



**HOW DOES SUBTRACTIVE BILINGUALISM AFFECT THE ACADEMIC PERFORMANCE AND L1 OF STUDENTS FROM SOCIAL GROUPS WITH LOW ETHNOLINGUISTIC VITALITY?**

COMO O BILINGUISMO SUBSTRATIVO AFETA O DESEMPENHO ACADÊMICO E L1 DE ALUNOS DE GRUPOS SOCIAIS COM BAIXA VITALIDADE ETOLINGUÍSTICA?

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**ABSTRACT**

This discusses the impact of subtractive bilingualism on students' academics and first language (L1) linguistic and communicative competences. Our target group will be students from low ethnolinguistic vitality social groups studying in an English as Medium of Instruction (EMI) context. It aims at discussing, elucidating and reflecting on the impact of subtractive bilingualism on speakers' academics and domain of communicative and linguistic skills using their First language (L1). It also aims to trigger an interest on people about this topic and also to trigger future reflection on how language planners, specially within the educational context guarantee that within their planning there is an intention of maintaining students' L1s. The present piece of work is based on a deep literature review. Since the main source of data for this study is the literature available, a more descriptive approach is adopted and displayed throughout this article. This study shows to be relevant due to the fast growing of the English Language all over the world, which may be beneficial since it strengthens its position as the main vehicle of international communication, it opens up job opportunities and it more and more connects people from different places. However, it may also leave devastating marks on some L1s and on the academic performance of their speakers. Most of the times, these negative effects occur within the educational context. Some educational institutions around the world have adopted English as a Medium of Instruction (EMI) for their schools because of the high ethnolinguistic vitality it carries, but a very careful linguistic planning/policy should be engendered so that English does

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not corrode the L1 as well as weaken the ability of speakers to understand and explain the world around themselves. This study will help elucidate people of the danger many L1s may be exposed to because of the expansion of the English Language around the world.

**Key words:** Academic performance, Bilingualism, Subtractive Bilingualism, EMI, Ethnolinguistic vitality, L1.

### RESUMO

Este artigo discute o impacto do bilinguismo substrativo dos alunos da universidade e nas competências linguísticas e comunicativas da primeira língua (L1). Nosso grupo-alvo serão alunos de grupos sociais de baixa vitalidade etnolinguística estudantes em um contexto de inglês como meio de instrução (EMI). Tem como objetivo discutir, elucidar e refletir sobre o impacto do bilinguismo subtrativo nos acadêmicos dos falantes e no domínio das habilidades comunicativas e linguísticas em sua língua materna (L1). Visa também despertar o interesse das pessoas sobre o tema e também uma reflexão futura sobre como os planejadores de línguas, principalmente no contexto educacional, garantem que dentro de seu planejamento haja a intenção de manter os L1s dos alunos. O presente trabalho é baseado em uma profunda revisão da literatura. Uma vez que a principal fonte de dados para o estudo é a literatura disponível, uma abordagem mais descritiva é adotada e exposta ao longo deste artigo. Este estudo mostra-se relevante devido ao rápido crescimento da Língua Inglesa em todo o mundo; o que pode ser benéfico, pois fortalece a sua posição como principal veículo de comunicação internacional, abre oportunidades de trabalho e cada vez mais conecta pessoas de lugares diferentes. No entanto, também pode deixar marcas devastadoras em alguns L1s e no desempenho acadêmico de seus falantes. Na maioria das vezes, esses efeitos negativos ocorrem dentro do contexto educacional. Algumas instituições de ensino ao redor do mundo adotaram o inglês como meio de instrução (EMI) para suas escolas devido à alta vitalidade etnolinguística que carrega, mas um planejamento linguístico muito cuidadoso / a política deve ser engendrada de forma que o inglês



não corra o L1, bem como enfraqueça a habilidade dos falantes de entender e explicar o mundo ao seu redor. Este estudo ajudará a elucidar as pessoas sobre o perigo ao qual muitos L1s podem estar expostos devido à expansão da Língua Inglesa ao redor do mundo.

Palavras-chave: Desempenho acadêmico; Bilinguismo; Bilinguismo subtrativo; EMI; Vitalidade etnolinguística, L1.

### 1- Introduction

Many authors and researchers in the field of Second Language Acquisition (SLA) (Lambert 1980; Liddicoat, 1991; Landry & Allard, 1992 & Robert, 1995) defend that subtractive bilingualism occurs when an individual is attempting to acquire or learn a second language. The conditions into which the second language (L2) is learned or acquired and the conditions into which the L1 is subjected to during the process of learning of an L2 may determine whether the individual involved develops subtractive bilingualism or not. The status of the individual's L1 and the status of the language being learned also play an important role. In this sense, if the L1 is of a low status and L2 of high status, the probability of having subtractive bilingualism is high, especially if no strong attention is paid to developing a strong policy that protects and develops the L1. Nowadays, enough attention needs to be paid to schools, especially those that use learner's L2s as the main medium of instruction; for example, schools where EMI is a reality.

Authors within this field (for example, Lambert, 1980) also defend that subtractive bilingualism may affect the academic performance of the individual trying to learn an L2. People in general express their feelings, emotions, imaginations, fantasy and understandings of the world and knowledge about various topics through language. Therefore, people need to know the language and have the necessary vocabulary so that they can make all of those things known by those they intend to communicate the ideas to. Sometimes, people may fail to communicate their ideas because they do not have domain of the language used or because they do not have the needed vocabulary to communicate those ideas and the world may understand that as a failure at first



glance. However, they may do better if they are also given a chance to communicate the same ideas in a language they fully understand.

The linguistic and communicative competence of individuals in L1 may also be affected. When a language is not used, it dies. One of the most basic way of protecting and maintaining a language alive is by making sure that it is consistently used in everyday life. For example, an L1 should be meaningfully used accordingly to the diverse social and cultural contexts, which means that fluent and accurate communication is required.

## 2- METHODOLOGY

This particular study is a bibliographic research because it relies on data collected from articles, books, journals and several other sources of this kind written or produced about this topic.

Bibliographic research, or secondary sources, covers all bibliography already made public in relation to the topic of study, from single publications, newsletters, newspapers, magazines, books, research, monographs, theses, cartographic material, etc. (Lakatos & Marconi, 2003).

This author highlights this particular way of doing research, and reinforces that wheel has been invented and all that needs to be done is to make use of it.

In general, the method resorted to here aims to put the researcher in direct contact with everything that has been written, said or filmed on a given subject, including conferences followed by debates that have been transcribed by some form, whether published or recorded (Lakatos & Marconi, 2003). For instance, through careful reading and selection of relevant data from different authors, various stand points were brought together, analyzed, criticized, compared and conclusions were drawn as well. Among the resources resorted to, books and articles, the most available sources were most used.





### 3- Subtractive Bilingualism

This section discusses the concept of subtractive bilingualism in the perspective of several authors. It also focuses on the impact of subtractive bilingualism on Academics and L1.

The term subtractive bilingualism was first created and first used in Lambert (1985) cited in Landry & Allard (1992). Since then, more and more authors have done researches to understand its causes, development, impacts and possible ways of its eradication. Along the studies, various definitions were also developed.

For example, subtractive bilingualism characterizes the situation in which students lose their first language in the process of acquiring their second language (Robert, 1995).

According to Liddicoat (1991), subtractive bilingualism develops when the two languages are competing rather than complementary. Such competition occurs when the minority language is being replaced by the more dominant and prestigious language of the majority group.

For many bilinguals, however, especially the minority group members, contacts with a second language had a detrimental effect leading to lower levels of L1 development and eventually linguistic and cultural assimilation. This kind of bilingualism was termed “subtractive” because of the negative consequences on the L1 development (Landry & Allard, 1992).

For Lambert, subtractive bilingualism is characterized by the loss or erosion of a home or first language and culture (Lambert 1980, in Baker 1993).

All authors agree that there should be at least 2 languages involved so that subtractive bilingualism emerges; one language being the individual L1 and another being the target language (L2). This thinking drives us to the second point of convergence among the authors, which is, the fact that an individual undergoes this phenomenon when he/ she is attempting to acquire an L2.



Liddicoat (1991) and Landry and Allard (1995) go deeper by specifying the actual context in which subtractive bilingualism is more likely to occur. Therefore, they highlight that there is a higher probability if the individual who attempts to learn a second language comes from a minority group whose language is of a lower status.

Liddicoat (1991) and Landry and Allard (1992) implicitly talk about the concept of Ethnolinguistic Vitality (EV) when they bring the terms minority and majority languages. This concept is defined in Landry and Allard (1995) by Giles, Bourhis and Taylor (1977) as the sociocultural factors that affect a group's ability to behave and survive as a distinct and collective entity.

In a nutshell, subtractive bilingualism is a phenomenon which is deeply affecting many people, especially students whose L1s are of lower status compared to the L2s. For example, in education where students are taught in the target language without proper support to their L1s, their L1s erode and their ability to express, learn and debate topics in their L1s decreases. This detrimental effect has also been noticed and proved by some authors who have been researching in the field.

For example, for Tamtam, Gallagher, Olabici and Naher (2012), one of the challenges of EMI is related to the detrimental effect this language policy can have on the mother tongues of the countries that resorted to it.

To illustrate, the case of Namibia, a country situated in the south western part of Africa, has witnessed the decline of ten native languages since English became an official one after the country got independent in 1990 (Brock-Utne & Holmaldottir, 2001 cited in Tamtam, Gallagher, Olabici & Naher, 2012).



#### **4-Impact of subtractive bilingualism on Academics and L1**

The language we speak is more than a tool that serves our daily communication, for example, to express our feelings, emotions, knowledge, dreams, etc., but it also distinguishes communities and social groups from each other. Therefore, one needs to master his/her language in order to be able to communicate ideas and preserve his/her sociocultural identity.

In general, this section focuses on the impact of subtractive bilingualism on academics and L1.

##### **4.1-Impact of subtractive bilingualism on Academics**

In this particular section, this piece of work focuses on how impactful subtractive bilingualism can be within the EMI school context, specifically on one's academic performance.

Magabe (2009) defends that an individual assimilates content when the communicative act is done through a language he understands. However, he/ she shows to understand better when the language used for the communicative act is his /her own language.

Most of the things we do in school at all levels are done through linguistic signs, either written or spoken. When we write an essay, answer questions on a test, do exams and fill in forms, we make use of our language. We also make use of our language when we are asked to give a speech, participate in debates, deliver a presentation or/and do oral exams. Therefore, we need to be fluent and accurate in the Language used as the medium of instruction, that's to say, one needs to be linguistically and communicatively competent in order to perform those successfully. He/she also needs to be aware of the necessary vocabulary for these acts to take place.

Magabe's point of view is that there is no problem in having people being instructed in a new language, but learning would be more effective if they were instructed in the language, they understand better (L1). For example, students who learn new subjects in a language that is not

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theirs', they have double tasks; they need to try to understand the new language, and then understand the content of their subjects. These detours may slow down their academic progress.

Kırkgöz (2013) explored the perceptions of 151 first and last year students about EMI. The results showed that both groups of students saw the EMI as "an obstacle to learning disciplinary knowledge" (p. 36) and understanding of their lectures.

Coşkun, Köksal and Tuğlu (2014) involving 90 pre-service teachers from three language teaching departments (Turkish, English and German) revealed that the participants obtained higher scores on comprehension at the basic and deep levels of reading comprehension when received it in Turkish and not in their foreign languages.

Coşkun, Köksal and Tuğlu findings are very relevant because they involved teachers who usually plan, organize, teach, evaluate and reflect on their work. These teachers were able to see huge difference in terms of academic performance between students whose first languages were other than English. These authors also proved that instruction or proper support in L1 may strengthen students' abilities to use language to enhance their academic performances.

Merve, Soruç and Griffiths (2018) investigated the difficulties and strategies of EMI students at a Turkish university, and they found out that students had few strategies for managing their emotional reactions, such as shyness and shame.

This finding shows to be crucial in explaining why students fail to give speeches, participate in debates and pass oral exams. Shyness and shame may hinder students from performing the way they should, maybe because they think their domain of the English language is not as good as it should be.

In a nutshell, if one does not have domain of the language he/ she speaks, he/ she may find it difficult to do well at school, whether it is his/ her L1 or L2.





#### 4.2-Impact of subtractive bilingualism L1

Apart from affecting students' academic performance, subtractive bilingualism affects the ability to use the L1.

Kırkgöz's (2005) study of 203 university students found detrimental effects of learning disciplines through another language, such as a feeling of detachment from their native language and culture.

The lack of opportunities for students to use their L1 within their school contexts, and the intensive and almost forced use of a new language as a medium of instruction more and more splits students and their languages.

According to Liddicoat (1991), one of the impacts of subtractive bilingualism is the erosion or decay of the L1; within the next paragraphs, this paper will look at language shift and loss.

Language shift and loss are some of the results of subtractive bilingualism. Maybe, it is the moment to bring up some definitions of the term being approached now.

The loss or change of a language denotes changes in collective language choices as a result of the destabilization of language ecologies due to changes in the political, economic and social ecology of their communities (Heinrich, 2015).

Here, Heinrich argues that the loss or change of a language makes the speaker start using the newly learnt language (L2) to using his/her L1; the speaker also stops using his/her language in the school, social institutional domains. Another negative result is that as time passes by, the speaker's first language destabilizes.



Summing up, students' first language is the one that suffers the most from subtractive bilingualism; this happens because it is usually the language with low status and ethnolinguistic vitality.

## FINAL CONSIDERATIONS

The benefits that a second language, especially English may convey are not deniable. It is not deniable that the spread of English has made it a must for people to learn it. It is undeniable as well that schools all over the world have opened their doors to students from different parts of the world and this fact leads to the choice of a common language for instruction and communication.

Countries, through universities, as a way of preparing their citizens for the current world dynamic, have devised courses, for example for English Language Teaching, where in some cases, they switch from L1 instruction to L2 instruction.

In one way, having a common language for instruction and communication is very important because it brings people together or unites people more and more. It also reduces the number of planning and the amount of money that could be invested to purchase resources that would be required for the coverage of all languages.

However, alongside the teaching of English and choice of the same language as the medium of communication, a lot more attention needs to be paid to the maintenance or development of the L1; especially, those L1s with low status and low ethnolinguistic vitality.

The aim of this work was to discuss, elucidate and reflect on the impact of subtractive bilingualism on speakers' academics and domain of their First language (L1). Among the findings, those of following researchers stand out:

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For example, Kırkgöz (2013) discovered that some students looked at EMI as an obstacle to learning disciplinary knowledge and understanding of their lectures.

Coşkun, Köksal and Tuğlu (2014) in their studies involving Turkish pre-service teachers also noticed that students obtained higher scores on comprehension at the basic and deep levels of reading comprehension when received it in Turkish and not in their foreign languages.

Students had few strategies for managing their emotional reactions, such as shyness and shame (Merve, Soruç and Griffiths, 2018)

In relation to the use of the use of students' L1 the following finds make themselves more visible:

Kırkgöz's (2005) study of 203 university students found detrimental effects of learning disciplines through another language, such as a feeling of detachment from their native language and culture.

According to Liddicoat (1991), one of the impacts of subtractive bilingualism is the erosion or decay of the L1.

Heinrich(2015) also mentions language loss or change, which denotes changes in collective language choices as a result of the destabilization of language ecologies due to changes in the political, economic and social ecology of their communities.

It was another aim of this work was to trigger an interest on people about this topic and also trigger future reflections on how language planners, specially within the educational context guarantee that within their planning there is an intention of maintaining students' L1s.



For this specific aim, there are no tangible evidences as such, but it is believed that the writing of this article will be a turning point in what concerns how this topic is approached and discussed in real situations.

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