographic data and opinions on CLIL, independent samples t-test and Pearson correlation analysis were used. The data was calculated at the 95% confidence interval and 5% significance level.

3.6. Conclusion

This section aimed to introduce the methodology of the present research in detail. After the research design was fleshed out, extensive information was introduced about the research setting and participants. Then, Intrinsic Motivation Inventory, Observation Form, Classroom Observation Checklist, Questionnaire for the Teachers, Pre-test and Post-test used in the investigation were introduced with their specific items. Finally, the data analysis procedure was presented. In the following chapter, the data obtained from the data collection instruments will be analysed, and the results will be interpreted.

CHAPTER IV

DATA ANALYSIS AND RESULTS

4.1. Introduction

In this chapter, the analysis of the data gathered from data collection instruments is illustrated via tables and graphs. The results are displayed in detail, taking the research questions of the current thesis into consideration. Firstly, observation forms, intrinsic motivation inventory, pre- and post-tests and questionnaires are presented in order. Then, the group statistics, including the number, mean, standard deviation, and the standard error mean are demonstrated. Later, the results of each set of items are reported. Finally, a summary of the results is provided at the end of the chapter.

4.2. Students' Results

4.2.1. Students' Sociodemographic Information

Table 4.1 Results of Student's Sociodemographic Information

	Control group		**Experimental group**	
	N	**%**	**N**	**%**
Age				
6	6	60.0	7	70.0
7	4	40.0	3	30.0
Sex				
Boy	5	50.0	5	50.0
Girl	5	50.0	5	50.0

According to Table 4.1, the total sample consisted of 20 students in which 50% of them were the control group while 50% of them were the experimental group.

According to the results, 60% of the control group were 6 years old while 40% of them were 7 and 70% of the experimental group are 6 years old while 30% of them were 7 years old. Gender was equally distributed between groups.

4.2.2. Results of Research Variables

The results of the descriptive analysis of the psycholinguistic development within 4 time periods were summarized in Table 4.2 and Figure 4.1 The findings show that the mean value of control group was found 3.40 (*SD*=1.17) while experimental group was found 10.90 (*SD*=.74) in week 1. In week 2, the mean value of control group was found 8.00 (*SD*=1.33) while experimental group was found 12.30 (*SD*=1.06). In week 3, the mean value of control group was found 11.60 (*SD=.97*) while experimental group was found 12.40 (*SD*=.70). In week 4, the mean value of control group was found 12.10 (*SD=1.10*) while experimental group was found 13.80 (*SD*=1.03).

Table 4.2 Descriptive Results for Psycholinguistic Development

	N	**Min**	**Max**	**Mean**	**SD**
Control group's psycholinguistic development					
Week 1	10	2.00	5.00	3.40	1.17
Week 4	10	6.00	11.00	8.00	1.33
Week 8	10	10.00	13.00	11.60	.97
Week 12	10	10.00	14.00	12.10	1.10
Experimental group's psycholinguistic development					
Week 1	10	10.00	12.00	10.90	.74
Week 4	10	10.00	13.00	12.30	1.06
Week 8	10	11.00	13.00	12.40	.70
Week 12	10	11.00	15.00	13.80	1.03

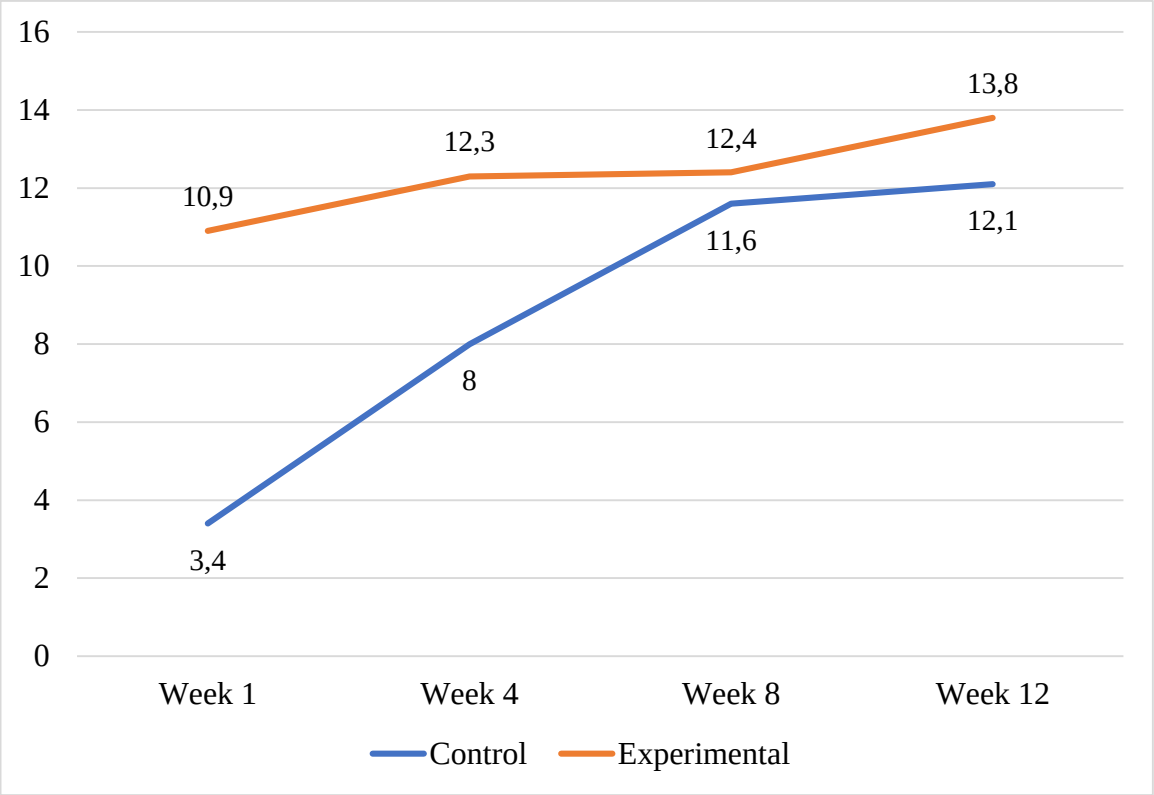


Figure 4.1 Time Graph for Psycholinguistic Development

The results of the self-learning mean values within 12 time periods were summarized in Table 4.3 and Figure 4.2 Since 3 point symbolizes the underdevelopment of the self-learning, it is possible to say that the experimental group was much better than the control group from the first week to the last week of the implementation. Therefore, one can say that the CLIL approach has a positive effect on the development of self-learning.

Table 4.3 Descriptive Results for Self-Learning

	N	Min	Max	Mean	SD
Control group					
Week 1	10	3	3	3.00	.00
Week 2	10	2	2	2.00	.00
Week 3	10	3	3	3.00	.00
Week 4	10	2	3	2.50	.53

Week 5	10	2	2	2.00	.00
Week 6	10	2	3	2.40	.52
Week 7	10	2	2	2.00	.00
Week 8	10	1	2	1.50	.53
Week 9	10	1	2	1.90	.32
Week 10	10	1	2	1.50	.53
Week 11	10	1	1	1.00	.00
Week 12	10	1	2	1.60	.52
Experimental group					
Week 1	10	1	2	1.30	.48
Week 2	10	1	2	1.60	.52
Week 3	10	1	2	1.40	.52
Week 4	10	1	2	1.30	.48
Week 5	10	1	2	1.40	.52
Week 6	10	1	2	1.60	.52
Week 7	10	1	2	1.30	.48
Week 8	10	1	2	1.10	.32
Week 9	10	1	2	1.60	.52
Week 10	10	1	1	1.00	.00
Week 11	10	1	2	1.30	.48
Week 12	10	1	1	1.00	.00

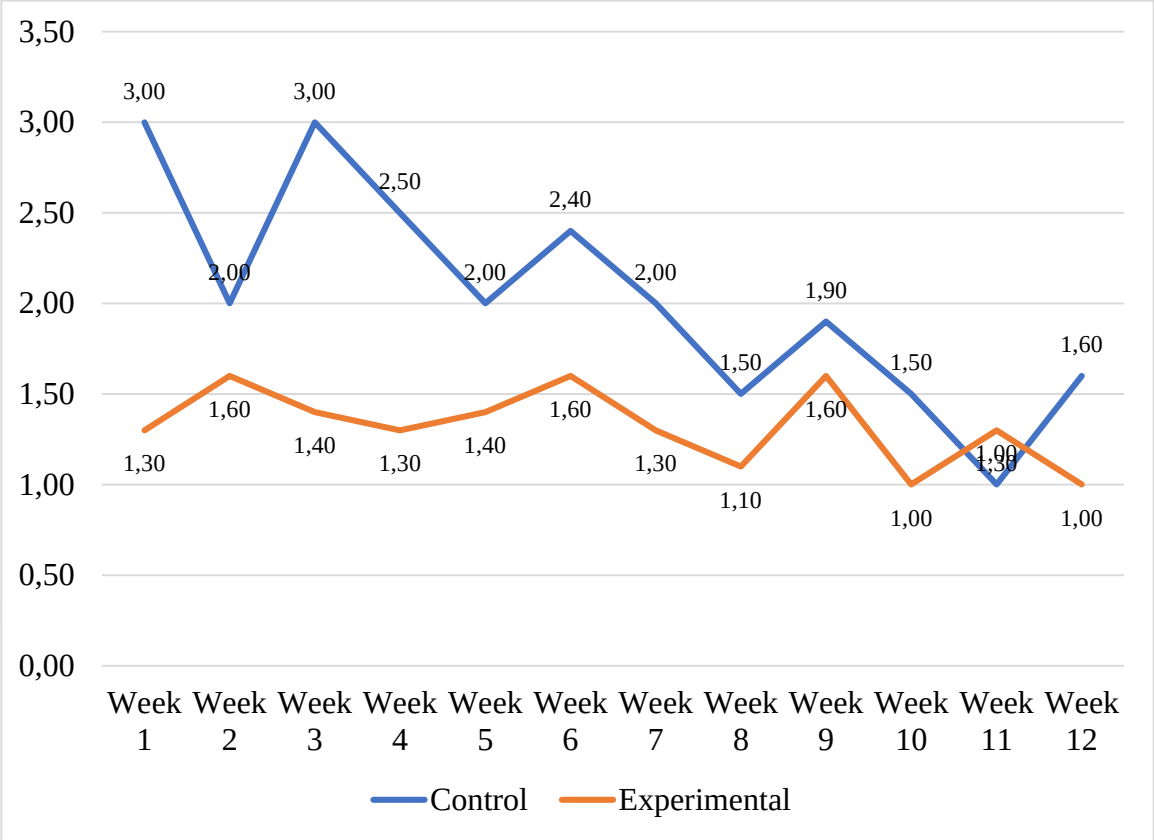


Figure 4.2 Time Graph for Self-Learning

The results of the self-determination mean values within 12 time periods were summarized in Table 4.4 and Figure 4.3 The findings show that the experimental group was good at the self-determination comparing to the control group. Inasmuch as it can be seen that the CLIL approach helps the young learners to be self-determinate in language learning.

Table 4.4 Descriptive Results for Self-Determination

	N	Min	Max	Mean	SD
Control group					
Week 1	10	3	3	3.00	.00
Week 2	10	2	2	2.00	.00
Week 3	10	2	3	2.60	.52
Week 4	10	2	3	2.60	.52
Week 5	10	2	2	2.00	.00

Week 6	10	2	2	2.00	.00
Week 7	10	1	1	1.00	.00
Week 8	10	2	2	2.00	.00
Week 9	10	1	1	1.00	.00
Week 10	10	2	2	2.00	.00
Week 11	10	1	2	1.50	.53
Week 12	10	1	2	1.30	.48
Experimental group					
Week 1	10	1	2	1.70	.48
Week 2	10	1	1	1.00	.00
Week 3	10	1	1	1.00	.00
Week 4	10	1	2	1.70	.48
Week 5	10	1	1	1.00	.00
Week 6	10	1	2	1.50	.53
Week 7	10	1	2	1.60	.52
Week 8	10	1	2	1.40	.52
Week 9	10	1	2	1.10	.32
Week 10	10	1	2	1.50	.53
Week 11	10	1	1	1.00	.00
Week 12	10	1	1	1.00	.00

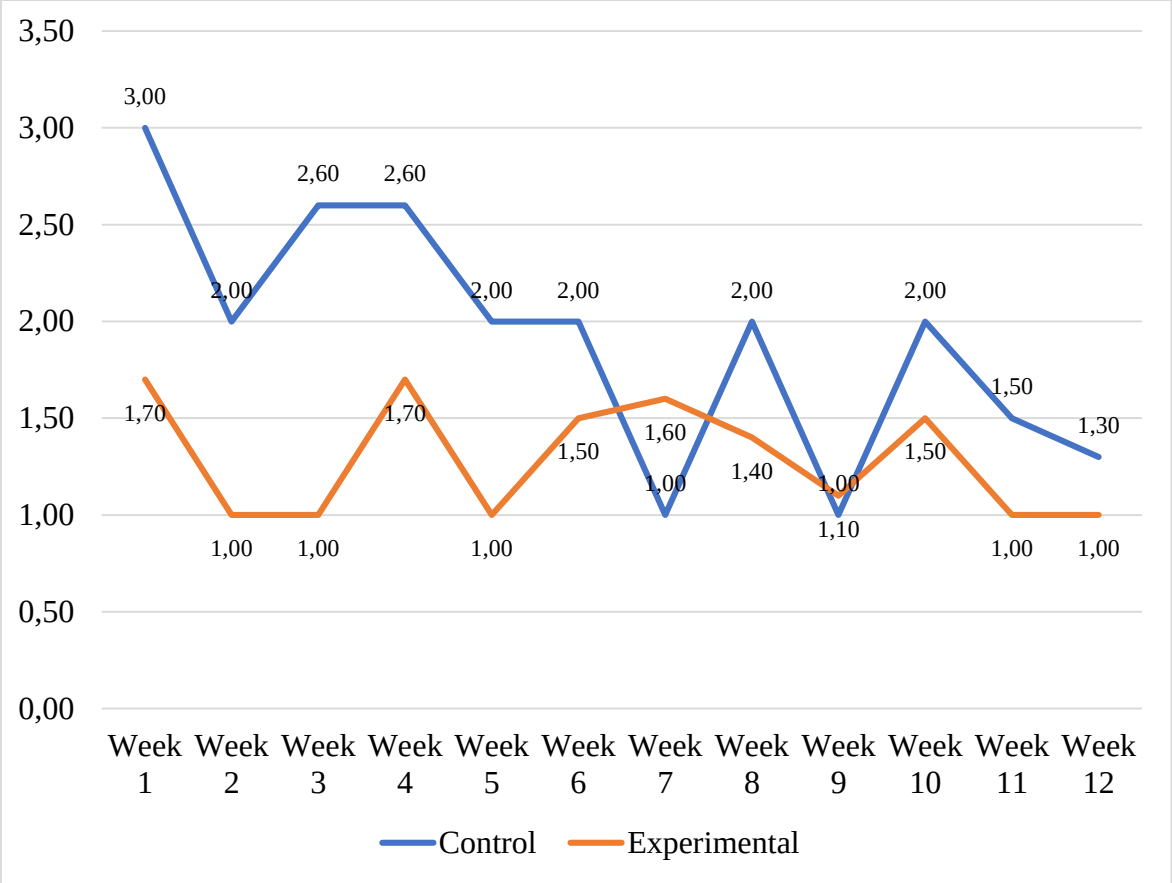


Figure 4.3 Time Graph for Self-Determination

The results of the self-confidence mean values within 12 time periods were summarized in Table 4.5 and Figure 4.4. The descriptive results for self-confidence show that the young learners in the experimental group had more self-confidence than the control group. Thus, one can indicate that CLIL has a positive impact on the students' self-confidence.

Table 4.5 Descriptive Results for Self-Confidence

	N	Min	Max	Mean	SD
Control group					
Week 1	10	3	3	3.00	.00
Week 2	10	2	2	2.00	.00
Week 3	10	2	3	2.30	.48
Week 4	10	3	3	3.00	.00

Week 5	10	2	2	2.00	.00
Week 6	10	1	1	1.00	.00
Week 7	10	2	2	2.00	.00
Week 8	10	2	2	2.00	.00
Week 9	10	1	2	1.10	.32
Week 10	10	1	2	1.90	.32
Week 11	10	2	2	2.00	.00
Week 12	10	1	1	1.00	.00
Experimental group					
Week 1	10	1	1	1.00	.00
Week 2	10	1	1	1.00	.00
Week 3	10	1	2	1.70	.48
Week 4	10	1	2	1.70	.48
Week 5	10	1	2	1.20	.42
Week 6	10	1	2	1.10	.32
Week 7	10	1	2	1.10	.32
Week 8	10	1	1	1.00	.00
Week 9	10	1	2	1.30	.48
Week 10	10	1	2	1.30	.48
Week 11	10	1	1	1.00	.00
Week 12	10	1	1	1.00	.00

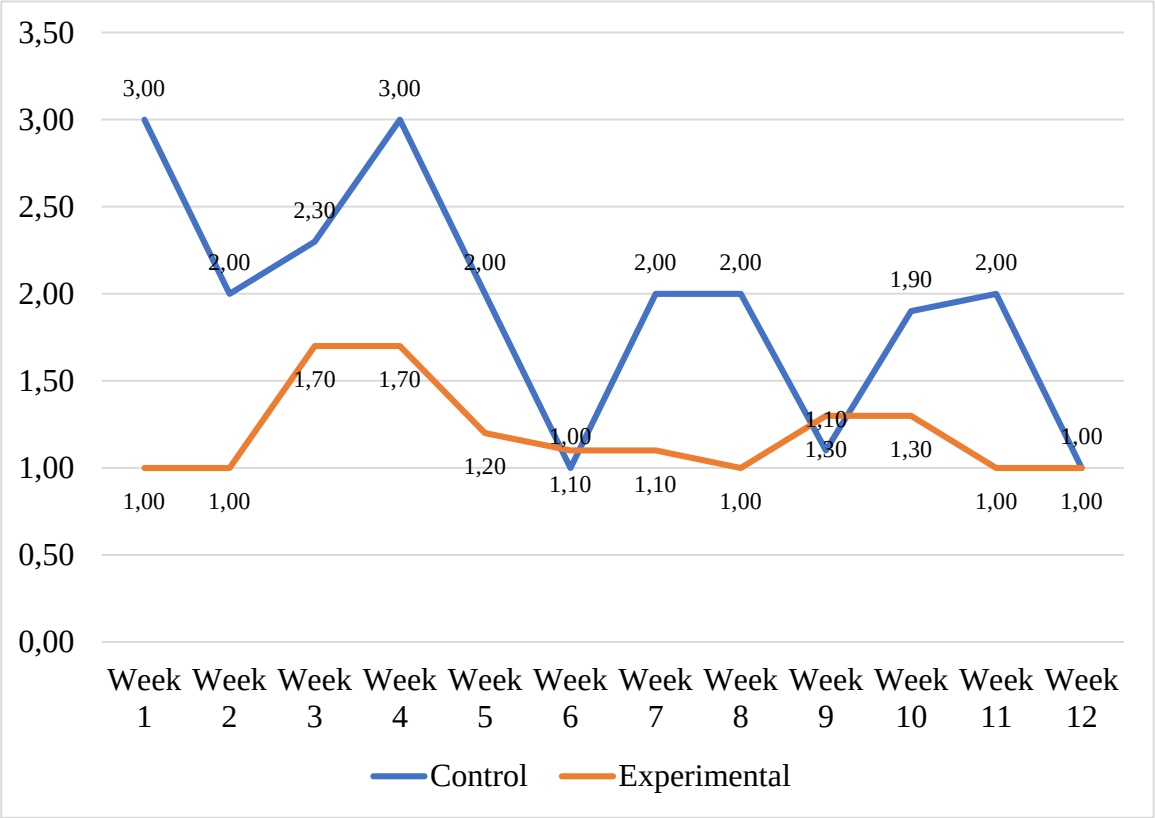


Figure 4.4 Time Graph for Self-Confidence

The results of the self-starter mean values within 12 time periods were summarized in Table 4.6 and Figure 4.5 As can be seen from the table and figure, it can be stated that the experimental group was better at being self-starter comparing to the control group. However, it is also possible to say that the control group's results were slightly more positive than the previous ones.

Table 4.6 Descriptive Results for Self-Starter

	N	Min	Max	Mean	SD
Control group					
Week 1	10	2	3	2.50	.53
Week 2	10	2	2	2.00	.00
Week 3	10	2	3	2.10	.32
Week 4	10	2	2	2.00	.00
Week 5	10	2	2	2.00	.00

Week 6	10	1	2	1.50	.53
Week 7	10	2	2	2.00	.00
Week 8	10	1	1	1.00	.00
Week 9	10	2	2	2.00	.00
Week 10	10	1	2	1.20	.42
Week 11	10	2	2	2.00	.00
Week 12	10	1	2	1.30	.48
Experimental group					
Week 1	10	1	2	1.80	.42
Week 2	10	1	2	1.80	.42
Week 3	10	1	1	1.00	.00
Week 4	10	1	2	1.60	.52
Week 5	10	1	2	1.30	.48
Week 6	10	1	1	1.00	.00
Week 7	10	1	2	1.30	.48
Week 8	10	1	2	1.30	.48
Week 9	10	1	2	1.40	.52
Week 10	10	1	2	1.10	.32
Week 11	10	1	2	1.20	.42
Week 12	10	1	1	1.00	.00

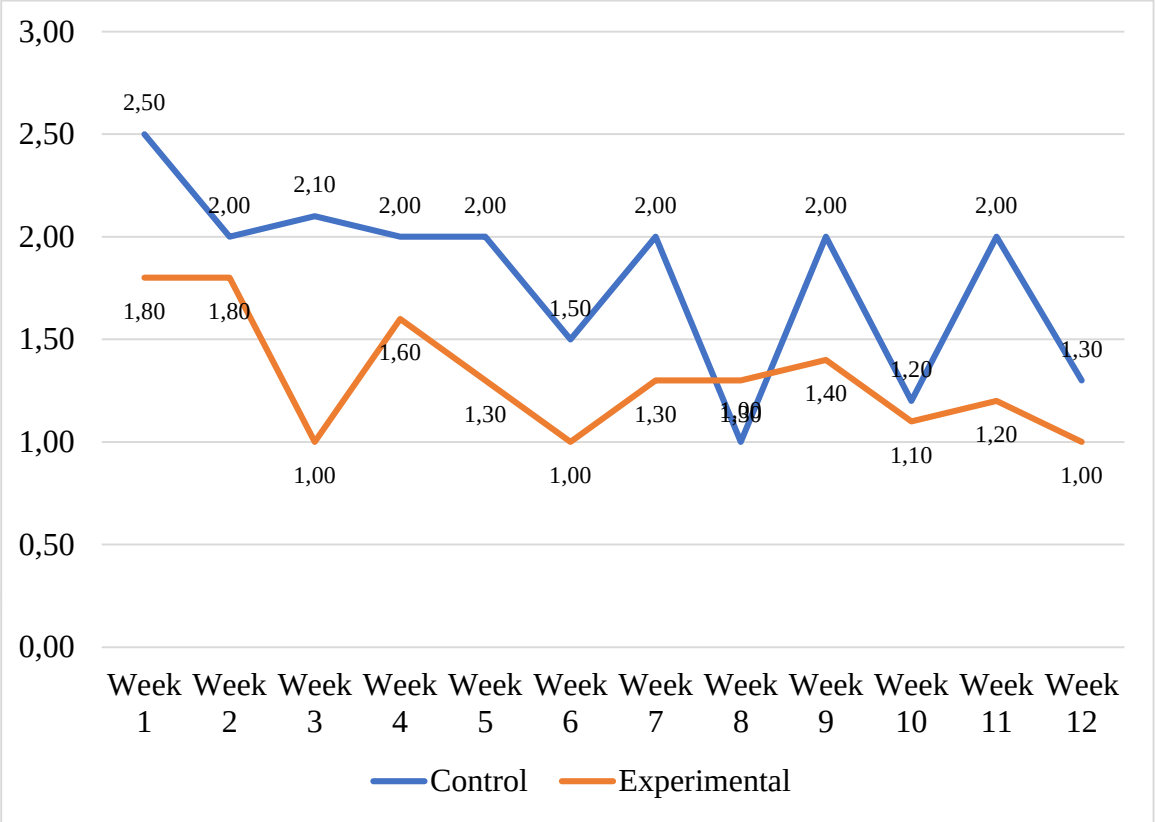


Figure 4.5 Time Graph for Self-Starter

The results of the pleasure mean values within 12 time periods were summarized in Table 4.7 and Figure 4.6 The results show that the experimental group got much more pleasure in leaning a language comparing to the control group.

Table 4.7 Descriptive Results for Pleasure

	N	Min	Max	Mean	SD
Control group					
Week 1	10	3	3	3.00	.00
Week 2	10	2	2	2.00	.00
Week 3	10	2	2	2.00	.00
Week 4	10	3	3	3.00	.00
Week 5	10	2	2	2.00	.00
Week 6	10	1	1	1.00	.00

Week 7	10	1	1	1.00	.00
Week 8	10	1	1	1.00	.00
Week 9	10	1	2	1.90	.32
Week 10	10	1	1	1.00	.00
Week 11	10	1	2	1.80	.42
Week 12	10	1	1	1.00	.00
Experimental group					
Week 1	10	1	2	1.60	.52
Week 2	10	1	2	1.60	.52
Week 3	10	1	2	1.10	.32
Week 4	10	1	2	1.30	.48
Week 5	10	1	2	1.70	.48
Week 6	10	1	2	1.30	.48
Week 7	10	1	2	1.60	.52
Week 8	10	1	2	1.30	.48
Week 9	10	1	2	1.40	.52
Week 10	10	1	2	1.50	.53
Week 11	10	1	2	1.30	.48
Week 12	10	1	1	1.00	.00

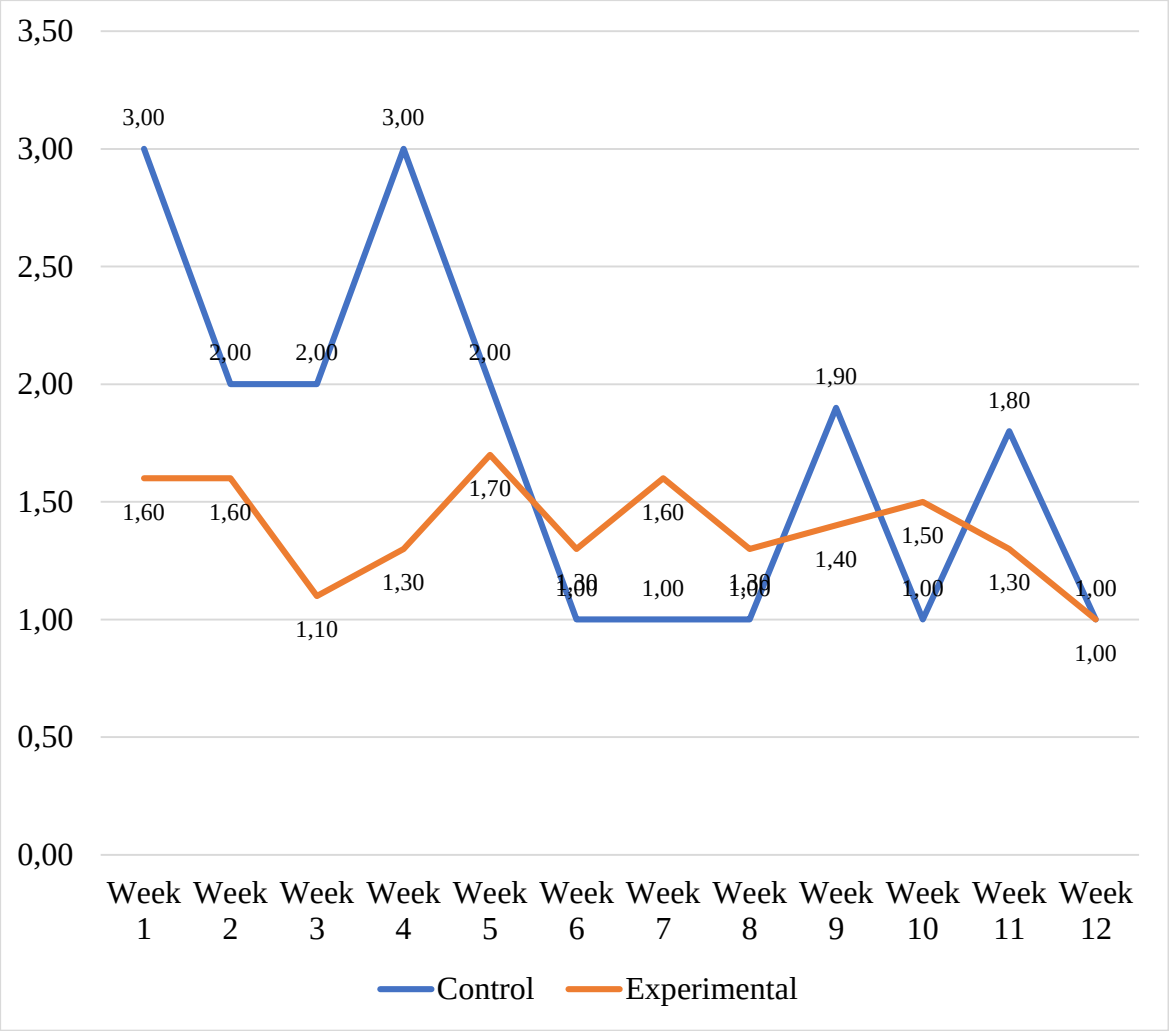


Figure 4.6 Time Graph for Pleasure

The results of the willingness to participate mean values within 12 time periods were summarized in Table 4.8 and Figure 4.7 The experimental group was participated the lessons more willingly than the control group as can be seen from the descriptive results. Thus, it is easy to say that the CLIL approach has a positive impact on the students' willingness in learning English as a foreign language.

Table 4.8 Descriptive Results for Willingness to Participate

	N	Min	Max	Mean	SD
Control group					
Week 1	10	3	3	3.00	.00
Week 2	10	3	3	3.00	.00
Week 3	10	2	2	2.00	.00

Week 4	10	2	2	2.00	.00
Week 5	10	1	1	1.00	.00
Week 6	10	2	2	2.00	.00
Week 7	10	1	1	1.00	.00
Week 8	10	1	1	1.00	.00
Week 9	10	1	1	1.00	.00
Week 10	10	1	1	1.00	.00
Week 11	10	1	1	1.00	.00
Week 12	10	1	1	1.00	.00
Experimental group	10				
Week 1	10	1	2	1.50	.53
Week 2	10	1	2	1.40	.52
Week 3	10	1	2	1.30	.48
Week 4	10	1	2	1.50	.53
Week 5	10	1	2	1.20	.42
Week 6	10	1	2	1.10	.32
Week 7	10	1	1	1.00	.00
Week 8	10	1	1	1.00	.00
Week 9	10	1	1	1.00	.00
Week 10	10	1	1	1.00	.00
Week 11	10	1	1	1.00	.00
Week 12	10	1	1	1.00	.00

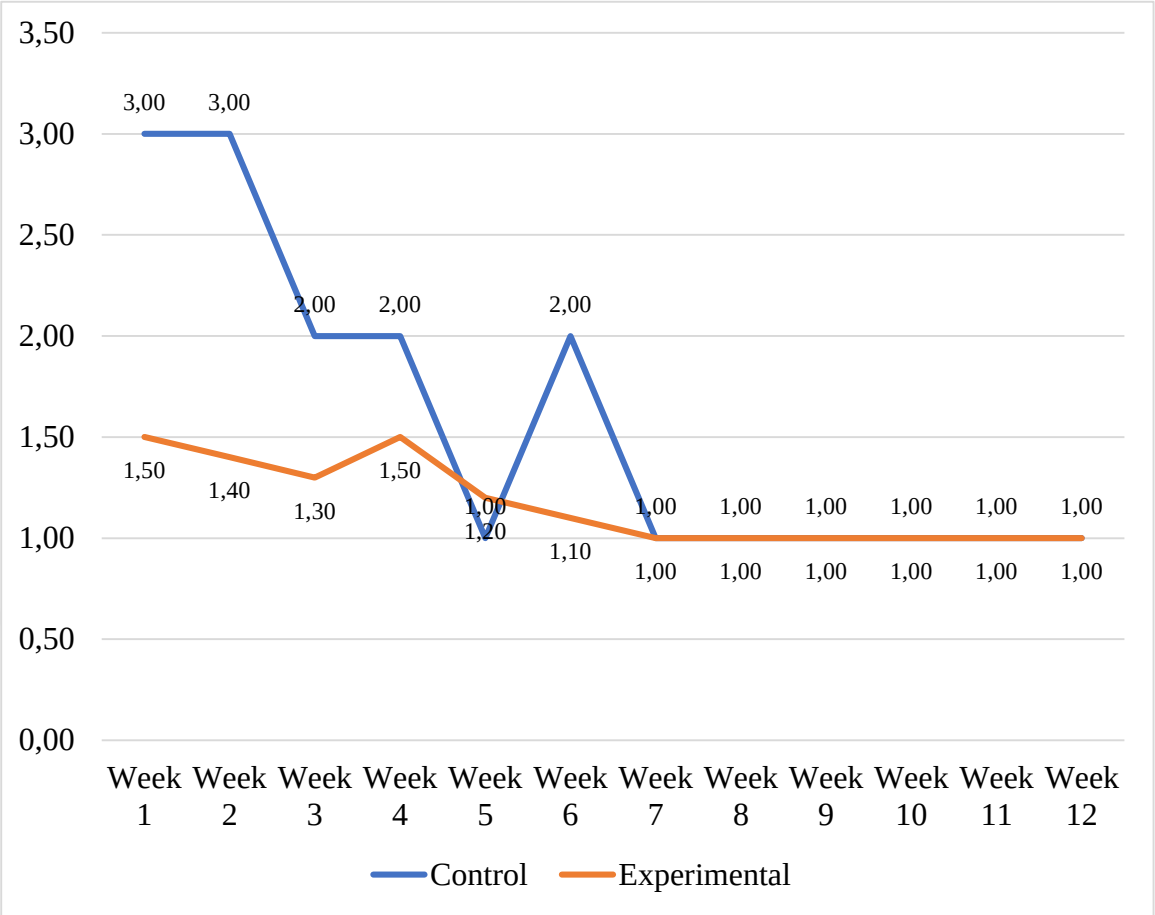


Figure 4.7 Time Graph for Willingness to Participate

The results of the attentiveness mean values within 12 time periods were summarized in Table 4.9 and Figure 4.8 The findings show that the experimental group's attentiveness was higher than the control group's. Therefore, one can state that the CLIL approach is playing a positive and crucial role in students' attentiveness.

Table 4.9 Descriptive Results for Attentiveness

	N	Min	Max	Mean	SD
Control group					
Week 1	10	3	3	3.00	.00
Week 2	10	3	3	3.00	.00
Week 3	10	2	2	2.00	.00
Week 4	10	2	2	2.00	.00

Week 5	10	1	1	1.00	.00
Week 6	10	2	2	2.00	.00
Week 7	10	2	2	2.00	.00
Week 8	10	1	2	1.10	.32
Week 9	10	1	1	1.00	.00
Week 10	10	1	1	1.00	.00
Week 11	10	1	2	1.10	.32
Week 12	10	1	1	1.00	.00
Experimental group					
Week 1	10	1	2	1.50	.53
Week 2	10	1	2	1.60	.52
Week 3	10	1	2	1.30	.48
Week 4	10	2	2	2.00	.00
Week 5	10	2	2	2.00	.00
Week 6	10	1	2	1.30	.48
Week 7	10	1	2	1.40	.52
Week 8	10	1	2	1.30	.48
Week 9	10	1	1	1.00	.00
Week 10	10	1	2	1.20	.42
Week 11	10	1	1	1.00	.00
Week 12	10	1	1	1.00	.00

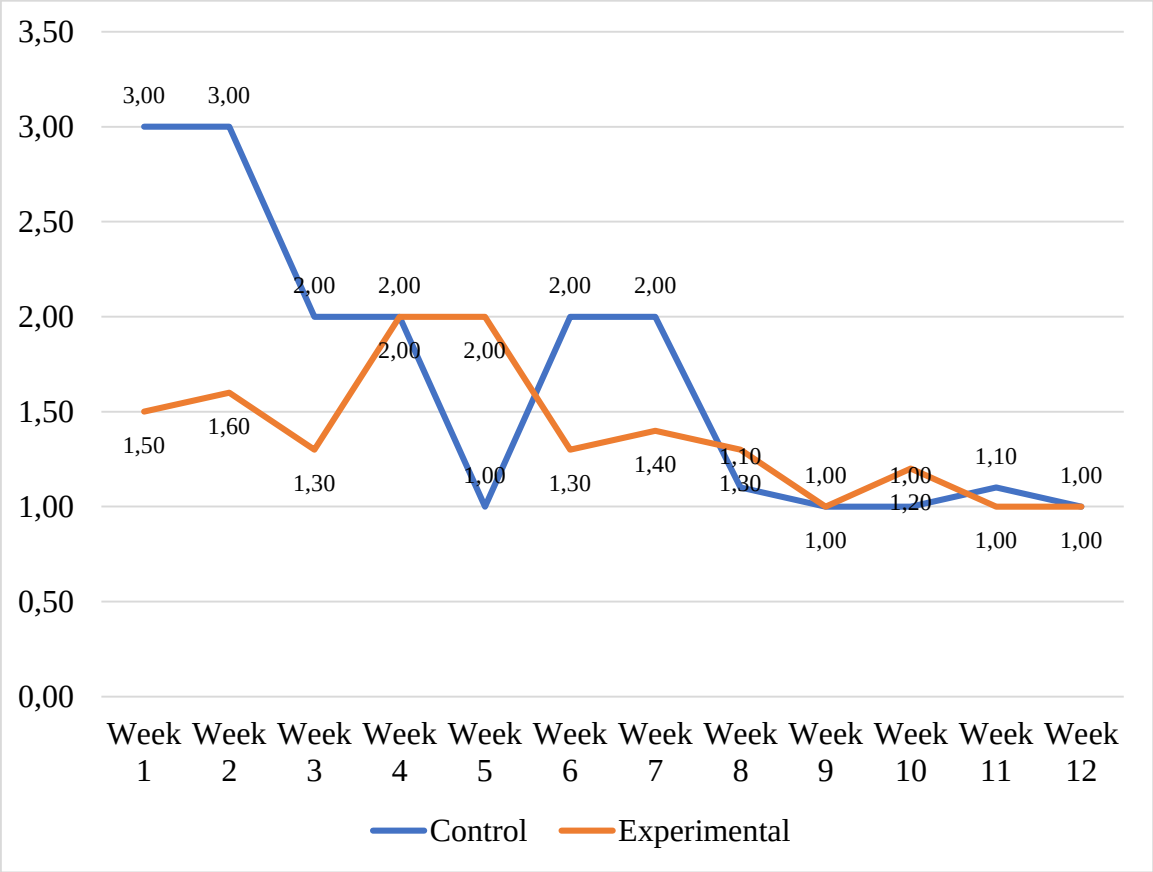


Figure 4.8 Time Graph for Attentiveness

The results of the descriptive analysis of the intrinsic motivation were summarized in Table 4.10. The findings show that the mean value of interest/enjoyment was found 14.00 (*SD*=.94) in control group and 15.00 (*SD*=.00) in experimental group. The mean value of perceived competence was found 13.80 (*SD*=.92) in control group and 14.90 (*SD*=.32) in experimental group. The mean value of pressure/tension was found 8.00 (*SD*=2.36) in control group and 5.90 (*SD*=1.37) in experimental group. The mean value of perceived choice was found 9.10 (*SD*=1.79) in control group and 13.70 (*SD*=1.34) in experimental group. The mean value of value/usefulness was found 12.60 (*SD*=1.35) in control group and 14.70 (*SD*=.67) in experimental group.

Table 4.10 Descriptive Results for Intrinsic Motivation Inventory

	N	Min	Max	Mean	SD
Control group's intrinsic motivation					
Interest/enjoyment	10	13.00	15.00	14.00	.94

Perceived competence	10	12.00	15.00	13.80	.92
Pressure/Tension	10	5.00	11.00	8.00	2.36
Perceived choice	10	6.00	11.00	9.10	1.79
Value/usefulness	10	10.00	15.00	12.60	1.35
Experimental group's intrinsic motivation					
Interest/enjoyment	10	15.00	15.00	15.00	.00
Perceived competence	10	14.00	15.00	14.90	.32
Pressure/Tension	10	5.00	9.00	5.90	1.37
Perceived choice	10	11.00	15.00	13.70	1.34
Value/usefulness	10	13.00	15.00	14.70	.67

The results of the descriptive analysis of the pre-test and post-test were summarized in Table 4.11. The findings show that the mean value of pre-test was found 38.80 (SD=4.16) in control group and 57.50 (SD=5.56) in experimental group. The mean value of post-test was found 57.50 (SD=5.56) in control group and 87.60 (SD=5.89) in experimental group.

Table 4.11 Descriptive Results for Pre-Post Tests

	N	**Min**	**Max**	**Mean**	**SD**
Control group's test results					
Pre-test	10	34	48	38.80	4.16
Post-test	10	55	78	67.70	7.54
Experimental group's test results					
Pre-test	10	45	65	57.50	5.56
Post-test	10	78	96	87.60	5.89

4.2.3. Comparison of Control and Experimental Groups

Independent samples T test results in Table 4.12 show that there are significant differences between control and experimental groups according to their psycholinguistic development scores on week 1, 4, 8 and 12, $t_{(18)}$ = -17.106, -7.985, -2.121, -3.562, $p < .05$, respectively. According to these results, throughout the experiment, experimental group's psycholinguistic development scores were more positive than control group's psycholinguistic development scores.

Table 4.12 Independent Samples T-Test for Differences in Psycholinguistic Development

	Groups	**N**	**Mean**	**S.D.**	***t***	***p***
Psycholing. Dev. Week 1	Control	10	3.40	1.17	-17.106	**.000**
	Experimental	10	10.90	.74		
Psycholing. Dev. Week 4	Control	10	8.00	1.33	-7.985	**.000**
	Experimental	10	12.30	1.06		
Psycholing. Dev. Week 8	Control	10	11.60	.97	-2.121	**.048**
	Experimental	10	12.40	.70		
Psycholing. Dev. Week 12	Control	10	12.10	1.10	-3.562	**.002**
	Experimental	10	13.80	1.03		

Independent samples T test results in Table 4.13 show that there are significant differences between control and experimental groups according to their self-learning scores on first, second and third months, $t_{(18)}$ = 8.363, 5.399, 4.714, $p < .01$, respectively. According to these results, experimental group's self-learning scores were more positive than control group's self-learning scores in first, second and third months.

Table 4.13 Independent Samples T-Test for Differences in Self-Learning

	Groups	**N**	**Mean**	**S.D.**	***t***	***p***
Self-Learning 1. Month	Control	10	2.63	.13	8.363	**.000**
	Experimental	10	1.40	.44		
Self-Learning 2. Month	Control	10	1.98	.22	5.399	**.000**

	Experimental	10	1.35	.29		
Self-Learning 3. Month	Control	10	1.50	.12	4.714	**.000**
	Experimental	10	1.23	.14		

Independent samples T test results in Table 4.14 show that there are significant differences between control and experimental groups according to their self-determination scores on first, second and third months, $t_{(18)}$ = 12.170, 4.025, 3.600, p < .01, respectively. According to these results, experimental group's self-determination scores were more positive than control group's self-determination scores in first, second and third months.

Table 4.14 Independent Samples T-Test for Differences in Self-Determination

	Groups	**N**	**Mean**	**S.D.**	***t***	***p***
Self-Determination 1. Month	Control	10	2.55	.20	12.170	**.000**
	Experimental	10	1.35	.24		
Self-Determination 2. Month	Control	10	1.75	.00	4.025	**.001**
	Experimental	10	1.38	.29		
Self-Determination 3. Month	Control	10	1.45	.20	3.600	**.002**
	Experimental	10	1.15	.17		

Independent samples T test results in Table 15 show that there are significant differences between control and experimental groups according to their self-confidence scores on first, second and third months, $t_{(18)}$ = 14.346, 15.922, 8.573, p < .01, respectively. According to these results, experimental group's self-confidence scores were more positive than control group's self-confidence scores in first, second and third months.

Table 4.15 Independent Samples T-Test for Differences in Self-Confidence

	Groups	**N**	**Mean**	**S.D.**	***t***	***p***
Self-Confidence 1. Month	Control	10	2.58	.12	14.346	**.000**
	Experimental	10	1.35	.24		
Self-Confidence 2. Month	Control	10	1.75	.00	15.922	**.000**
	Experimental	10	1.10	.13		

Self-Confidence 3. Month	Control	10	1.50	.00	8.573	**.000**
	Experimental	10	1.15	.13		

Independent samples T test results in Table 4.16 show that there are significant differences between control and experimental groups according to their self-starter scores on first, second and third months, $t_{(18)}$ = 6.573, 4.951, 5.823, p < .01, respectively. According to these results, experimental group's self-starter scores were more positive than control group's self-starter scores in first, second and third months.

Table 4.16 Independent Samples T-Test for Differences in Self-Starter

	Groups	**N**	**Mean**	**S.D.**	***t***	***p***
Self-Starter 1. Month	Control	10	2.15	.13	6.573	**.000**
	Experimental	10	1.55	.26		
Self-Starter 2. Month	Control	10	1.63	.13	4.951	**.000**
	Experimental	10	1.23	.22		
Self-Starter 3. Month	Control	10	1.63	.18	5.823	**.000**
	Experimental	10	1.18	.17		

Independent samples T test results in Table 4.17 show that there are significant differences between control and experimental groups according to their pleasure scores on first and second months, $t_{(18)}$ = 11.584, -2.377, p < .05, respectively. According to these results, only in the first month, experimental group's pleasure scores were more positive than control group's pleasure scores. However, in the second month, control group's pleasure scores were more positive than experimental group's pleasure scores

Table 4.17 Independent Samples T-Test for Differences in Pleasure

	Groups	**N**	**Mean**	**S.D.**	***t***	***p***
Pleasure 1. Month	Control	10	2.50	.00	11.854	**.000**
	Experimental	10	1.40	.29		
Pleasure 2. Month	Control	10	1.25	.00	-2.377	**.029**
	Experimental	10	1.48	.30		

Pleasure 3. Month	Control	10	1.43	.17	1.523	.145
	Experimental	10	1.30	.20		

Independent samples T test results in Table 4.18 show that there are significant differences between control and experimental groups according to their willingness to participate scores on first and second months, $t_{(18)}$ = 10.864, 4.583, p < .01, respectively. According to these results, experimental group's willingness to participate scores were more positive than control group's willingness to participate scores in the first and second months.

Table 4.18. Independent Samples T-Test for Differences in Willingness to Participate

	Groups	**N**	**Mean**	**S.D.**	***t***	***p***
Willingness to Participate 1. Month	Control	10	2.50	.00	10.864	**.000**
	Experimental	10	1.43	.31		
Willingness to Participate 2. Month	Control	10	1.25	.00	4.583	**.000**
	Experimental	10	1.08	.12		
Willingness to Participate 3. Month	Control	10	1.00	.00*	-	-
	Experimental	10	1.00	.00*		

* t cannot be computed because the standard deviations of both groups are 0.

Independent samples T test results in Table 4.19 show that there are significant differences between control and experimental groups according to their attentiveness scores only on first month, $t_{(18)}$ = 8.433, p < .01. According to these results, only in the first month, experimental group's attentiveness scores were more positive than control group's attentiveness scores.

Table 4.19 Independent Samples T-Test for Differences in Attentiveness

	Groups	**N**	**Mean**	**S.D.**	***t***	***p***
Attentiveness 1. Month	Control	10	2.50	.00	8.433	**.000**
	Experimental	10	1.60	.34		
Attentiveness 2. Month	Control	10	1.53	.08	.218	.830
	Experimental	10	1.50	.35		

Attentiveness 3. Month	Control	10	1.03	.08	-.600	.556
	Experimental	10	1.05	.11		

Independent samples T test results in Table 4.20 show that there are significant differences between control and experimental groups according to their five intrinsic motivation scores (interest/enjoyment, perceived competence, pressure/tension, perceived choice, value/usefulness), $t_{(18)}$ = -3.354, -3.549, 2.436, -6.505, -4.400, p < .05, respectively. According to these results, experimental group's interest/enjoyment, perceived competence, perceived choice and value/usefulness scores were higher than control group. Also, experimental group's pressure/tension scores were lower than control group.

Table 4.20 Independent Samples T-Test for Differences in Intrinsic Motivation

	Groups	**N**	**Mean**	**S.D.**	***t***	***p***
Interest/enjoyment	Control	10	14.00	.94	-3.354	**.004**
	Experimental	10	15.00	.00		
Perceived competence	Control	10	13.80	.92	-3.549	**.002**
	Experimental	10	14.90	.32		
Pressure/Tension	Control	10	8.00	2.36	2.436	**.025**
	Experimental	10	5.90	1.37		
Perceived choice	Control	10	9.10	1.79	-6.505	**.000**
	Experimental	10	13.70	1.34		
Value/usefulness	Control	10	12.60	1.35	-4.400	**.000**
	Experimental	10	14.70	.67		

Independent samples T test results in Table 4.21 show that no significant difference was found between experimental and control groups according to the difference between post-test and pre-test.$t_{(18)}$ = -.467, p > .05.

Table 4.21 Independent Samples T-Test for Differences in Pre-Post Tests

	Groups	**N**	**Mean**	**S.D.**	***t***	***p***
Difference between Pre-test and Post-test	Control	10	28.90	5.20	-.467	.646
	Experimental	10	30.10	6.24		

4.3. Teachers' Results

4.3.1. Results of Teacher's Sociodemographic Information

According to Table 4.22, the total teacher sample consisted of 60 teachers in which 50% of them were the male while 50% of them were female. It is seen that 48.3% of teachers were 21-30 years old while 50% of them were 31-40 years old and 1.7% of them were 41-50 years old. Average teaching experience among teachers was found 5.83 (*SD*=2.38). 20% of the teachers' first language was English while 73.3% of the teachers' first language was Turkish. %6.7 of the teachers' first language was found German or Swedish. 33.3% of the teachers were teaching the 1st grade while 35% of them were teaching the 2nd grade. 8.3% of them were teaching the 3rd grade while 15% of them were teaching the 4th grade. 13.3% of them were teaching the 5th grade while 1.7% of them were teaching the 6th grade. 1.7% of them were teaching the 7th grades and 3.3% of them were teaching the 8th grade.

Table 4.22 Results of Teacher's Sociodemographic Information

	N	**%**	**Mean**	**SD**
Gender				
Male	30	50,0		
Female	30	50,0		
Age				
21-30	29	48,3		
31-40	30	50,0		
41-50	1	1,7		
Teaching Experience (in years)			5,83	2,38

First Language		
English	12	20,0
Turkish	44	73,3
Other	4	6,7
Classes		
1	20	33.3
2	21	35.0
3	5	8.3
4	9	15.0
5	8	13.3
6	1	1.7
7	1	1.7
8	2	3.3

4.3.2. Results of Research Variables

The descriptive results of CLIL and its impact on teaching and learning were summarized in Table 4.23. It was seen that the items "CLIL helps my students to learn better." and "CLIL makes teaching easier than other ways such Traditional Classroom." were found to have the highest mean value 3.43 (*SD*=0.50). The mean value of the item "CLIL makes learning more enjoyable" was found 3.42 (*SD*=0.50) and "CLIL helps students to have self-confidence in the use of target language" was found 3.42 (*SD*=0.53). The mean value of the item "CLIL helps my students to improve their language skills" was found 3.40 (*SD*=0.53) and "Students enjoy learning subjects in English" was found 3.28 (*SD*=0.56). These findings show that teachers agree with CLIL's positive impact on teaching and learning.

Table 4.23 Descriptive Results for CLIL and its impact on teaching and learning

	N	Mean	SD
Students enjoy learning subjects in English.	60	3.28	.56
CLIL helps my students to learn better.	60	3.43	.50
CLIL helps my students to improve their language skills.	60	3.40	.53
CLIL makes teaching easier than other ways such Traditional Classroom.	60	3.43	.50
CLIL makes learning more enjoyable.	60	3.42	.50
CLIL helps students to have self-confidence in the use of target language.	60	3.42	.53

1=Strongly disagree, 4=Strongly agree

The descriptive results of CLIL and cooperation were summarized in Table 4.24. It was seen that the item "CLIL requires not only cooperation but also something more than it" was found to have the highest mean value 3.50 (*SD*=0.50). The mean value of the item "CLIL requires more cooperative work with the content teacher" was found 3.40 (*SD*=0.49). The mean value of the item "If you teach other subjects in English, I need to collaborate with the teacher of the subject of study" was found 3.17 (*SD*=0.59) and "Language and content teachers should always work together in CLIL" was found 3.12 (*SD*=0.61). The mean value of the item "I believe that I can teach without cooperation with the content teacher" was found 2.52 (*SD*=0.62) and "It is easy to cooperate with the content teachers" was found 2.17 (*SD*=0.81). These findings show that teachers agree with CLIL needs cooperation with other subject teachers. However, they disagree with ease of cooperation.

Table 4.24 Descriptive Results for CLIL and Cooperation

	N	Mean	SD
If you teach other subjects in English, I need to collaborate with the teacher of the subject of study (e.g., History, Science…).	60	3.17	.59
I believe that I can teach without cooperation with the content teacher.	60	2.52	.62
It is easy to cooperate with the content teachers.	60	2.17	.81
CLIL requires more cooperative work with the content teacher.	60	3.40	.49
CLIL requires not only cooperation but also something more than it.	60	3.50	.50
Language and content teachers should always work together in CLIL	60	3.12	.61

1=Strongly disagree, 4=Strongly agree

The descriptive results of materials and L1 usage were summarized in Table 4.25. It was seen that the item "Focusing on 4 skills (Listening, Speaking, Reading and Writing) in most of classroom materials helps the students learn much better." was found to have the highest mean value 3.43 (*SD*=0.50). The mean value of the item "The materials used in the lessons are authentic and interactive" was found 2.37 (*SD*=0.94) and "I prefer to apply most of the activities in my own way." was found 2.33 (*SD*=1.02). The mean value of the item "When I prepare for the lesson, I have difficulty to choose or understand the materials" was found 2.18 (*SD*=0.98). The mean value of the item "Sometimes using L1 is much better to teach effectively" was found 1.83 (*SD*=0.69) and "During my classroom practice, I prefer to use mother tongue when it is needed" was found 1.47 (*SD*=0.50). These findings show that teachers agree that focusing on 4 skills and using materials is efficient. However, teachers disagree with L1 usage.

Table 4.25 Descriptive Results for Materials and L1 Usage

	N	Mean	SD
When I prepare for the lesson, I have difficulty to choose or understand the materials.	60	2.18	.98
During my classroom practice, I prefer to use mother tongue when it is needed.	60	1.47	.50
Sometimes using L1 is much better to teach effectively.	60	1.83	.69
The materials used in the lessons are authentic and interactive.	60	2.37	.94
I prefer to apply most of the activities in my own way.	60	2.33	1.02
Focusing on 4 skills (Listening, Speaking, Reading and Writing) in most of classroom materials helps the students learn much better.	60	3.43	.50

1=Strongly disagree, 4=Strongly agree

The descriptive results of self-efficacy were summarized in Table 4.26. It was seen that the item "My proficiency of English is enough to teach through CLIL." was found to have the highest mean value 3.42 (*SD*=0.50). The mean value of the item "I am confident to teach CLIL" was found 3.07 (*SD*=0.58) and "I believe that average knowledge is pretty enough to have interactive CLIL lessons." was found 2.85 (*SD*=0.68). The mean value of the item "I think we need much more training to teach CLIL effectively" was found 2.33 (*SD*=0.95). The mean value of the item "I feel that my English is not sometimes pretty enough to teach subjects in English" was found 1.70 (*SD*=0.74) and "When I teach the content, I switch from target language (English) to mother tongue (Turkish) in order to be understood by the students" was found 1.55 (*SD*=0.50). These findings show that teachers are confident about their proficiency and teaching CLIL. However, they disagree with using mother tongue when teaching.

Table 4.26 Descriptive Results for Self-Efficacy

	N	Mean	SD
My proficiency of English is enough to teach through CLIL.	60	3.42	.50
I am confident to teach CLIL.	60	3.07	.58
I believe that average knowledge is pretty enough to have interactive CLIL lessons.	60	2.85	.68
I feel that my English is not sometimes pretty enough to teach subjects in English.	60	1.70	.74
When I teach the content, I switch from target language (English) to mother tongue (Turkish) in order to be understood by the students.	60	1.55	.50
I think we need much more training to teach CLIL effectively.	60	2.33	.95

1=Strongly disagree, 4=Strongly agree

4.3.3. Relationships between Sociodemographic and Research Variables

In this part of the study, relationships between sociodemographic variables and research variables were examined. In order to analyze gender, age (1=21/30, 2=31/40) and first language of the teacher (1=English, 2=Turkish) independent samples t-test was used. On the other hand, to analyze teaching experience and teaching class, Pearson correlation analysis was used.

Table 4.27 shows that there was no significant relationship between gender, first language of the teacher, teaching class and CLIL's impact on teaching and learning, $p > .05$. However, there is a significant relationship between teacher's age and their opinion about "Students enjoy learning subjects in English" $t_{(57)} = 2.085$, $p < .05$. This result shows that teachers between the ages of 21-30 think that students enjoy learning subjects in English more than 31-40 years old teachers.

It was also found that there is a significant relationship between teaching experience and teacher's opinion about "Students enjoy learning subjects in English" $r = -.284$,

$p < .05$. It shows that when teachers' teaching experience increases, their agreement to "Students enjoy learning subjects in English." decreases.

Table 4.27 Analysis Results for Relationship between Sociodemographic Variables and CLIL's Impact on Teaching and Learning*

	Gender	Age	Exp.	First Lang.	Class
Students enjoy learning subjects in English.	.818	**.042**	**.028**	.482	.297
CLIL helps my students to learn better.	.305	.689	.540	.927	.320
CLIL helps my students to improve their language skills.	.628	.381	.608	.966	.268
CLIL makes teaching easier than other ways such Traditional Classroom.	.305	.689	.540	.927	.320
CLIL makes learning more enjoyable.	.441	.506	.677	.927	.275
CLIL helps students to have self-confidence in the use of target language.	.470	.533	.486	.966	.309

* The table shows the p values of analysis results.

Table 4.28 shows that there was no significant relationship between teachers' sociodemographic variables and their opinion about cooperation, $p > .05$.

Table 4.28 Analysis Results for Relationship between Sociodemographic Variables and Cooperation*

	Gender	Age	Exp.	First Lang.	Class

If you teach other subjects in English, I need to collaborate with the teacher of the subject of study (e.g., History, Science…).	.664	.855	.254	.143	.397
I believe that I can teach without cooperation with the content teacher.	.539	.468	.497	.594	.255
It is easy to cooperate with the content teachers.	.526	.979	.474	.268	.752
CLIL requires more cooperative work with the content teacher.	.605	.916	.584	.927	.888
CLIL requires not only cooperation but also something more than it.	.310	.704	.915	.252	.409
Language and content teachers should always work together in CLIL	.532	.855	.338	.968	.394

* The table shows the p values of analysis results.

Table 4.29 shows that there was no significant relationship between teachers' sociodemographic variables and their opinion about materials and L1 usage, $p > .05$.

Table 4.29 Analysis Results for Relationship between Sociodemographic Variables and Materials and L1 Usage*

	Gender	**Age**	**Exp.**	**First Lang.**	**Class**
When I prepare for the lesson, I have difficulty to choose or understand the materials.	.088	.580	.105	.408	.565

During my classroom practice, I prefer to use mother tongue when it is needed.	.125	.527	.496	.891	.712
Sometimes using L1 is much better to teach effectively.	.267	.736	.979	.626	.674
The materials used in the lessons are authentic and interactive.	.275	.464	.744	.809	.826
I prefer to apply most of the activities in my own way.	.315	.076	.330	.104	.516
Focusing on 4 skills (Listening, Speaking, Reading and Writing) in most of classroom materials helps the students learn much better.	1.000	.506	.564	.062	.200

* The table shows the p values of analysis results.

Table 4.30 shows that there was no significant relationship among age, teaching experience and their self-efficacy scores, p > .05. However, there is a significant relationship between teacher's gender and their opinions about "When I teach the content, I switch from target language (English) to mother tongue (Turkish) in order to be understood by the students" and "I think we need much more training to teach CLIL effectively" $t_{(58)}$ = -2.408, -2.878, p < .05. This result shows that female teachers switch from English to Turkish more often than male teachers. Also, female teachers believe that there should be more training to teach CLIL effectively.

It was also found that there is a significant relationship between teachers' native language and their confidence to teach CLIL $t_{(54)}$ = -2.168, p < .05. It shows that native Turkish teachers are more confident to teach CLIL than native English teachers.

Additionally, there is a significant relationship between teaching class and preference of switching English to Turkish r = .273, p < .05. It shows that when the grade which the teachers are teaching rises from 1 to 8, preference of switching English to Turkish also increases.

Table 4.30 Analysis Results for Relationship between Sociodemographic Variables and Self-Efficacy*

	Gender	Age	Exp.	First Lang.	Class
My proficiency of English is enough to teach through CLIL.	.441	.679	.267	.641	.735
I am confident to teach CLIL.	.074	.188	.975	**.035**	.186
I believe that average knowledge is pretty enough to have interactive CLIL lessons.	.576	.727	.453	.386	.806
I feel that my English is not sometimes pretty enough to teach subjects in English.	.732	.459	.467	.620	.521
When I teach the content, I switch from target language (English) to mother tongue (Turkish) in order to be understood by the students.	**.019**	.515	.143	.927	**.042**
I think we need much more training to teach CLIL effectively.	**.006**	.069	.719	.509	.055

* The table shows the p values of analysis results.

CHAPTER V

DISCUSSION AND CONCLUSION

5.1. Introduction

In this chapter, the findings obtained through the SPSS analyses will be discussed in the light of the relevant literature. The chapter will also present the pedagogical implications, limitations, and suggestions for further studies.

5.2. Discussion of the Findings

5.2.1. Findings of the Observation Form

In this current thesis, observation forms were designed and adopted in order to evaluate the students' psycholinguistic development throughout the process. This form has two parts and it aims to answer the following question; "If the students are exposed to CLIL at a very early age, does it bring any differences in learning a language? If so, what are they and how are these students' psycholinguistic development compared to a group of students who are not exposed to it at early ages?" When looking at the result of the collected data, one could observe that during the experiment, experimental group's psycholinguistic development scores were more positive than control group's scores. However, it is also so interesting that according to the results, control group performance was increasing very fast until the 8th week of the experiment. Therefore, it is also possible to say that it may not matter whether the students are exposed to CLIL for a long time to develop their psycholinguistic competence. Additionally, in this thesis, as an answer for the first question, it can be said that the students' psycholinguistic development will increase and be strongly stabilized throughout their learning adventure especially in terms of self-learning, self-determination, self-confidence, self-starter, pleasure, willingness to participate and attentiveness. if the learners are exposed to CLIL at very early age, their readiness will be more positive and effective. However, the results show that experimental group's score was 3.4 while control group's score was 10.9 in the beginning of the observations. Addtionally, their readiness will be higher effective on their psycholinguistic development because the students' preparedness is always important for a successful and effective learning.

5.2.2. Findings of Intrinsic Motivation Inventory

In the former chapters, it was stated that intrinsic motivation is an important part of learning (Deci & Vansteenkiste, 2004). Additionally, it was found that intrinsic motivation and more autonomous forms of extrinsic motivation are totally related to academic performance because they have positive effect on success (Pintrich & De Groot, 1990; Grolnick & Ryan, 1987)". Taking the importance of intrinsic motivation in language learning into consideration, the recent research has found that motivation in both life and learning bring success (Bono et al., 2014).

Inspired by these findings, this thesis aimed to find an answer to the following question; "Does CLIL affect students' motivation in language learning?" Therefore, the Intrinsic Motivation Inventory was adopted and changed before being filled by the students' teachers. Finally, the results were analysed on SPSS via independent samples t-test to find out the mean differences between the experimental and control groups.

According to the result, it can be said that experimental group's interest/enjoyment, perceived competence, perceived choice and value/usefulness scores were higher than the control group. Also, experimental group's pressure/tension scores were lower than the control group. Therefore, it is possible to say that the results can be associated with the findings of Wu (2003), Froh et al. (2010), Emmons (2009), Hutcherson et al. (2008), Edmunds et al. (2008), and Rahman et al., (2011). As a result, as an answer to the second question in this thesis, it can be said that CLIL plays a crucial role in the young learners' motivation.

5.2.3. Findings of Pre- and Post-Tests

Since the success of the learners shows how effective a method is, in this current thesis, pre- and post-tests were applied in order to show if CLIL is effective or not in learning a language. The pre- and post-tests have 4 main parts; Part 1: Math, Part 2: Social Studies, Part 3: Science and Part 4: Language Arts. The pre-test was applied in the beginning to learn what they have already known and the post-test is applied to see how their knowledge would improve. When looking at the results of the pre-tests, it can be seen that in the control group, the lowest grade is 34 and the highest one is 48 while in the experimental group, the lowest one is 45 and the highest one is 65. As

can be seen, even before the experiment, the experimental group was more successful than the control one. When looking at the results of the post-test, it can be seen that in the control group, one could observe that the lowest grade is 55 and the highest one is 78 while in the experimental group the lowest one is 78 and the highest one is 96. Therefore, even if there is an increasing success in both groups, their success has increased almost equally. However, the experimental group was much more successful since the students in this group were exposed to CLIL 9 months more.

As a result, as an answer the third research question in this thesis, it can be stated that CLIL plays a role in success of the students when they are exposed to CLIL at a very early age.

5.2.4. Findings of Questionnaires for the Teachers

After the discussion of the results of the students' part, it is time to evaluate the teachers' part. Since teaching is a tiring but satisfying profession, it is important to know what teachers think about CLIL. Therefore, in this thesis, the questionnaire was designed and applied to the teachers who have been teaching CLIL for some years. In this thesis, 60 teachers filled the questionnaire (30 males – 30 females). 29 of them are in the 21-30 age group and 30 of them are in 31-40 age group while 1 of them is in the 41-50 age group. When taking these details into consideration, the results seem so interesting in fact.

The findings show that the teachers between the ages of 21-30 think that students enjoy learning subjects in English more than 31-40 years old teachers do. However, when teachers' teaching experience increases, their agreement to "Students enjoy learning subjects in English." interestingly and surprisingly decreases.

Additionally, female teachers switch from English to Turkish more often than male teachers do. Also, female teachers believe that there should be more training to teach CLIL effectively. In addition, native Turkish teachers are more confident to teach CLIL than native English teachers even if English is the second language for most language teachers who participated in this study. Finally, when the grade which teachers teach is increasing from 1 to 8, preference of switching English to Turkish also rises.

After coming across these interesting results, it can be also seen that teachers agree with CLIL's impact on teaching and learning in a positive way. The teachers also believe that CLIL will be much more effective if there is an effective cooperation with other subject teachers. However, they disagree with ease of cooperation. Additionally, teachers agree with focusing on 4 skills and using materials is efficient. However, teachers disagree with L1 usage.

As a conclusion, to answer the last research question, the teachers believe that CLIL can be much more effective at very early ages when there is a good cooperation with subject teachers and when not switching the target language with mother tongue. They also think that CLIL makes learning enjoyable and effective for both students and teachers. Additionally, they emphasize the importance of CLIL in motivating and helping the students to learn better.

5.3. Suggestions for Further Research

This study investigated the relationship between CLIL and psycholinguistic development in language learning of the first grade EFL students at one of the well-known private schools in Turkey. This study also had different aims like finding out about both content and language teachers' attitudes towards CLIL and CLIL's effects on the students' success and their language improvement as well as the impacts on their motivation to learn the target language. Through this research, the main objective was to contribute to the related literature by showing how CLIL, psycholinguistics, motivation and success are working in harmony as indicating the findings of the current study. However, this study is limited in terms of time of the experiment. If this study is extended from 3 months to 6 months, much more interesting results can be obtained. This study is also limited to the first grade students at one of the primary schools in Antalya in Turkey during the first semester of the Academic Year 2018-2019. Thus, if this study is applied to the different age group or grades, different result can be seen. As a conclusion, when taking these limitations into consideration, much more surprising findings can be found and that's why the suggestions can be applied for the further studies in order to contribute the relevant literature.

5.4. Conclusion

Psycholinguistics is a rising demanded area of study in today's world. This research aimed to utilize the findings and the tools of this new study area to contribute to the field of ELT in terms of success and motivation of the students. First, the pre-test was done and observation forms were filled by the researcher throughout the experiment. At the end of the experiment, post-tests and intrinsic motivation inventories were done. Later, 60 teachers were asked to answer the questions in the questionnaire. After the applications of the tools and experiment, the findings were drawn and the mean differences of the pre-tests, the post-tests, motivation inventory and the questionnaires were analysed through the independent samples t-test on SPSS for the experimental and the control groups.

Throughout the experiment, experimental group's psycholinguistic development scores were more positive than control group's psycholinguistic development scores and experimental group's self-learning, self-determination, self-confidence, self-starter, pleasure, willingness to participate and attentiveness scores more positive than control group's. Additionally, the students in the experimental group were much more motivated to learn a language through CLIL. When looking at the success of the students in both groups, one could argue that they all showed good performance, but their success was equally increased even if experimental group was much more successful.

Furthermore, after these results, some argue that if the students are exposed to CLIL in three months of intense CLIL based education, they may be successful. However, the students' preparedness in terms of psycolinguistic development and understanding the target language and subjects will not be enough. Therefore, in the actual classroom practice, students need to get exposed to CLIL for at least 6 months in order to improve psycholinguistically and academically.

The most interesting result of the study was found through teachers' questionnaire because teachers between the ages of 21-30 think that students enjoy learning subjects in English more than 31-40 years old teachers do. Furthermore, when teachers' teaching experience increases, their agreement to "Students enjoy learning subjects in English." decreases. In addition, female teachers switch from English to Turkish more often than male teachers. Female teachers believe also that there

should be more training to teach CLIL effectively. According to the results, native Turkish teachers were more confident to teach CLIL than native English teachers. Lastly, in the higher grades, teachers tend to use the mother tongue for clarification.

Additionally, in the classroom practice, teachers are supposed to prepare for the lessons and the target topics beforehand since they will deliver the science and math lessons even if they are the language teachers. Therefore, CLIL application can be more difficult than what it is in reality and freash teachers who will apply CLIL in their classrooms need much more training.

Besides, the outcomes of the present study showed that the students who were exposed to CLIL more were able to use the target language in the different contexts and times more positively and effectively when compared to the control group's students. Therefore, it is possible to say that Piaget's cognitive theory can be also related to the amount of the exposure across early childhood as well as the stages of improvement and use of the language. Inasmuch as the amount of exposure to the target language is also playing a role on the motivation, success and psycholinguistic development of the learners, especially young learners.

All in all, the results of this study have showed that the CLIL approach is much more effective to teach a language when it is used at very early ages. The further research can be done to contribute to the relevant literature of this area of the study.

REFERENCES

Altınkamış, T. (2009). *A Case Study on the Relation between Content and Language Integrated Learning (CLIL) and Motivation in Language Learning* (1-93). Adana: Çukurova University. Retrieved October 10, 2018, from https://tez.yok.gov.tr/UlusalTezMerkezi/.

Arnó-Macià, E., & Mancho-Bares, G. (2015). The role of content and language in content and language integrated learning (CLIL) at university: Challenges and implications for ESP. *Elsevier (English for Specific Purposes),* 37: 63-73. doi:10.1016/j.esp.2014.06.0070889-4906/

Atlı, I. (2016). *A Suggested Content and Language Integrated Learning (CLIL) Model for the Faculty of Medicine at Ondokuz Mayıs University: Exploring Perceptions and Practices* (1-254). Samsun: Ondokuz Mayıs University. Retrieved November 10, 2018, from https://tez.yok.gov.tr/UlusalTezMerkezi/.

Banegas, D. L. (2018). Learning subject-specific content through ESP in a Geography teaching programme: An action research story in Argentina. *Elsevier (English for Specific Purposes),* 50: 1-13. doi:https://doi.org/10.1016/j.esp.2017.11.001

Bock, K., Konopka, A., & Middleton, E. (2006). Spoken Language Production: Psycholinguistic Approach. *Encyclopedia of Language & Linguistics* (103-112). doi:10.1016/b0-08-044854-2/00799-9

Bono, G., Froh, J. J., & Forrett, R. (2014). Gratitude in school: Benefits to students and schools. In M. Furlong, R. Gilman, & E. S. Huebner (Eds.), Handbook of positive psychology in schools (67–81). New York, NY: Routledge.

Boran, G. (2018). A Psycholinguistic Analysis of Semantic Transfer by Turkish Learners of English. *Novitas-ROYAL (Research on Youth and Language)* (16 -26). Retrieved February/March, 2019, from https://www.researchgate.net/publication/325120672_A_Psycholinguistic_Analysis_of_Semantic_Transfer_by_Turkish_Learners_of_English.

Castella, C. (2010). *Jean Piaget's theory on child language development.* Retrieved February 4th, 2010, from eHow Website: http://www.ehow.com/about_6587239_jean-theory-child-language-development.html

Chomsky, N. (1975). Reflections of Language. New York: Pantheon Books.

Chostelidou, D., & Griva, E. (2014). Measuring the effect of implementing CLIL in higher education: An experimental research project. *Elsevier (Procedia - Social and Behavioral Sciences),* 116: 2169-2174. doi:10.1016/j.sbspro.2014.01.538

Collins Online Dictionary | Definitions, Thesaurus and Translations. (n.d.). Retrieved from https://www.collinsdictionary.com/

Coyle, D. (2008). CLIL: A Pedagogical Approach from the European Perspective. In N. H. Hornberger (Ed.), *Encyclopedia of Language and Education* (97-112). Berlin, Germany: Springer-Verlag Berlin. DOI: 10.1007/978-0-387-30424-3

Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and language integrated learning.* New York, NY: Cambridge University Press.

Crain, S., & Lillo-Martin, D.C. (1999). *An introduction to linguistic theory and language acquisition. Malden,* (MA): Blackwell Publishing Ltd.

Çınar, S. (2018). *Implementation of Content and Language Integrated Learning (CLIL) and Its Effects on Student Motivation* (1-116). İstanbul: Bahçeşehir University. Retrieved January/February, 2018, from https://tez.yok.gov.tr/UlusalTezMerkezi/.

Dall SRX, Houston AI, McNamara JM. (2004). The behavioural ecology of personality: Consistent individual differences from an adaptive perspective. Ecology Letters, 7:734–739. doi:10.1111/j.14610248.2004.00618.x.

Dalton-Puffer, C. (2015). The Role of Different Tasks in CLIL students' use of evaluative language. *Elsevier (System),* 54: 69-79. doi:10.1016/j.system.2015.05.0010346-251X/

Deci, E. L., & Vansteenkiste, M. (2004). Self-determination theory and basic need satisfaction: Understanding human development in positive psychology. Ricerche di Psichologia, 27: 17-34.

Demirezen, M. (1988). Behaviour theory and language learning. *Hacettepe Universitesi Eğitim Fakültesi Dergisi,* 3: 135-140.

Doiz, A., & Lasagabaster, D. (2017). Management teams and teaching staff: do they share the same beliefs about obligatory CLIL programmes and the use of the L1? *Language and Education*, 31(2): 93-109. doi:10.1080/09500782.2017.1290102

Drigas, A., & Karyotaki, M. (2017). Attentional Control and other Executive Functions. *International Journal of Emerging Technologies in Learning (iJET)*, 12 (03): 219. doi:10.3991/ijet.v12i03.6587

Edmunds, J., Ntoumanis, N., Duda, J. L. (2008). Testing a self-determination theory-based teaching style intervention in the exercise domain, *European Journal of Social Psychology*, 388: 375-388.

Ellison, M. (2015). CLIL: The Added Value to English Language Teacher Educatıon For Young Learners. *Linguarum Arena,* 6: 59-69. doi:1647-8770

Emmons, R.A. (2009). Religion, psychology of. In D. Matsumoto (Ed.). *Cambridge Dictionary of Psychology* (438). New York: Cambridge University Press.

Esteban, S. G. (2015). Integrating curricular contents and language through storytelling: Criteria for effective CLIL lesson planning. *Elsevier (Procedia - Social and Behavioral Sciences)*, 212: 47-51. doi:10.1016/j.sbspro.2015.11.297

Explore Encyclopedia Britannica. (n.d.). Retrieved from https://www.britannica.com/

Fernández Fontecha, A. (2014). Receptive vocabulary knowledge and motivation in CLIL and EFL. *Revista de Lingüística y Lenguas Aplicadas*, 1 (9): 23-32. Available at: <https://polipapers.upv.es/index.php/rdlyla/article/view/2077>. Date accessed: 09 Jan. 2019. doi: https://doi.org/10.4995/rlyla.2014.2077.

Foster, P., Tonkyn, A., & Wigglesworth, G. (2000). Measuring spoken language: A unit for all reasons. *Applied Linguistics*, 21: 354–375. https://doi.org/10.1093/applin/21.3.354

Froh, J. J., Kashdan, T. B., Yurkewicz, C., Fan, J., Allen, J., & Glowacki, J. (2010). *The benefits of passion and absorption in activities: Engaged living in adolescents and its role in psychological well-being*. Manuscript submitted for publication.

Gándara, D. G. (2017). The Role of the Students in the CLIL Classroom A New Perspective to Identify Types of Tasks. *International Journal of Applied Linguistics & English Literature, 6* (4): 5-10. ISSN 2200-3452

Gao, G., & Cao, J. (2015). Effects of CLIL on EAP Learners: Based on Sample Analysis of Doctoral Students of Science. *International Journal of Applied Linguistics and English Literature*, 4 (5): 1-11. doi:10.7575/aiac.ijalel.v.4n.5p.113

Gierlinger E. & Wagner T. (2016). The more the merrier – revisiting CLIL-based vocabulary growth in secondary education. *LACLIL*, 9 (1): 37-63. doi:10.5294/laclil.2016.9.1.3

Goodluck, H. (1991). *Language acquisition: A linguistic introduction.* Malden (MA): Blackwell Publishing Ltd.

Gordo, M. (2017). The oral production and negotiation of meaning of Spanish EFL children in task-supported interaction: The role of age and task repetition. Retrieved from https://pdfs.semanticscholar.org/8704/ae640410697570236bc5eadf334418eef41b.pdf

Goris, J., Denessen, E. & Verhoeven L. (2017): The contribution of CLIL to learners' international orientation and EFL confidence, *The Language Learning Journal*, DOI: 10.1080/09571736.2016.1275034

Haselow, A. (2018). Language change from a psycholinguistic perspective: The long-term effects of frequency on language processing. *Language Sciences,* 68: 56-77. doi:10.1016/j.langsci.2017.12.006

Hutcherson C. A., Seppala E. M., Gross J. J. (2008). Loving-kindness meditation increases social connectedness. *Emotion,* 8: 720–724.

Jimenez Catalan, R. M., & Agustín Llach, M. P. (2017). CLIL or time? Lexical profiles of CLIL and non-CLIL EFL learners. *Elsevier (System),* 66: 87-99. http://dx.doi.org/10.1016/j.system.2017.03.016

Kassymova, G. (2018). *The Effect of CLIL-Based Training on Turkish EFL Preservice Teachers' Self-Efficacy Beliefs and Attitudes towards CLIL* (1-97). İstanbul: Bahçeşehir University. Retrieved September 10, 2018, from https://tez.yok.gov.tr/UlusalTezMerkezi/.

Kewara, P., & D. P. (2017). CLIL teacher Professional Development for Content Teachers in Thailand. *Irainian Journal of Language Teaching Research,* 6 (1): 93-108. Retrieved August 10, 2018.

Korosidou E. & Griva E. (2016). "It's the same world through different eyes": a content and language integrated learning project for young EFL learners. *Colomb. Appl. Linguist J.*, 18 (1): 116-132.

Kusmayadi, Y., & Suryana, Y. (2017). Improving students' factual report writing skill by using content and language integrated learning (CLIL) method. *Indonesian EFL Journal*, 3 (1): 21-3.

Leech, G., & Weisser, M. (2003). Generic speech act annotation for task-oriented dialogue. In D. Archer, P. Rayson, A. Wilson, & A. McEnery (Eds.), Proceedings of the corpus linguistics 2003 conference. Lancaster: UCREL Technical Papers. https://doi.org/10.3115/1118078.1118084

Linden, L. (2007). *The Basic Theories of Language Acquisition.* Norderstedt, Germany: GRIN Verlag.

Maiz-Arevalo, Carmen; Domínguez Romero, Elena, (2013). Students' response to CLIL in tertiary education: the Case of Business administration and economics at Complutense University. *Revista de Lingüística y Lenguas Aplicadas,* l (8): 1-12. ISSN 1886-6298. Available at: <https://polipapers.upv.es/index.php/rdlyla/article/view/955>. Date accessed: 09 July 2018. doi: https://doi.org/10.4995/rlyla.2013.955.

Manafe, N. R. (2018). Making Progress in Content and Language Integrated Learning (CLIL) Lessons: An Indonesian Tertiary Context. *SHS Web of Conferences,* 42: 1-7. doi: https://doi.org/10.1051/shsconf/20184200111GC-TALE

Mariño, C. M. (2014). Towards implementing CLIL at CBS (Tunja, Colombia). Colombian Applied Linguistics Journal, 16 (2): 151-160.

Marsh, D. (2000). *Using Languages to Learn and Learning to Use Languages*, Finland, University of Jyväskylä.

Marsh, D. (2002). *CLIL/EMILE – The European Dimension. Actions, Trends and Foresight Potential*, Strasbourg, European Commission.

Mayo, M. D. & Hidalgo, M. A. (2015). Do children negotiate for meaning in task-based interaction? Evidence from CLIL and EFL settings. *Elsevier (System),* 54: 40-54. http://dx.doi.org/10.1016/j.system.2014.12.001

McAuley, E., Duncan, T., & Tammen, V. V. (1987). Psychometric properties of the Intrinsic Motivation Inventory in a competitive sport setting: A confirmatory factor analysis, Research Quarterly for Exercise and Sport, 60: 48-58.

McDougald, J. (2015). Teachers´ attitudes, perceptions and experiences in CLIL: A look at content and language. Colomb. Appl. Linguist. J., 17 (1): 25-41.

McLaughlin, S.F. (2010). Verbal Behaviour by B.F Skinner: contributions to analyzing early language learning. *Journal of Speech- Language Pathology and Applied Behaviour Analysis.* Retrieved February 3rd, 2011, from BNET Website: http://findarticles.com/p/articles/mi_6888/is_2_5/ai_n54226849/?tag=content;col1

MSG Management Study Guide. (n.d.). Retrieved from https://www.managementstudyguide.com/what_is_motivation.htm

Nieto Moreno de Diezmas, E. (2018). "Exploring CLIL contribution towards the acquisition of cross-curricular competences: a comparative study on digital competence development in CLIL*". Revista de Lingüística y Lenguas Aplicadas,* 13: 75-85. https://doi.org/10.4995/rlyla.2018.9023

Nordqvist, C. (2018). What is psychology? Retrieved from https://www.medicalnewstoday.com/articles/154874.ph

Oprescu, M. (n.d.). Cultural Identity Through CLIL. *De Gruyter,* (34-39). doi:10.1515/rjes-2015-0005

Orazbekova, Z., Burbekova, S., & Isabekova, G. (2014). Psycholinguistic Aspects of Nonverbal Communication in the Turkish Speaking Cultures. *Procedia - Social and Behavioral Sciences,* 112: 787-791. doi:10.1016/j.sbspro.2014.01.1231

Pappa, S., Moate, J., Ruohotie-Lyhty, M., Etelapelto, A. (2017). Teachers' Pedagogical and Relational Identity Negotiation in the Finnish CLIL Context. *Elsevier (Teaching and Teacher Education),* 65: 61-70. http://dx.doi.org/10.1016/j.tate.2017.03.0080742-051X/

Pavenkova Rubtcova, M., & Pavenkov, O. & Pavenkov, V. (2018). English, Russian, And Russian Englısh In Russia: Clıl And Non-Clil Students' Opinion In Saınt Petersburg. *Revista Científica Hermes,* 20: 133-152. Retrieved August 10, 2018, from m.rubtsova@spbu.ru

Pérez, M. C., & Basse, R. (2015). Analyzing errors of CLIL and non-CLIL primary school students in their written and oral productions: A comparative study. *Elsevier (Procedia - Social and Behavioral Sciences),* 173: 11-17. doi:10.1016/j.sbspro.2015.02.023

Pérez, M. L., & Malagón, C. G. (2017). Creating materials with ICT for CLIL lessons: A didactic proposal. *Elsevier (Procedia - Social and Behavioral Sciences),* 237: 633-637. doi:10.1016/j.sbspro.2017.02.02

Perez-Vidal, C., & Roquet, H. (2015). The linguistic impact of a CLIL Science programme: An analysis measuring relative gains. *Elsevier (System),* 54: 80-90. http://dx.doi.org/10.1016/j.system.2015.05.004

Pickering, M., & Branigan, H. (1999). Syntactic priming in language production. *Trends in Cognitive Sciences,* 3 (4): 136-141. doi:10.1016/s1364-6613(99)01293-0

Pladevall-Ballester, E., & Vallbona, A. (2016). CLIL in minimal input contexts: A longitudinal study of primary school learners' receptive skill. *Elsevier (System),* 58: 3748. http://dx.doi.org/10.1016/j.system.2016.02.009

Rahman, R.J., Thogersen-Ntoumani, C., Thatcher, J., Doust, J. (2011). Changes in need satisfaction and motivation orientation as predictors of psychological and behavioural outcomes in exercise referral. *Psychology & Health*, 26 (11): 1521-1539.

Ryan, R. M. (1982). Control and information in the intrapersonal sphere: An extension of cognitive evaluation theory. Journal of Personality and Social Psychology, 43: 450–461.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55 (1): 68-78.

Slobin D I. (1996). 'From ''thought and language'' to ''thinking for speaking.''' In Gumperz J & Levinson S C (eds.) *Rethinking linguistic relativity* (70–96). Cambridge: Cambridge University Press.

Smet, A. D., Mettewie, L., Galand, B., Hiligsmann, P., & Mensel, L. V. (2018). Classroom anxiety and enjoyment in CLIL and non-CLIL: Does the target language matter? *Studies in Second Language Learning and Teaching,* 8 (1): 47-71. doi:10.14746/ssllt

Sylvén, L. K. (2015). CLIL and non-CLIL students' beliefs about language. *Studies in Second Language Learning and Teaching,* 2 (4): 251-272. doi:10.14746/ssllt.2015.5.2.4

Temirova, F., & Westall, D. (2015). Analysis of first and foreign language use in Content and Language Integrated Learning (CLIL) classrooms. *Elsevier (Procedia - Social and Behavioral Sciences),* 178: 217-221. doi:10.1016/j.sbspro.2015.03.184

Wahyuningsih, N., Widiati, U., & Anugerahwati, M. (2016). Teachers' Attitudes toward the Use of Clil in ESP Classes. *Jurnal Pendidikan*, 1 (9): 1853-1863. doi:2507-471X

Williamson, G. (2008). *Language Acquisition*. Retrieved February 4th, 2010, from Speech Therapy Information and Resources Website: http://www.speech-therapy-information-and-resources.com/language-acquisition.html

Wu, X. (2003). Intrinsic motivation and young language learners: The impact of the classroom environment. *System*, 31: 501-517.

Your Dictionary. (n.d.). Retrieved from https://www.yourdictionary.com/

Yufrizal, H., H., & Hasan, B. (2017). Project Based - Content Language Integrated Learning (Clil) at Mathematics Department Universitas Lampung. *The Canadian Center of Science and Education*, 10 (9): 131-138. doi:10.5539/elt.v10n9p131

APPENDICES

Appendix A: The Pre-test

Pre- Test

Student Name: **Date:**

Part 1: Math

1.

Look at the underlined numbers, colour the squares.

Ones = Red Tens = Blue

67	23	47	54	32	16	18
80	42	74	10	26	14	83
49	70	33	17	92	51	49
93	22	44	88	46	31	66
61	80	59	28	57	25	90
19	41	63	39	83	77	53
40	36	50	65	60	34	72

2. Please do the following addition, multiplication, fraction and subtractions.

2 + 2
5 – 3
6 * 2
9 / 3

3
12
2
4

Part 2: Social Studies

Dayo's New Friend

This is Dayo. He lives in Africa. One day, he finds a baby elephant. The elephant is lonely and scared. Dayo likes the elephant.

He shows his parents the elephant. 'What's this?' ask his parents. 'It's my pet elephant', says Dayo. Dayo's parents take the elephant to a reserve. Dayo is sad.

At the reserve, the people take care of Dayo's elephant. They give the elephant milk and food.

A year later, Dayo goes to the reserve. He puts out food and waits. Then he sees his friend. The elephant is big and strong now. Dayo is very happy.

Section 1: Write True or False.

1. Dayo finds a big elephant. False

2. Dayo is happy when the elephant goes to a reserve. ……

3. At the reserve, people take care of the elephant. ……

4. The elephant is big when Dayo sees it again. ……

Section 2: Answer the questions about characters.

the elephant	Dayo	Dayo's parents

1. Who takes the elephant to the reserve?

_____

2. Who is happy to see the elephant big and strong?

_____

3. Who is lonely and scared?

_____

Part 3: Science

Look at the sentences and pictures. Re-write the definitions in correct categories. Draw or write the names of the living things and non-living things into correct categories.

Living things:

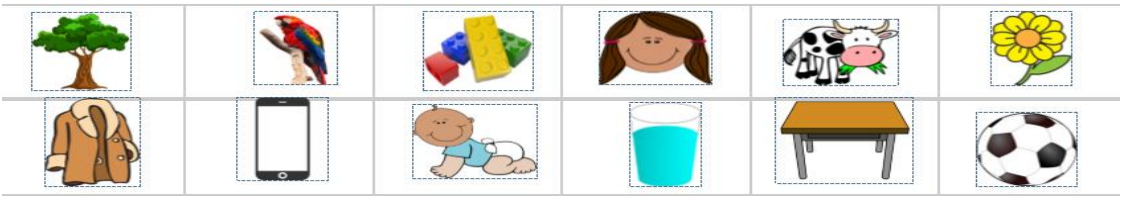
……

Non-living things:

……

A. The things that grow, produce seeds, need oxygen and food such as humans and animals are alive.

B. They don't breathe and don't need food or water. They don't move and grow. These things are not alive.



Part 4: Language Arts

Please match the following idioms with their meanings.

It is raining cats and dogs.	*Being so happy.*
On Cloud Nine	*It is raining a lot.*
Walking on Eggshells	*If you think together with someone, the outcome will be better than if just one of you thought of the idea*
Two head are better than one	*Good Luck*
I'm all ears.	*Trying really hard to not upset someone*
Break a leg.	*Ready to listen.*

Appendix B: The Post-test

Post- Test

Student Name: **Date:**

Part 1: Math

1. Do the following problems.

   a. I have 10 Turkish Liras. If I spend 3 liras to buy some toys, how much money is left?

   b. Ali has 8 Turkish Liras. His mother gives 10 liras. How much money does he have?

   c. Gokhan has 6 marbles. He lost 3 of them and found 6 under the bed. How many does he have now?

   d. My car goes 12 km away from my work. However, I have to go 1 km on foot. In total, how many kilometres do I walk every day?

2. Please do the following addition, multiplication, fraction and subtractions.

6 + 5
9 - 5
8 * 5
10 / 5

40
2
11
4

Part 2: Social Studies

Goldilocks and the 3 Bears

Once upon a time there was a little girl. Her name was Goldilocks. She had golden hair. One day Goldilocks was walking in the forest. She saw a house and knocked on the door. She went inside. Nobody was there. Goldilocks saw three bowls on the table. She was hungry. 'This porridge is too hot! This porridge is too cold! This porridge is just right!'

Goldilocks ate all the porridge. Goldilocks was tired now.

'This chair is too big! This chair is too big, too! This chair is just right!'

But the chair broke. Goldilocks was very tired. She went upstairs. 'This bed is too hard! This bed is too soft! This bed is just right!' Soon, the bears came home.

'Someone's been eating my porridge!' said Daddy Bear.

'Someone's been eating my porridge!' said Mummy Bear.

'Someone's been eating my porridge - and it's all gone!' said Baby Bear.

'Someone's been sitting on my chair!' said Daddy Bear.

'Someone's been sitting on my chair!' said Mummy Bear.

'Someone's been sitting on my chair - and it's broken!' said Baby Bear.

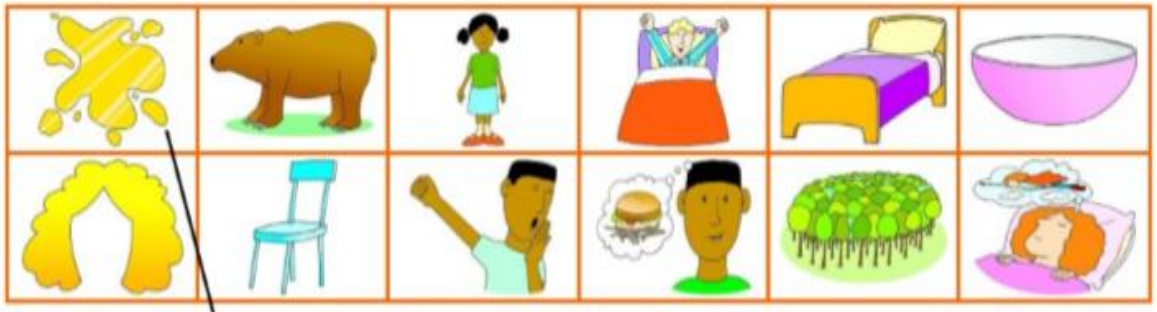
'Someone's been sleeping in my bed!' said Daddy Bear.

'Someone's been sleeping in my bed!' said Mummy Bear.

'Someone's been sleeping in my bed - and she's still there!' said Baby Bear.

Goldilocks woke up and saw the three bears. 'Help!' She ran downstairs and into the forest. She never came back again.

Section 1: Please match the words with the pictures.



girl	golden	hair	forest	bowl	hungry
chair	tired	bed	bear	sleep	wake up

Section 2: Find the words from Section 1

I	B	E	A	R	T	H	Q	S	N	Y	B
Z	T	E	L	W	E	I	A	B	F	G	H
G	O	L	D	E	N	T	W	I	O	P	X
I	C	N	G	Z	F	I	R	U	R	W	S
R	M	H	U	N	G	R	Y	F	E	J	L
L	R	P	A	H	L	E	C	X	S	K	E
O	A	Y	S	I	Q	D	V	O	T	M	E
J	U	K	D	V	R	W	A	K	E	U	P

Part 3: Science

Look at the sentences and pictures. Re-write the definitions in correct categories. Draw or write the names of need and wants into correct categories.

Needs:

……

Wants:

……

A. The things that all living things need to live and they necessary.

B. They are not necessary for living, but they make life easier and enjoyable sometimes. We can live without them.

Part 4: Language Arts

Please match the following idioms with their meanings.

It is raining cats and dogs.	*Being so happy.*
On Cloud Nine	*It is raining a lot.*
Walking on Eggshells	*If you think together with someone, the outcome will be better than if just one of you thought of the idea*
Two head are better than one	*Good Luck*
I'm all ears.	*Trying really hard to not upset someone*
Break a leg.	*Ready to listen.*

Appendix C: Questionnaires for the Teachers

Questionnaire on Teachers' Attitudes, Perceptions and Understanding in CLIL

This questionnaire is an essential part in getting to understand the attitudes, experience and challenges of both content and language teachers as well as to learn its impacts on the development of the students. The questionnaire will take only 10 minutes to complete. The information gathered will be used to aid in understanding the impact of CLIL in private sector in Turkey. The answers will be kept confidential. Thank you for answering the questions truly and sincerely.

Mert ATEŞ

Part 1

Name (Optional)		**Gender**	Male	Female
Age Range	21/30 - 31/40 - 41/50 - 51/60	**Teaching Experience (in years)**		
First Language	English	Turkish	Other:	
Which class (es) are you teaching? (Please specify if you teach Newcomers)				

Part 2

		Statements	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**
Part 1 (CLIL and its impact on teaching and learning)	**1**	Students enjoy learning subjects in English.				
	2	CLIL helps my students to learn better.				
	3	CLIL helps my students to improve their language skills.				
	4	CLIL makes teaching easier than other ways such Traditional Classroom.				
	5	CLIL makes learning more enjoyable.				

	6	CLIL helps students to have self-confidence in the use of target language.				
Part 2 (CLIL and Cooperation)	**7**	If you teach other subjects in English, I need to collaborate with the teacher of the subject of study (e.g., History, Science…).				
	8	I believe that I can teach without cooperation with the content teacher.				
	9	It is easy to cooperate with the content teachers.				
	10	CLIL requires more cooperative work with the content teacher.				
	11	CLIL requires not only cooperation but also something more than it.				
	12	Language and content teachers should always work together in CLIL				
Part 3 (Materials and L1 Usage)	**13**	When I prepare for the lesson, I have difficulty to choose or understand the materials.				
	14	During my classroom practice, I prefer to use mother tongue when it is needed.				
	15	Sometimes using L1 is much better to teach effectively.				
	16	The materials used in the lessons are authentic and interactive.				
	17	I prefer to apply most of the activities in my own way.				
	18	Focusing on 4 skills (Listening, Speaking, Reading and Writing) in most of classroom materials helps the students learn much better.				
(Self-Efficacy	**19**	My proficiency of English is enough to teach through CLIL.				

	20	I am confident to teach CLIL.				
	21	I believe that average knowledge is pretty enough to have interactive CLIL lessons.				
	22	I feel that my English is not sometimes pretty enough to teach subjects in English.				
	23	When I teach the content, I switch from target language (English) to mother tongue (Turkish) in order to be understood by the students.				
	24	I think we need much more training to teach CLIL effectively.				

Please write anything else that you would like to share with the researcher about CLIL or your experience of CLIL. ☺

Appendix D: The Observation Form

The Observation Form

This form is designed to collect some information about the participants' language and psycholinguistic development during the application of CLIL process across early childhood.

Part 1

Student			**Gender**	**Male**	**Female**	**Age**	
Observation Date	**…/…/…**	**Observation Week**		**Class - Group**		**Control Group**	
						Experimental Group	

Part 2

	Statements	**Yes**	**No**
1	The student feels confident while participating in some conservation in English.		
2	Knowing the content gives the student a chance to say his/her ideas.		
3	The student does not want to join English activities at all.		
4	The student usually tends to use his/her mother tongue.		
5	The student produces only sentences in English to communicate.		
6	The student produces only words in English to communicate.		
7	The student uses only his/her body gestures to communicate.		
8	The student produces both sentences and words in English to communicate.		
9	The student neither produces any sentences or words nor uses his/her body gestures to communicate.		
10	The student is not eager to attend English lessons.		
11	The student has difficulties to remember the previous topics.		

12	The student needs to be reminded to produce a full sentence.		
13	The student can answer the comprehensive questions.		
14	The student focuses on other things rather than the topic.		
15	The student needs to repeat the sentences before producing.		

Appendix E: Observation Checklist

CLASSROOM OBSERVATION CHECKLIST

This checklist is done to collect some specific information about the process.

1: Good **2:** Neutral **3:** Bad

Name of the participant: **Group/Class:**

	Self-learning	Self-determination	Self-confidence	Self-starter	Pleasure	Willingness to participate	Attentiveness
Week 1							
Week 2							
Week 3							
Week 4							
Week 5							
Week 6							
Week 7							
Week 8							
Week 9							
Week 10							
Week 11							

Week 12							

Appendix F: Intrinsic Motivation Inventory

INTRINSIC MOTIVATION INVENTORY

This intrinsic motivation inventory is designed to collect some information to learn how participants' intrinsic motivation is affected by the process of the application of CLIL.

3- Yes, I agree 2- I partly agree 1- No, I don't agree

Student Name: Doğa	**Age:**	**Group/Class: Experimental**	**Gender: M / F**

INTEREST / ENJOYMENT	1. He/She enjoyed doing the activities very much.	
	2. Activities were fun to do for him/her.	
	3. He/She thought activities were not attracting the attention.	
	4. Activities did not hold his/her attention at all.	
	5. While he/she was doing activities, he/she was thinking about how much he/she enjoyed them.	
PERCEIVED COMPETENCE	1. I think he/she is pretty good at activities in general.	
	2. I think he/she did pretty well at activities, compared to other students.	
	3. After working at activities for a while, he/she felt pretty competent.	
	4. He/She was pretty skilled at activities.	
	5. During the application of CLIL he/she couldn't do very well.	
PRESSURE / TENSION	1. He/She did not feel nervous at all while doing activities.	
	2. He/She felt very tense while doing activities.	
	3. He/She was very relaxed in doing the activities.	
	4. He/She was anxious while working on tasks.	

	5. He/She felt pressured while doing the activities.	
PERCEIVED CHOICE	1. He/She felt like it was not his/her choice to do tasks.	
	2. He/She felt like he/she had to do the activities.	
	3. He/She did activities because he/she had no choice.	
	4. He/She did activities because he/she wanted to.	
	5. He/She did activities because he/she had to.	
VALUE / USEFULNESS	1. He/She believes activities could be of some value to him/her.	
	2. He/She thinks that doing activities is useful because he/she could associate English with the things he/she learnt in the other lessons.	
	3. He/She thinks activities are important to do because he/she learned more effectively and meaningfully.	
	4. He/She would be willing to do activities again because they have some value to him/her.	
	5. He/She sees the values of the tasks and does the activities accordingly.	

Appendix G: Intrinsic Motivation Inventory (IMI) by Ryan (1982)

Intrinsic Motivation Inventory (IMI)

Scale Description

The Intrinsic Motivation Inventory (IMI) is a multidimensional measurement device intended to assess participants subjective experience related to a target activity in laboratory experiments. It has been used in several experiments related to intrinsic motivation and self-regulation (e.g., Ryan, 1982; Ryan, Mims & Koestner, 1983; Plant & Ryan, 1985; Ryan, Connell, & Plant, 1990; Ryan, Koestner & Deci, 1991; Deci, Eghrari, Patrick, & Leone, 1994). The instrument assesses participants interest/enjoyment, perceived competence, effort, value/usefulness, felt pressure and tension, and perceived choice while performing a given activity, thus yielding six subscale scores. Recently, a seventh subscale has been added to tap the experiences of relatedness, although the validity of this subscale has yet to be established. The interest/enjoyment subscale is considered the self-report measure of intrinsic motivation; thus, although the overall questionnaire is called the Intrinsic Motivation Inventory, it is only the one subscale that assesses intrinsic motivation, per se. As a result, the interest/enjoyment subscale often has more items on it that do the other subscales. The perceived choice and perceived competence concepts are theorized to be positive predictors of both self-report and behavioural measures of intrinsic motivation, and pressure/tension is theorized to be a negative predictor of intrinsic motivation. Effort is a separate variable that is relevant to some motivation questions, so is used it its relevant. The value/usefulness subscale is used in internalization studies (e.g., Deci et al, 1994), the idea being that people internalize and become self-regulating with respect to activities that they experience as useful or valuable for themselves. Finally, the relatedness subscale is used in studies having to do with interpersonal interactions, friendship formation, and so on.

The IMI consists of varied numbers of items from these subscales, all of which have been shown to be factor analytically coherent and stable across a variety of tasks, conditions, and settings. The general criteria for inclusion of items on subscales have been a factor loading of at least 0.6 on the appropriate subscale, and no cross loadings above 0.4. Typically, loadings substantially exceed these criteria. Nonetheless, we recommend that investigators perform their own factor analyses on

new data sets. Past research suggests that order effects of item presentation appear to be negligible, and the inclusion or exclusion of specific subscales appears to have no impact on the others. Thus, it is rare that all items have been used in a particular experiment. Instead, experimenters have chosen the subscales that are relevant to the issues they are exploring. The IMI items have often been modified slightly to fit specific activities. Thus, for example, an item such as I tried very hard to do well at this activity can be changed to I tried very hard to do well on these puzzles or ...in learning this material without effecting its reliability or validity. As one can readily tell, there is nothing subtle about these items; they are quite face-valid. However, in part, because of their straightforward nature, caution is needed in interpretation. We have found, for example, that correlations between self-reports of effort or interest and behavioural indices of these dimensions are quite modest--often around 0.4. Like other self-report measures, there is always the need to appropriately interpret how and why participants report as they do. Ego-involvements, self-presentation styles, reactance, and other psychological dynamics must be considered. For example, in a study by Ryan, Koestner, and Deci (1991), we found that when participants were ego involved, the engaged in pressured persistence during a free choice period and this behaviour did not correlate with the self-reports of interest/enjoyment. In fact, we concluded that to be confident in one's assessment of intrinsic motivation, one needs to find that the free-choice behaviour and the self-reports of interest/enjoyment are significantly correlated.

Another issue is that of redundancy. Items within the subscales overlap considerably, although randomizing their presentation makes this less salient to most participants. Nonetheless, shorter versions have been used and been found to be quite reliable. The incremental R for every item above 4 for any given factor is quite small. Still, it is very important to recognize that multiple item subscales consistently outperform single items for obvious reasons, and they have better external validity.

On The Scale page, there are five sections. First, the full 45 items that make up the 7 subscales are shown, along with information on constructing your own IMI and scoring it. Then, there are four specific versions of the IMI that have been used in past studies. This should give you a sense of the different ways it has been used. These have different numbers of items and different numbers of subscales, and they

concern different activities. First, there is a standard, 22-item version that has been used in several studies, with four subscales: interest/ enjoyment, perceived competence, perceived choice, and pressure/tension. Second, there is a short 9-item version concerned with the activity of reading some text material; it has three subscales: interest/enjoyment, perceived competence, and pressure/tension. Then, there is the 25-item version that was used in the internalization study, including the three subscales of value/usefulness, interest/enjoyment, and perceived choice. Finally, there is a 29-item version of the interpersonal relatedness questionnaire that has five subscales: relatedness, interest/enjoyment, perceived choice, pressure/tension, and effort.

Finally, McAuley, Duncan, and Tammen (1987) did a study to examine the validity of the IMI and found strong support for its validity.

References

Deci, E. L., Eghrari, H., Patrick, B. C., & Leone, D. (1994). Facilitating internalization: The self-determination theory perspective. *Journal of Personality*, 62, 119-142.

McAuley, E., Duncan, T., & Tammen, V. V. (1987). Psychometric properties of the Intrinsic Motivation Inventory in a competitive sport setting: A confirmatory factor analysis. *Research Quarterly for Exercise and Sport*, 60, 48-58.

Plant, R. W., & Ryan, R. M. (1985). Intrinsic motivation and the effects of self-consciousness, self-awareness, and ego-involvement: An investigation of internally-controlling styles. *Journal of Personality*, 53, 435-449.

Ryan, R. M. (1982). Control and information in the intrapersonal sphere: An extension of cognitive evaluation theory. Journal of Personality and Social Psychology, 43, 450- 461.

Ryan, R. M., Connell, J. P., & Plant, R. W. (1990). Emotions in non-directed text learning. *Learning and Individual Differences*, 2, 1-17.

Ryan, R. M., Koestner, R., & Deci, E. L. (1991). Varied forms of persistence: When free-choice behavior is not intrinsically motivated. *Motivation and Emotion*, 15, 185-205.

Ryan, R. M., Mims, V., & Koestner, R. (1983). Relation of reward contingency and interpersonal context to intrinsic motivation: A review and test using cognitive evaluation theory. *Journal of Personality and Social Psychology*, 45, 736-750

The Scales

THE POST-EXPERIMENTAL INTRINSIC MOTIVATION INVENTORY

(Below are listed all 45 items that can be used depending on which are needed.)

For each of the following statements, please indicate how true it is for you, using the following scale: 1 2 3 4 5 6 7

not at all somewhat very true true true

Interest/Enjoyment

I enjoyed doing this activity very much

This activity was fun to do.

I thought this was a boring activity. (R)

This activity did not hold my attention at all. (R)

I would describe this activity as very interesting.

I thought this activity was quite enjoyable.

While I was doing this activity, I was thinking about how much I enjoyed it.

Perceived Competence

I think I am pretty good at this activity.

I think I did pretty well at this activity, compared to other students.

After working at this activity for a while, I felt pretty competent.

I am satisfied with my performance at this task.

I was pretty skilled at this activity.

This was an activity that I couldn’t do very well. (R)

Effort/Importance

I put a lot of effort into this.

I didn’t try very hard to do well at this activity. (R)

I tried very hard on this activity.

It was important to me to do well at this task.

I didn’t put much energy into this. (R)

Pressure/Tension

I did not feel nervous at all while doing this. (R)

I felt very tense while doing this activity.

I was very relaxed in doing these. (R)

I was anxious while working on this task.

I felt pressured while doing these.

Perceived Choice

I believe I had some choice about doing this activity.

I felt like it was not my own choice to do this task. (R)

I didn’t really have a choice about doing this task. (R)

I felt like I had to do this. (R)

I did this activity because I had no choice. (R)

I did this activity because I wanted to.

I did this activity because I had to. (R)

Value/Usefulness

I believe this activity could be of some value to me.

I think that doing this activity is useful for _____

I think this is important to do because it can _____

I would be willing to do this again because it has some value to me.

I think doing this activity could help me to _____

I believe doing this activity could be beneficial to me.

I think this is an important activity.

Relatedness

I felt really distant to this person. (R)

I really doubt that this person and I would ever be friends. (R)

I felt like I could really trust this person.

I'd like a chance to interact with this person more often.

I'd really prefer not to interact with this person in the future. (R)

I don't feel like I could really trust this person. (R)

It is likely that this person and I could become friends if we interacted a lot.

I feel close to this person.

Constructing the IMI for your study: First, decide which of the variables (factors) you want to use, based on what theoretical questions you are addressing. Then, use the items from those factors, randomly ordered. If you use the value/usefulness items, you will need to complete the three items as appropriate. In other words, if you were studying whether the person believes an activity is useful for improving concentration, or becoming a better basketball player, or whatever, then fill in the blanks with that information. If you do not want to refer to a particular outcome, then just truncate the items with its being useful, helpful, or important.

Scoring information for the IMI: To score this instrument, you must first reverse score the items for which an (R) is shown after them. To do that, subtract the item response from 8, and use the resulting number as the item score. Then, calculate subscale scores by averaging across all of the items on that subscale. The subscale scores are then used in the analyses of relevant questions.

****

For each of the following statements, please indicate how true it is for you, using the following scale:

! ! ! 1 2 3 4 5 6 7

not at all somewhat very

true true true

1. While I was working on the task I was thinking about how much I enjoyed it.

2. I did not feel at all nervous about doing the task.

3. I felt that it was my choice to do the task.

4. I think I am pretty good at this task.

5. I found the task very interesting.

6. I felt tense while doing the task.

7. I think I did pretty well at this activity, compared to other students.

8. Doing the task was fun.

9. I felt relaxed while doing the task.

10. I enjoyed doing the task very much.

11. I didn't really have a choice about doing the task.

12. I am satisfied with my performance at this task.

13. I was anxious while doing the task.

14. I thought the task was very boring.

15. I felt like I was doing what I wanted to do while I was working on the task.

16. I felt pretty skilled at this task.

17. I thought the task was very interesting.

18. I felt pressured while doing the task.

19. I felt like I had to do the task.

20. I would describe the task as very enjoyable.

21. I did the task because I had no choice.

22. After working at this task for a while, I felt pretty competent.

Scoring information: Begin by reverse scoring items # 2, 9, 11, 14, 19, 21. In other words, subtract the item response from 8, and use the result as the item score for that

item. This way, a higher score will indicate more of the concept described in the subscale name. Thus, a higher score on pressure/tension means the person felt more pressured and tense; a higher score on perceived competence means the person felt more competent; and so on. Then calculate subscale scores by averaging the items scores for the items on each subscale. They are as follows. The (R) after an item number is just a reminder that the item score is the reverse of the participant's response on that item.

Interest/enjoyment: 1, 5, 8, 10, 14(R), 17, 20

Perceived competence: 4, 7, 12, 16, 22

Perceived choice: 3, 11(R), 15, 19(R), 21(R)

Pressure/tension: 2(R), 6, 9(R), 13, 18

The subscale scores can then be used as dependent variables, predictors, or mediators, depending on the research questions being addressed.

****

TEXT MATERIAL QUESTIONNAIRE I

For each of the following statements, please indicate how true it is for you, using the following scale as a guide:

1 2 3 4 5 6 7

not at all somewhat very

true true true

1. While I was reading this material, I was thinking about how much I enjoyed it.

2. I did not feel at all nervous while reading.

3. This material did not hold my attention at all.

4. I think I understood this material pretty well.

5. I would describe this material as very interesting.

6. I think I understood this material very well, compared to other students.

7. I enjoyed reading this material very much.

8. I felt very tense while reading this material.

9. This material was fun to read.

Scoring information: Begin by reverse scoring items # 2 and 3. In other words, subtract the item response from 8, and use the result as the item score for that item. This way, a higher score will indicate more of the concept described in the subscale name. Then calculate subscale scores by averaging the items scores for the items on each subscale. They are shown below. The (R) after an item number is just a reminder that the item score is the reverse of the participant's response on that item.

Interest/enjoyment: 1, 3(R), 5, 7, 9

Perceived competence: 4, 6,

Pressure/tension: 2(R), 8

****

The next version of the questionnaire was used for a study of internalization with an uninteresting computer task (Deci et al., 1994).

ACTIVITY PERCEPTION QUESTIONNAIRE

The following items concern your experience with the task. Please answer all items. For each item, please indicate how true the statement is for you, using the following scale as a guide:

1 2 3 4 5 6 7

not at all somewhat very

true true true

1. I believe that doing this activity could be of some value for me.

2. I believe I had some choice about doing this activity.

3. While I was doing this activity, I was thinking about how much I enjoyed it.

4. I believe that doing this activity is useful for improved concentration.

5. This activity was fun to do.

6. I think this activity is important for my improvement.

7. I enjoyed doing this activity very much.

8. I really did not have a choice about doing this activity.

9. I did this activity because I wanted to.

10. I think this is an important activity.

11. I felt like I was enjoying the activity while I was doing it.

12. I thought this was a very boring activity.

13. It is possible that this activity could improve my studying habits.

14. I felt like I had no choice but to do this activity.

15. I thought this was a very interesting activity.

16. I am willing to do this activity again because I think it is somewhat useful.

17. I would describe this activity as very enjoyable.

18. I felt like I had to do this activity.

19. I believe doing this activity could be somewhat beneficial for me.

20. I did this activity because I had to.

21. I believe doing this activity could help me do better in school.

22. While doing this activity I felt like I had a choice.

23. I would describe this activity as very fun.

24. I felt like it was not my own choice to do this activity.

25. I would be willing to do this activity again because it has some value for me.

Scoring information: Begin by reverse scoring items # 8, 12, 14, 18, 20, and 24 by subtracting the item response from 8 and using the result as the item score for that item. Then calculate subscale scores by averaging the items scores for the items on each subscale. They are shown below. The (R) after an item number is just a reminder that the item score is the reverse of the participant's response on that item.

Interest/enjoyment: 3, 5, 7, 11, 12(R), 15, 17, 23

Value/usefulness: 1, 4, 6, 10, 13, 16, 19, 21, 25

Perceived choice: 2, 8(R), 9, 14(R), 18(R), 20(R), 22, 24(R)

****

SUBJECT IMPRESSIONS QUESTIONNAIRE

The following sentences describe thoughts and feelings you may have had regarding the other person who participated in the experiment with you. For each of the following statement please indicate how true it is for you, using the following scale as a guide:

1 2 3 4 5 6 7

not at all true somewhat true very true

1. While I was interacting with this person, I was thinking about how much I enjoyed it.

2. I felt really distant to this person.

3. I did not feel at all nervous about interacting with this person.

4. I felt like I had choice about interacting with this person.

5. I would describe interacting with this person as very enjoyable.

6. I really doubt that this person and I would ever become friends.

7. I found this person very interesting.

8. I enjoyed interacting with this person very much.

9. I felt tense while interacting with this person.

10. I really feel like I could trust this person.

11. Interacting with this person was fun.

12. I felt relaxed while interacting with this person.

13. I'd like a chance to interact more with this person.

13. I'd like a chance to interact more with this person.

14. I didn't really have a choice about interacting with this person.

15. I tried hard to have a good interaction with this person.

16. I'd really prefer not to interact with this person in the future.

17. I was anxious while interacting with this person.

18. I thought this person was very boring.

19. I felt like I was doing what I wanted to do while I was interacting with this person.

20. I tried very hard while interacting with this person.

21. I don't feel like I could really trust this person.

22. I thought interacting with this person was very interesting.

23. I felt pressured while interacting with this person.

24. I think it's likely that this person and I could become friends.

25. I felt like I had to interact with this person.

26. I feel really close to this person.

27. I didn't put much energy into interacting with this person.

28. I interacted with this person because I had no choice.

29. I put some effort into interacting with this person.

Scoring information: Begin by reverse scoring items # 2, 3, 6, 12, 14, 16, 18, 21, 25, 27, and 28 by subtracting the item response from 8 and using the result as the item score for that item. Then calculate subscale scores by averaging the items scores for the items on each subscale. They are shown below. The (R) after an item number is just a reminder that the item score is the reverse of the participant's response on that item.

Relatedness: 2(R), 6(R), 10, 13, 16(R), 21(R), 24, 26

Interest/enjoyment: 1, 5, 7, 8, 11, 18(R), 22

Perceived choice: 4, 14(R), 19, 25(R), 28(R)

Pressure/tension: 3(R), 9, 12(R), 17, 23,

Effort: 15, 20, 27(R), 29

CV

Mert Ateş earned his BA from Karadeniz Technical University, Department of English Language and Literature. During his BA education, he has been to Kristianstad University in Sweden as an exchange student for a year. Additionally, he got his Pedagogical Teaching Certificate from his home university during his B.A. After completing the training programs by Cambridge and Oxford University on Foreign Language Teaching, he continued his teaching in several institutions. Now, he has been working as an English Teacher in a primary school in Antalya while he continues his studies and publications.