



Attitudes towards Codeswitching in ESP classes: A Case Study of Second-Year Students in Business Administration

Actitudes hacia el cambio de código en las clases de inglés para fines específicos: Un estudio de caso de estudiantes de Administración de Empresas

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Abstract: Globalization has favored the expansion of teaching and learning English in higher education worldwide. Spain has not been an exception. The aim of this paper is to examine students' attitude to codeswitching and determine whether variables such as sex and age play a role in the perception of codeswitching in the English for Specific Purposes (ESP, hereinafter) classroom. The focus is specifically on second-year-Business Administration students. A datadriven analysis of data, collected by means of the questionnaire, reveals that neither sex nor age are significantly influential in the students' attitude to codeswitching. Furthermore, the findings indicate that resorting to Spanish while learning English contributes substantially to enhancing learners' learning experience and making it more effective.

Keywords: Codeswitching; English for specific purposes; attitudes; bi/multilingualism; higher

Summary: Introduction. Literature Review. Method. Data Analysis. Discussion and Concluding Remarks.

Resumen: La globalización ha favorecido la expansión de la enseñanza y el aprendizaje del inglés en la educación superior en todo el mundo, y España no se ha quedado al margen. El objetivo de este estudio es examinar la actitud de los estudiantes hacia el cambio de código y determinar si variables como el sexo y la edad influyen en la percepción del cambio de código en el aula de inglés para fines específicos (ESP, en inglés). El estudio se centra específicamente en estudiantes de segundo año de Administración de Empresas. Un análisis basado en datos, recopilados a través de un cuestionario, revela que ni el sexo ni la edad tienen una influencia significativa en la actitud de los estudiantes hacia el cambio de código. Además, los resultados indican que recurrir al español durante el aprendizaje del inglés contribuye sustancialmente a mejorar la experiencia de aprendizaje de los estudiantes y hacerla más eficaz.

Palabras clave: Cambio de código; inglés para fines específicos; actitudes; bi/multilingüismo; educación superior.

Sumario: Introducción. Revisión de la literatura. Método. Análisis de datos. Discusión y conclusiones

INTRODUCTION

Over the last decades, Spanish decision-makers and scholars have incentivized foreign language teaching with a view to meeting the European Union's goals and fostering internationalization (Anghel et al.). English is now taught and used as a medium of instruction, not only in primary and secondary schools, but also in higher education (Macaro et al.). This increasing demand for English language education in Spain has posed challenges related to teacher or learner profiles and attitudes as well as pedagogic methods. By and large, much emphasis has been placed on monolingual approaches, which are based on the belief that teachers should be fluent enough to avoid alternating between codes in the classroom (Custodio Espinar). Moreover, while research on language attitudes continues to grow in other contexts (Macaro; Ellwood;

Canagarajah; Chimbutane; Samar and Moradkhani; Buoy and Nicoladis), little is known of students' attitudes towards codeswitching in ESP classes at La Universidad Europea de Madrid (UEM, hereinafter). This research was motivated by the hypothesis that, despite being officially discouraged, codeswitching involving Spanish and English is very common in foreign language classes and viewed positively by the students. Therefore, with the aim of determining the students' attitudes to codeswitching, we surveyed—by means of questionnaires—students enrolled in the undergraduate degree program in Business Administration (BA, hereinafter) at UEM. To this end, the study specifically intends to (1) learn more about how widespread codeswitching practices are, (2) understand the role of codeswitching in ESP classrooms, (3) examine students' attitudes towards codeswitching, and (4) explore and explain motives for codeswitching from the students' perspective. Specifically, the study intends to provide scientific answers to the following research questions.

- (1) Is codeswitching positively or negatively perceived?
- (2) How does sex affect the students' attitudes to codeswitching?
- (3) How does age affect the students' attitudes to codeswitching?
- (4) What pragmatic, academic, and psychological factors drive students to codeswitch, and how do they justify their choices?

The above-mentioned research questions rest on the following two hypotheses:

- H₁. Sex does not play a statistically significant role in students' attitudes to codeswitching. In other words, male and female students have similar attitudes to codeswitching.
- H₂. Age does not play a statistically significant role in students' attitudes to codeswitching.

This paper is organized as follows. Section 2 reviews literature on codeswitching and attitudes in both ESP and second language acquisition contexts. Section 3 describes the method. The data will be presented in section 4. The results are analyzed in Section 5. Section 6 discusses the results. Finally, the conclusions are drawn in the final section.

1. LITERATURE REVIEW

Codeswitching refers to the alternation of two or more different languages during a communicative exchange among bilingual individuals (Ellwood; Canagarajah). Although codeswitching is a common phenomenon among bilingual individuals (Macaro; Ellwood; Chimbutane; Samar and Moradkhani; Buoy and Nicoladis; Hazaymeh), it is considered "a chaotic practice." In some cases, codeswitching is regarded as "a sign of lack of mastery of either or both languages" (Mabule 340). This negative view also applies to codeswitching in the foreign language classroom. Some scholars claim that language alternation can be a liability and a source of confusion for students (Raschka et al.). However, others consider that the use of the first language (or L1) should be seen as an asset in the bilingual classroom (Muñoz and Mora). The argument is that allowing students to make use of "natural codeswitching" encourages "greater . participation" and can be used as a means of scaffolding in early levels (Muñoz and Mora 35). According to Muñoz and Mora (38), the use of codeswitching by teachers normally responds to affective and repetitive functions, such as indicating a change in topic (topic switch), building rapport with students (affective function), or clarifying the meaning of key information (repetitive function). On the other hand, students' codeswitching instances tend to respond to establishing equivalencies, or translating certain words; reiteration, and floor-holding, or using their L1 "to avoid gaps in communication," thus prioritizing communication over accuracy.

Determining the impact of codeswitching in language teaching/learning based on students' attitudes, has attracted the attention of many scholars (Ellwood; Wei and Wu; Raschka et al.; Canagarajah; Chimbutane). What seems to be the agreed-upon assertion about these studies is the argument that (positive and negative) attitudes towards codeswitching are key to, not just the success and/or failure of teaching/learning practices, but more importantly, may determine ways in which students assimilate the culture of the target language, while connecting the experience with thoughts and ideas already developed in L1. This has the potential to promote a "safe space" for bilingualism. For example, it has been suggested that positive attitudes may become an important factor to avoid tensions and conflicts that may arise between the target language ideologies and policies and the actual practices of teachers and students (Wei and Wu; Meij and Zhao). This, however, does not mean

attitudes to codeswitching are always positive in every language teaching/learning context. Codeswitching is often argued to undermine the learning process by proponents of the target language exclusivity. The argument, as Macaro (531) notes, is that "teaching entirely through [the target language] makes the language real, allows learners to experience unpredictability, and develops the learners' own in-built language system."

1.1 A Note on Translanguaging in Higher Education

Translanguaging, as in Baker, is an approach in pedagogy which emphasizes the use of the students' full linguistic repertoire in the classroom. Although most studies on translanguaging fall within language revitalization, bilingual education and second language acquisition, research from other fields such as distributed cognition and language have also contributed positively to conceptualizing translanguaging (Wei). One may argue that until the early 90s, the use of students' first language in second language classes was highly discouraged and thought to affect their ability to achieve full proficiency in the second language. Research into the use of students' home language in multilingual settings has gained ground recently. García, for example, studies Hispanic students in the USA in which the author contends that the students' underachievement was mainly due to the fact that their home language, Spanish, was never seen as a resource that teachers could tap into. In other words, resorting to the mother tongue has a positive effect on student achievement (see Effiong).

It is also important to note that, even though translanguaging and codeswitching involve alternating between languages, Wei insists that both terms should not be used interchangeably as they differ in their theoretical conceptualization. While the definition of codeswitching is built on the identification and distinction between languages, translanguaging, as Wei (167) posits, "emphasizes human beings' ability to deliberately break the boundaries of named languages to create novel ways of expression and communication." This paper focusses on codeswitching, even though some of the practices we observed could perfectly be described as translanguaging.

2. METHOD

This section overviews the context of the study, describes the participants, and explains the instruments and data collection procedure.

2.1 Context

This study is an exploratory attempt at determining not just the students' attitudes to codeswitching, but more importantly the role codeswitching plays in ESP classrooms at UEM where ESP is a compulsory subject in virtually every undergraduate program. ESP is a subject taught throughout the second year of every program at UEM. The subject is taken by students whose English level is B2 according to the CEFR. This paper specifically focuses on second-year students enrolled in the Business Administration undergraduate program. The choice of this program was both practical and methodological. It is practical in the sense that this was one of the programs with the most students enrolled in the second semester of the 2022/2023 academic year. Because of the exploratory nature of the study in a context where, to the best of our knowledge, no attention has ever been paid to either attitudes or codeswitching focusing on one single program could provide not just insights into the spread of codeswitching in ESP classrooms and its impact on the academic performance of the students, but more importantly, this could serve as a reference to much larger-scale research on codeswitching at UEM. This choice was also methodological in the sense that most of the responses (44.87%) to the questionnaire, randomly sent out to second-year students enrolled in undergraduate programs, came from the Business Administration undergraduate program alone, and, as will be explained in the upcoming subsection, over half of all the students enrolled in this program completed the questionnaire.

2.2 Participants

The participants in this study included second-year students enrolled in the BA program. Overall, 179 students, including 131 male and 48 female students, were enrolled in this program in the second semester of the

¹ The long-term goal of this research group is eventually to study attitudes to codeswitching in virtually every program taught at UEM.

2022/2023 academic year. Of these 179 students, 92 students, which represents 51.39%, completed the questionnaire. In terms of the sample representation, this means that 1 in 2 students enrolled in the program completed the questionnaire. Of the 92 students who completed the questionnaire, 68, which represents 53.12% were male students whereas 24, which represents 47.05%, were female students. In other words, roughly half of both male and female students participated evenly in the survey, making the gender distribution reflective of BA classes at UEM. Put in perspective, this sample is more representative than those used in other studies which rely on fewer than 30 participants (Macaro; Ellwood; Samar and Moradkhani). In terms of age, self-reported responses led us to categorize the students' age in three different cohorts, including 18/20, 21/24 and 25+. As will be seen in the analysis, most participants were aged 21 to 24 (n 47) followed by students aged 18–20 (n 37). Only 8.6 percent of our respondents (n 8) were 25 or older.

2.3 Instruments and Data Collection Procedure

The data collection process started with the design of a robust data collection tool to gather suitable data on the students' attitudes. This led to the design of a Google form-based questionnaire. The questionnaire was organized in four different sections, including students' linguistic background, current ESP context, attitudes toward codeswitching in general and attitudes towards own codeswitching (see Appendix 1). Then, the questionnaire was sent out to the students through their teachers in the second week of May 2023. Each teacher was advised to put aside about 10 minutes at the end of their scheduled classes to allow the students to complete the questionnaire. This first attempt at data gathering did not yield as much data as expected. Therefore, a second attempt was made in the fourth week of May 2023. The questionnaire included four main categories of questions. The first category was intended to test students' attitudes to codeswitching in general. The second one was designed as a self-assessment of students' own codeswitching. The third category of questions aimed at eliciting information regarding how often students would make use of more than one language in everyday life. The final category was intended to evaluate the motives for which the students codeswitch. While categories 1, 2 and 3 were based on Likert scales, category 4 included close-end questions allowing the students to select one response category out of five suggested response categories, each of which represented specific pragmatic purpose for codeswitching in the classroom.

One may argue that reliance on the questionnaire alone is a drawback since the study would have benefitted a great deal from the combination of more than one single data collection tool. However, studies that solely rely on questionnaires as a strong data collection tool have had a significant impact in assessing students' attitudes and perceptions of codeswitching in ESP and ESL classrooms (Levine; Wei and Martin; Van der Meij and Zhao; Buoy and Nicoladis). Second, to strengthen our approach, the questionnaire was designed in a way that could yield both the students' attitudes and the motives behind the use of codeswitching. Finally, the fact that all the authors of this paper are experienced ESP teachers allows us to reflect on this experience as a background observational tool of codeswitching as it manifests in the classroom.

3. DATA ANALYSIS

The present paper draws on a mixed-method analysis which tackles the collected data from both qualitative and quantitative approaches. While the quantitative analysis sheds light on the statistical values of codeswitching, the qualitative analysis explores the pragmatic motives behind the use of codeswitching in the classroom.

Sex and age were examined as independent variables in order to determine their impact, if any, on the manifestation of codeswitching in the classroom. This understanding implies that attitudes to codeswitching are taken as a dependent variable whose value depends on changes in the independent variables. The dependent variable here is positive or negative attitudes to codeswitching. In other words, the paper sets out to test whether favorable or unfavorable attitudes to codeswitching depend on the students' sex and/or their age. In terms of sex, for example, females' attitudes were contrasted to males' attitudes to determine whether sex bears any influence on the occurrence of codeswitching. In terms of age, the three cohorts, including 18/20, 21/24 and 25+, were statistically contrasted to determine their ramifications when it comes to students' attitudes to codeswitching. The goal here was to test and determine whether there might be any variations based on the students' age.

Statistical analyses, especially those based on Likert scale, often rely on a reasonable manipulation of control variables. This is why, in each of the categories of questions, specific Likert-related response categories

were carefully selected to serve as control variables. In categories 1 and 2, for example, "strongly disagree," "disagree," "neutral," "agree," and "strongly agree" serve as the control variables. In category 3, we relied on "never or hardly ever," "occasionally," "sometimes," "often," "very often" to serve as control variables so as to determine the frequencies in the use of codeswitching. In category 4, however, we relied on key aspects in language teaching/learning to serve as control variables. These aspects include "it does not make any difference," "to increase attention span," "to feel more confident about what the teacher is saying," "to produce an answer and to follow instructions." The manipulation of these variables allowed us to examine not just the nature of codeswitching, but also its causes, effects as well as consequences in students' academic performance.

Finally, to test the above-mentioned hypotheses, the analysis of the data is carried out both horizontally and vertically. The horizontal analysis allows us to determine the effect of both dependent and independent variables on the control variables. The vertical analysis, on the other hand, was intended to contrast the findings both in terms of sex and age. The extent to which each variable affects the use of codeswitching in the ESP classroom was determined by running two main statistical analyses, including mixed ANOVA and logistic regression analysis.

4. RESULTS

The data analysis begins with a closer look at students' attitudes to the concept of teacher-induced codeswitching. Then, it delves into an examination of the students' attitudes towards their own codeswitching in the specific context of ESP. Frequencies and/or occurrences of codeswitching as reported by the students are explored before looking into the role of codeswitching in the students' academic performance.

4.1 Students' Attitudes Towards Teacher-Induced Codeswitching

The students' attitudes were examined based on how they positioned themselves regarding some statements as described below.

Before moving any further, it is important to point out that all the statements related to Q1² in both tables 1 and 2 (i.e., Q1a, Q1b, Q1c, Q1d, Q1d and Q1e) represent some of the different functions of codeswitching in the classroom, as put forward in previous studies (Sánchez Carretero; Muñoz and Mora). For example, whereas Q1a, Q1b, and Q1d touch into the students' language development, Q1c and Q1e account for the way codeswitching becomes a tool to build teacher and student relationships in second language acquisition and ESP.

Overall, the students' perception of teacher-induced codeswitching is more favorable. For example, in Q1a, 41.17% of male and 41.66% of female students "agree," and 25% of male and 29.16% of female students "strongly agree." Only a small proportion of students "disagree," 1.47% of male and 4.16% of female. Finally, 4.41% of male and none of female "strongly disagrees." Resorting to Spanish while learning English can be deemed useful by the students as they seek to strengthen teaching-learning process (Effiong). This points to the fact that, as can be observed in the rating of Q1a, the students' perception of the teacher meaning clarification is rather positive.

However, students do not lean one way or the other regarding the statement about the use of codeswitching to introduce a new topic or activity (i.e., Q1b). As can be observed, the most rated response category is "neutral" (i.e., 38.23% of male and 37.5% of female students). The statistics show that beside neutral, both female and male students "agree" or "strongly agree" that they pay more attention when Spanish is used as tool to introduce a new topic or activity. Concretely, 32.35% of male and 20.83% of female respondents "agree;" 5.88% of males and 20.83 of females "strongly agree." This stands against 13.23% of male and 20.83% of female who "disagree;" and 10.29% of male and 0% of female who "strongly disagree."

² Throughout this paper Q, as in Q1, Q2, Q3, Q4 and Q5, refers to the questions on which our analysis is based. For question Q1 and Q2, a general question was followed by statements (i.e., Q1a, Q1b, Q2a, Q2b, etc.) to which the students had to react. The students were asked to report how often they codeswitch by means of two additional questions, Q3 and Q4. Q5 was a simple prompt aimed at eliciting the reasons for codeswitching (see Appendix 2).

	Table 1	I. Perce <u></u>	Table 1. Perception of teacher-induced codeswitching according to sex	eacher-i	nduced o	odeswi	tching a	ccording	to sex	
	I strongly disagree	ly e	I disagree		Neutral		I agree	I	I strongly agree	χ
Sex	Male	Female	Male Female Male Female Male Female Male Female Male Female	Female	Male	Female	Male	Female	Male	Female
Q1a	3 (4.41%)	0	1 (1.47%)	1 (4.16%)	19 (27.94%)	6 (25%)	28 (41.17%)	1 1 19 6 28 10 17 7 (1.47%) (4.16%) (27.94%) (25%) (41.17%)(41.66%) (25%) (29.16%)	17 (25%)	7 (29.16%)
Q1b	7 (10.29%)	0	9 (13.23%)	5 (20.83%)	26 (38.23%)	9 (37.5%)	22 (32.35%)	9 5 26 9 22 5 4 5 (13.23%)(20.83%)(38.23%) (37.5%) (32.35%)(20.83%) (5.88%) (20.83%)	4 (5.88%)	5 (20.83%)
Q1c	6 (8.82%)	1 (4.16%)	6 1 5 1 21 10 27 4 9 8 (8.82%) (4.16%) (7.35%) (4.16%) (30.88% (41.66%)(39.70%)(16.66%)(13.23%)(33.33%)	1 (4.16%)	21 (30.88%)	10 (41.66%)	27 (39.70%)	4 (16.66%)(9 [13.23%)	8(33.33%)
Q1d	5 (735%)	2 (8.33%)	5 2 9 1 18 6 27 8 9 7 (7.35%) (8.33%) (13.23%) (4.16%) (26.47%) (25%) (39.70%)(33.33%) (13.23%) (29.16%)	1 (4.16%)	18 (26.47%)	6 (25%)	27 (39.70%)	8 (33.33%)(9 [13.23%]	7 (29.16%)
Qle	3 (4.41%)	1 (4.16%)	3 1 6 23 20 7 28 5 11 8 (4.41%) (4.16%) (8.82%) (12.5%) (29.41%)(29.16%)(41.17%)(20.83%)(16.17%)(33.33%)	23 (12.5%)	20 (29.41%)	7 (29.16%)	28 (41.17%)	5 (20.83%)(11 [16.17%]	8 (33.33%)

According to Sánchez Carretero (141), "humor helps to provide an adequate climate in which the student relaxes and additionally lowers the level of anxiety caused by the embarrassment that comes with speaking a second language." In the same vein, the statistics of Q1c show that the use of Spanish by the teacher to tell jokes within the classroom seems to be positively valued by the students. For instance, 39.70% of male and 16.66% of female students "agree" and 13.23% of male and 33.33 % of female "strongly agree." It is important to note, however, the high percentages of the students who remain neutral, with more female students than their male peers (i.e., 30.88% of male and 41.66% of female). Although one may argue that female students are less enthusiastic about joke telling or any distraction in the classroom, it is to note that one of the main functions of humor is motivation (Barrio and Fernández Solís). The fact that most students, regardless of their sex, welcome joke telling-induced codeswitching supports the argument that the use of humor can serve as a motivator and a stress reliever in the language classroom.

The last two statements (Q1d and Q1e) evaluate how codeswitching can help the students better understand the lesson (Q1d) and how codeswitching can contribute to building teacher-student rapport (Q1e). Accordingly, the percentages, as shown in table 1, show that most students, regardless of sex "agree" (i.e., 39.70% male and 33.33% female) and "strongly agree" (i.e., 13.23% male and 29.16% female), thus welcoming the use of Spanish in class. With respect to Q1e, most students regardless of sex, agree or strongly agree. In fact, 41.17% of male and 20.83% female students agree, and 16.17% male and 33.33% female strongly agree.

Table 2. Perception of teacher-induced codeswitching according to age

I strongly disagree		I disagree	Neutral		I agree		I strongly agree	
Age 18–20 21–24 25+ 18–20 21–24 25+ 18–20 21–24 25+ 18–20 21–24 25+ 18–20 21–24 25+ 18–20 21–24 25+ (n37) (n47) (n8) (n37) (n47) (n8) (n37) (n47) (n8) (n37) (n47) (n8)	25+ (n8)	18–20 21–24 25 (n37) (n47) (n	5+ 18–20 2 8) (n37) (1–24 25+ n47) (n8)	18–20 21–2 (n37) (n47)	25 25+	18–20 21–24 (n37) (n47)	. 25+ (n8)
Q1a 1 2 (2.70%) (425%)		0 1 1 0 10 14 1 17 16 5 8 14 2 2.70%) (2.12%) (2.12%) (45.94%)(45.94%)(45.94%)(62.5%)(21.62%)(29.78%) (25%)) 10 (27:02%)(2	14 1 9.78% (12 <i>5</i> %	17 16 (45,94%)(34,04	5%)(62.5%)	8 14)(21.62%)(29.78%	2 (25%)
Q1b 2 5 (5.40%)(10.63%)	0	6 5 3 14 20 1 13 12 2 2 5 2 2 (1621%)(10.63%)(37.53%)(37.53%)(12.5%)(35.13%)(25.3%)(25.3%)(25.%)(10.63%)(25.%)	3 14 5%) (37.83%)(4	20 1 255%)(12 <i>5</i> %	13 12)(35.13%)(25.53	2 %) (25%)	2 5 (5.40%) (10.63%	2 (25%)
Q1c 3 4 (8.10%) (8.51%)	0	2 3 1 7 21 3 15 13 3 10 6 1 (5.40%) (6.38%) (12.5%) (18.91% (44.68%) (37.5%) (40.54%)(27.65%) (37.5%) (27.02%) (12.5%)	l 7 5%) (1891%(4	21 3 4.68%) (37.5%	15 13)(40.54%)(27.65	3 %)(37 <i>5</i> %	10 6 %7.02%(12.76%	1 ((12 <i>5</i> %)
Q1d 2 5 (5.40%)(10.63%)	0	3 5 2 10 13 1 14 17 4 8 7 1 (8.10%) (10.68%) (27.02%) (27.02%) (12.5%) (37.88%) (36.17%) (50%) (21.62%) (14.89%) (12.5%)	2 %) (27.02%)(2	13 1 7.65%) (12.5%	14 17 (37.83%)(36.17	4 %) (50%)	8 (21.62%)(14.89%	1 ((12 <i>5</i> %)
Q1e 2 2 (5.40%) (4.25%)	0	1 6 2 9 16 2 16 1 9 7 3 (2.70%) (12.76%) (25%) (24.32%)(34.04%) (25%) (43.24%)(34.04%) (12.5%) (24.32%)(14.89%) (37.5%)	2 9 %) (24.32%)(3	16 2 4.04%) (25%)	16 16 (43.24%(34.04	1%)(125%)	9 7)(2432%)(14.89%	3)(37.5%)

The mixed ANOVA showed that there was a significant difference between the groups of the first factor "strongly disagree," "disagree," "neutral," "agree," and "strongly agree" in relation to the students' attitudes to teacher-induced codeswitching (F(4, 48) = 43.57, p < .001). As can be observed in table 2, this difference stems from the fact that the three age cohorts have similar attitudes with respect to Ola, Olb, Olc, Old, Q1e. In other words, regardless of their age, the students were more likely to have positive attitudes towards codeswitching in the classroom. In fact, the number of students who favorably and positively rated the use of codeswitching is substantially higher than the number of those who went for "disagree" or "strongly disagree." For example, when it comes to Q1a, which centers on the teacher' use of Spanish, the statistics are mostly favorable in that 45.94% of students aged 18-20, 34.04% of those aged 21-24, and 62.5% of 25+ years old students "agree," and 21.62% of 18-20, 29.78% of 21–24 and 25% of 25+ years old students "strongly agree." The implication is that, irrespective of age, the students welcome the use of Spanish by the teacher when clarifying some ESP contents.

Similarly, the percentages related to Q1c and Q1e show that "agree" is the most rated response category. In fact, the percentages associated with Q1c show that 40.54% of 18–20, 27.65% of 21–24, and 37.5% of 25+ agree, and 27.02% of 18-20, 12.76% of 21-24, 12.5% of 25+ strongly agree. On the other hand, the statistics associated with Q1e reveal that 43.24% of 18–20, 34.04% of 21–24 and 12.5% of 25+ agree, and 24.32% of 18–20, 14.89% of 21–24 and 37.5% of 25+ strongly agree. In both Q1c and Q1e, the second most represented response category is "neutral." This may indicate that some students are more focused on learning the content of the language rather than building rapport with their teachers. Interestingly, the age cohort that is more appealing to Q1c and Q1e, which represents the effective function of codeswitching, is the 18–20 years old. In other words, whereas the 21–24 and 25+ year-old students are more neutral in their ratings of Q1c and Q1e, it is the 18–20-year-old students who strongly rate Q1c and Q1e favorably. This implies that younger students may be more receptive to the teachers' sense of humor. With respect to Q1b, the most rated response category is neutral (i.e., 37.83% of 18-20, 42.55% of 21-24 y 12.5% of 25+), followed by agree (i.e., 35.13% of 18-20, 25.53% of 21-24 and 25% of 25+). However, a closer look at the students' ratings of "agree" and "strongly agree" suggests that most students, irrespective of age, are receptive to codeswitching when the teacher switches topic or introduces new activities. Finally, the ratings of

Q1d show that the highest percentage corresponds to the response category "agree" (i.e., 37.83% of 18-20, 36.17% of 21-24 and 50% of 25+), followed by "neutral" (i.e., 27.02% of 18-20, 27.65% of 21-24 and 12.5% of 25).

4.2 Students' Attitudes Towards Student-Induced Codeswitching

This subsection examines students' attitudes to codeswitching within the classroom when initiated by themselves or their classmates. To this end, the students' ratings of the different statements attached to Q2 are analyzed on the grounds of the influence of both sex and age.

Table 3 shows that most students are either in favour of or neutral towards their classmates' using Spanish when they communicate with the teacher. The statistics associated with Q2a show that 47.05% of male students "agree" (25%) or "strongly agree" (22.05%) that they do not mind when their classmates codeswitch when talking to their professor, and 38.23% remain neutral. In terms of female students, 45.83% "agree" (20.83%) or "strongly agree" (25%), and 50% of them remain neutral. It therefore seems that, regardless of their sex, most students are either favourable or neutral with respect to switching to Spanish to communicate with the teacher. It can be observed, however, that no female students disagreed strongly with the use of Spanish in student-teacher communication, while 5.88% of male students (5.88%) did oppose it strongly.

Table	I strongly disagree	Sex Male	Q2a 4 (5.88%)	Q2b 4 (5.88%)	Q2c 7 (10.29%)	Q2d 13 (19.11%)
3. Percej	1 _y	Female	0	1 (14.16%)		3 (12.50%)
ption of	I disagree	Male	6 (8.82%)	7)(10.29%)	10 (14.70%)	17 (25%)
student		Female	1 (4.16%)	5)(20.83%)	1) (4.16%)	3 (12.50%)
induced	Neutral	Male	26 (38.23%)	34 (50%)	16 (23.52%	25)(36.76%)
Table 3. Perception of student-induced codeswitching according to sex		Male Female Male Female Male Female Male Female Male Female	6 1 26 12 17 5 15 6 (8.82%) (4.16%) (38.23%) (50%) (25%) (25%) (20.83%)(22.05%) (25%)	4 1 7 5 34 9 14 5 9 4 (5.88%) (14.16%) (10.29%) (20.83%) (5.00%) (37.5%) (37.5%) (20.58%) (13.23%) (16.66%)	0 10 1 16 9 25 7 10 7 (14.70%) (4.16%) (23.52% (37.50%)(36.76%)(29.16%)(14.70%)(29.16%)	13 3 17 3 25 10 9 5 4 3 (19.11%)(12.50%) (25%) (12.50%)(36.76%)(41.66%)(13.23%)(20.83%) (5.88%) (12.50%)
tching a	I agree	Male	17 (25%)	14 (20.58%)	25 (36.76%)	9 (13.23%)
according		Female	5 (20.83%)	5 (20.83%)	7 (29.16%)	5 (20.83%)
g to sex	I strongly agree	Male	15 (22.05%)	9 (13.23%)	10 (14.70%)	4 (5.88%)
	y	Female	6 (25%)	4 (16.66%)	7 (29.16%)	3 (12.50%)

With regard to Q2b, 33.81% of male students are either relieved (20.58% "agree") or greatly relieved (13.23% "strongly agree") when told they can communicate in Spanish with their professor, and 50% remain neutral, which might indicate that they feel comfortable communicating with the teacher in English but might be open to using Spanish in certain situations. On the other hand, only 16.17% of male respondents express

disagreement (5.88% "strongly disagree" and 10.29% "disagree"). On the other hand, 37.49% of female students agree with statement 2b (20.83% "agree" and 16.66% "strongly agree"), 37.5% remained neutral, and 24.99% disagreed (20.83%) or strongly disagreed (4.16%). Therefore, results show that female students seem to feel more comfortable than male respondents when it comes to the possibility to communicating solely in English, since close to 30% of males do not feel relieved knowing they can communicate in their mother tongue with their professor, and almost 40% remain neutral on this question.

Concerning whether students should be allowed to resort to Spanish when unable to communicate in English (Q2c), 51.46% of male respondents agreed (36.76% agree and 14.70% strongly agree), 23.52% remain neutral and 24.99% disagree (14.70% disagree and 10.29% strongly disagree). In the case of the female respondents, whilst most respondents are in favour of using Spanish, 37.5% remain neutral, and only a 4.16% disagree. What this implies is that male students tend to be stricter towards the use of the L1 in the classroom.

Finally, when asked about their levels of anxiety when forbidden from using Spanish (Q2d), 19.11% of male respondents report feeling anxious (13.23% "agree") or very anxious (5.88% "strongly agree"), versus the remaining 80.87% (25% "disagree," 19.11% "strongly disagree," and 36.76% "neutral"). On the other hand, 33.33% of female respondents, which includes 20.83% who "agree" and 12.5% who "strongly agree"), recognise feeling anxious, and out of this amount, 12.5% claim to feel extremely anxious (i.e., "disagree"). Hence, one can argue that female students tend to feel more anxiety when not allowed to speak in Spanish. Yet, 41.66% of female respondents reported feeling neutral, 12.5% disagreed and 12.5% strongly disagreed with Q2d, thus claiming to feel no stress or anxiety when unable to use Spanish. This might indicate than more than half of female students feel comfortable using English to communicate in the classroom.

With respect to sex, the mixed ANOVA showed that there was a significant difference between the groups of the first factor "I strongly disagree," "I disagree," "Neutral," "I agree," and "I strongly agree" in relation to the dependent variable, which is codeswitching (F(4, 36) = 15.33, p < .001). In other words, the difference between neutral or positive response categories ("agree" and "strongly agree") and negative response categories ("disagree" and "strongly disagree") is statistically significant. This is illustrated by the percentages of the five response categories in table

4 where a closer look reveals that, even though the response category associated with neutral outnumbers the remaining response categories, it is the response categories such as "agree" and "strongly agree" that overall outnumber the response category associated with disagree and strongly disagree when it comes to Q2a and c. This implies, in other words, that the trend in the students' attitudes, regardless of age, is towards a more favorable view of the manifestation of their own codeswitching. For example, when looking into how tolerant the students are (i.e., O2a) to see and hear classmates engage in Spanish with the teacher, a roughly substantial number of students of all age cohorts strongly tolerate the use of Spanish between the teacher and the students. Illustratively, it can be seen, for example, that 32.43% of 18-20 agree whereas 25.53% of 21-24 and 37.5% of 25+ strongly agree. Similar attitudes are observable when it comes to Q2c where 35.13% of 18-20, and 34.04% of 21-24 and 37.5% of 25+ agree on the statement that Spanish should be used alongside English. This may be grounded in linguistic tolerance, defined as willingness to accept behavior and beliefs that are different from your own, although you might not agree with or approve of them. However, a closer look at Q2b and Q2d reveals some rather contrasting results. With respect to Q2b, which revolves around what it means to use Spanish in ESP classrooms, 21.27% of 21-24 disagree whereas 32.43% of 18-20 agree and 12.5% of 25+ strongly disagree. Likewise, when it comes to Q2d, which revolves around whether the students feel anxious when they are forbidden from using Spanish, the results show that while 18–20-year-old students agree, 21-24-year-old students as well as 25+-year-old students disagree. The contrast between the results associated with O2a and O2c as opposed to Q2b and Q2d may be tied to the very nature of the questions. While the former could be more connected to linguistic tolerance, which often depends on external factors, the latter draw on the students' personal emotions and feelings, which do not just tend to depend on internal factors but also tend to be more hidden than revealing. Nevertheless, both emotional attachment to language and linguistic tolerance are practices that represent pragmatic functions of codeswitching as they promote linguistic diversity in multicultural settings (Tsoumou).

Table 4. Perception of student-induced codeswitching according to age

	I strongly disagree	rly e		I disagree	ee.		Neutral			I agree			I strongly agree	ly	
Age	18–20 r	21–24 (n47)	25+ (n8)	Age 18–20 21–24 25+ 18–20 21–24 25+ 18–20 21–24 25+ 18–20 21–24 25+ 18–20 21–24 25+ 35+ 35+ 35+ 35+ 35+ 35+ 35+ 35+ 35+ 3	21–24 (n47)	25+ (n8)	18–20 r	21–24 (n47)	25+ (n8)	18–20 (n37)	21–24 (n47)	25+ (n8)	18–20 2 (n37)	21–24 (n47)	25+ (n8)
Q2a	2 (5:40%)	Q2a 2 2 (5.40%) (42.5%)	0	4 2 1 13 22 3 12 9 1 6 12 3 (10.81%) (42.5%) (12.50%) (35.13%) (46.80%) (37.50%) (32.43%) (19.14%) (12.50%) (12.50%) (35.53%) (37.50%)	2 (425%)(1	1 1250%,	13 (35.13%)(22 (46.80%)	3 37.50%)	12 (3243%)	9 (19.14%)(1 1250%)	6 (1621%)(12 25.53%)(3 37.50%)
Q2b	3 (8.10%)	Q2b 3 2 (8.10%) (42.5%)	0	2 10 0 17 22 4 12 6 1 3 7 3 (5.40%)(21.27%) (45.94%)(46.80%) (50%) (32.43%)(12.76%)(12.50%)(8.10%)(14.89%)(12.50%)	10 (21 <i>27</i> %)	0	17 (45.94%)(22 4680%)	4 (50%)	12 (3243%)	6 (1276%)(1 1250%)	17 22 4 12 6 1 3 7 3 (45.94%)(46.80%) (50%) (32.43%)(12.76%)(12.50%) (8.10%) (14.89%)(12.50%)	7 14.89%)(3 1250%)
Q2c	3 (8.10%)	4 (851%)(1 1250%	Q2c 3 4 1 4 6 1 9 13 3 13 16 3 8 8 0 (8.10%) (8.51%) (12.50%) (10.25%) (12.5%) (24.32%) (24.32%) (27.65%) (37.50%) (35.13%) (34.04%) (37.50%) (17.02%)	6 (1276%)(1 12 <i>5</i> %)	9 (24.32%(13 27.65%)(3 37.50%)	13 (35.13%)	16 (34.04%)(3 37.50%)	8 (21.62%)(8 17.02%)	0
Q2d	8 21.62%)(Q2d 8 8 (21.62%)(17.02%)	0	6 11 3 14 18 3 7 6 1 2 4 1 (1621%)(23.40%)(37.50%)(37.83%)(38.29%)(37.50%)(1891%)(12.76%)(12.50%) (8.51%) (12.50%)	11 (23.40%)(5	3	14 (37.83%)(18	37.50%	7(1891%)	6(12.76%)(1250%)	6 11 3 14 18 3 7 6 1 2 4 1 (1621%)(23.40%)(37.50%)(38.29%)(37.50%)(18.91%)(12.76%)(12.50%) (8.51%) (12.50%)	4 (851%)(1 1250%)

Disparity is also notable when it comes to the percentages associated with each age cohort within each specific control variable. What is observable is that none of the age cohorts holds its ratings consistent and constant either horizontally among the control variables (i.e., strongly disagree, disagree, neutral, agree and strongly agree) or vertically among the specific statements (i.e., Q2a, Q2b, Q2c and Q2d). All in all, the students, regardless of age, are mostly reluctant to position themselves one way or the other when it comes to their attitudes to codeswitching as manifested in the classroom. Since codeswitching may be indexical of sociolinguistic identity (Myers-Scotton; Ellwood), the reason for this neutrality may be tied to the students' desire to conceal their identity. Ellwood (539) notes, for example, that "acts of identity are not always attempts to align with a particular identity, but may be attempts to reject, resist, or seek to modify an imposed identity." If (strongly) disagree or (strongly) agree may oblige the students to position themselves, thus revealing their standings when it comes to codeswitching, neutrality becomes an appropriate way to conceal such standings.

4.3 Self-Reported Frequencies/Occurrences of Codeswitching

The examination of self-reported frequencies of codeswitching revolves around two main questions.

Q3 intended to elicit information regarding how often students would make use of more than one language in everyday life. Just like the questions discussed in previous sections, it was structured as a five-point Likert scale. Nevertheless, to obtain information about frequency, the five response categories the students could choose included "never or hardly ever," "occasionally," "sometimes," "often," and "very often."

Table 5. Frequencies/occurrences of codeswitching according to sex

	Never c	Never or hardly Occasionally Sometimes ever	Occasior	ıally	Sometim		Often		Very often	en
Sex	Male	Male Female Male Female Male Female Male Female Female	Male]	Female	Male I	Female	Male	Female	Male	Female
Q3	2 (2.94%)	2 1 17 6 23 8 14 5 12 4 (2.94%) (4.16%) (25%) (25%) (33.82%)(33.33%)(20.58%)(20.83%)(17.64%)(16.66%)	17 (25%)	6 (25%)	23 (33.82%)(8 33.33%)(14 (20.58%)	5 (20.83%)(12 (17.64%)	4 (16.66%)
40	15 22.05%)	15 3 22 6 20 6 6 8 2 2 2 2 2.05%) (12.50%) (32.35%) (25%) (29.41%) (50%) (8.82%) (33.33%) (2.94%) (8.33%)	22 (32.35%)	6 (25%)	20 (29.41%)	6 (50%)	6 (8.82%)	8 (33.33%)	2 (2.94%)	2 (8.33%)

As shown in table 5, the response category that attracted more responses amongst male and female respondents include "sometimes," with over 33% of responses in both groups, and "occasionally" with 25% of responses for both male and female participants. It is worth noting that even though they did not attract as many responses as "sometimes" and "occasionally," "often," and "very often" garnered far more responses than

"never or hardly ever." This suggests that most students boast many languages in their repertoire, which they use on a regular basis.

After finding out about the languages in their active repertoire, the focus turned to analyzing the students' codeswitching practices. This was motivated by the belief that even though bi/multilingualism and codeswitching are closely connected, negative attitudes towards the latter (Martínez Agudo; Mata) could make multilingual students strive to keep the languages in their repertoire separate. Just like in the previous question, the respondents were asked, by means of a Likert-scale question, to indicate how often they alternated between languages when speaking, with response categories ranging from "never or hardly ever" to "very often."

Here again, most respondents across gender groups were likely to codeswitch on a regular basis. That is exactly why "occasionally," "sometimes," and "often" attracted most responses. However, it is important to note that, in comparison with Q3, a sizeable number of respondents claimed they never or hardly ever alternated between languages. More specifically, while only 2.94% of males and 4.16% of females indicated that they never or hardly ever used more than one language, many more male and female respondents (22.05% and 12.5% respectively) stated that they never or hardly ever codeswitch.

Furthermore, as mentioned in the methodology section, the respondents were divided into different age groups based on the belief that factoring in age could reveal the extent to which codeswitching practices might differ depending on how old the respondents were. Overall, and as confirmed by the statistical analysis tests conducted, the options "occasionally," "sometimes," and "often" did attract most responses amongst all age groups, as illustrated in table 6.

Table 6. Frequencies/occurrences of codeswitching according to age

	Never o	Never or hardly ever		Occasionally	onally		Sometimes	mes		Often			Very often	ten	
I	18–20 (n37)	21–24 (n47)	25+ (n8)	Age 18–20 21–24 25+ 18–20 21–24 25+ 18–20 21–24 25+ 18–20 21–24 25+ 18–20 21–24 25+ 18–20 21–24 25+ (n37) (n47) (n8) (n37) (n47) (n8) (n37) (n47) (n8) (n37) (n47) (n8)	21–24 (n47)	25+ (n8)	18–20 (n37)	21–24 (n47)	25+ (n8)	18–20 (n37)	21–24 (n47)	25+ (n8)	18–20 ; (n37)	21–24 (n47)	25+ (n8)
	Q3 2 (5.40%)	2 1 (5.40%) (2.12%)		0 5 13 5 17 13 1 7 11 1 6 9 1 (13.51%)(27.65%)(62.50%)(45.94%)(27.65%(12.50%)(18.91%)(23.40%)(12.50%)(16.21%)(19.14%)(12.50%)	5 13 5 17 13 1 7 11 1 6 9 1 (13.51%)(27.65%)(45.94%)(27.65%)(12.50%)(18.91%)(23.40%)(12.50%)(16.21%)(19.14%)(12.50%)	5 (62.50%)	17 (45.94%)	13 (27.65%(1	7 (1891%)	11 (23.40%)(1 12 50 %)	6 (1621%)(9 19.14%(1 [12.50%]
$\overline{}$	Q4 9 (24.32%)(14.8	7 (14.89%)	2 (25%)	7 2 14 11 3 10 15 0 3 11 3 1 2 1 89%) (25%) (37.83%)(23.40%)(37.50%)(27.02%)(31.91%) (8.10%) (23.40%)(37.50%) (2.70%) (4.25%) (12.50%)	11 (23.40%)(3 37.50%)	10 (27:02%)(15 (31.91%)	0	3 (8.10%)	3 11 2 1 (8.10%) (23.40%)(37.50%) (2.70%) (4.25%) (12.50%)	3 37.50%)	1 (2.70%)	2 (425%)(1 [12 <i>5</i> 0%]

After obtaining the aforementioned results, the most logical step was to find out whether gender and age could be correlated with multi/bilingual and codeswitching practices. The ANOVA test revealed that, overall, there was no statistically significant difference between male and female respondents when it comes to their propensity to use more than one language (Q3) and their codeswitching practices (Q4). That is exactly why the p values obtained for both questions were greater than 0.05 (0.103 and 0.391, respectively).

To further explore the above findings, logistic regression tests were carried out in a bid to gauge the influence of some variables on others and similar results were obtained. Here again, neither age nor gender was significant with regard to the respondents' multilingualism and how often they switched between languages.

4.4 Motives for Codeswitching in the Classroom

This subsection examines what the students claim to be the reasons why codeswitching may or may not help them in their academic performance.

The manifestation of codeswitching in academic settings is arguably the highlight of the positive side of mixing languages, thus countering the pejorative connotation that codeswitching once had. It is a linguistic practice that matters to the students. Tables 7 and 8 below, for example, show how the students relate codeswitching to their academic performance. The response categories associated with "increasing attention span," "feeling confidence about what the teacher is saying," "producing an answer," and "following the instruction" are visibly and notably the most rated reasons why the students resort to codeswitching in the classroom. These statistics suggest that the manifestation of codeswitching is key to the process of concept development that allows the students to connect the contents taught by the teacher with thoughts and ideas already developed in Spanish. For example, "an increase in attention span" is arguably a substantial component of success in the second language learning process. "Confidence in what the teacher is saying" and "understanding of the instructions" are undoubtedly the backbone of teaching activities. The percentages in these response categories show the benefits that the students see in codeswitching. The fact that the students link the use of codeswitching to these response categories allows the argument the students' ability to use both Spanish and English is key to enhancing their comprehension of the ESP contents.

In both tables 7 and 8, it is clear that the response category associated with "it does not make any difference" is the least valued, which explicitly indicates that the students are fully aware of the academic value of codeswitching in the classroom. In other words, codeswitching, as reflected in both tables, manifests for various reasons, thus confirming what has been suggested in previous studies (see Muñoz and Mora). However, an observation can be drawn from what is presented in both tables 7 and 8. It may be the case that the response categories associated with "increasing attention span," "feeling confidence about what the teacher is saying," "producing an answer," and "following the instruction" play a substantial role in second learning acquisition, but critics of codeswitching may justifiably argue that resorting to the first language as a confidence booster may stem from the students' lower level and lack of proficiency in English (Flyman-Mattsson and Burenhult). Evidently, being at a B2 level in English implies that students might not be fully proficient in English, which, to a larger extent may stand as the reason for them to go back and forth between Spanish and English. Meij and Zhao (406) already anticipated that "a . . . factor that is likely to influence . . . codeswitching behavior is the language proficiency . . . more switches will take place when the students are less and less knowledgeable and (less) skilled)." Nevertheless, as Ariza (2) argues, codeswitching "makes meaning clearer, and helps students to keep up with the academic gains of the rest of the class [in this particular context]" (own emphasis).

	Table	7. Codes	switchir	Table 7. Codeswitching and academic performance according to sex	ademic	pertorm	ance ac	cording t	o sex	
	It does not make any difference		To increase attention spa	ri Li	To feel more confident abo what the teacher is	more nt about [e.g., and a second content is second content in second content is second content in second content in second content is second content in se	To prod answer	To feel more confident about To produce an To follow what the answer instruction teacher is	To follow instructions	w ons
Sex	Male	Female	Male	Male Female Male Female Male Female Male Female Male Female	Male	Female	Male	Female	Male	Female
Q 5	13 (19.11%)	13 4 14 3 :11%)(16.66%)(20.58%)(12.50	14 (20.58%)	13 4 14 3 23 10 11 5 7 2 (19.11%)(16.66%)(20.58%)(12.50%)(33.80%)(41.66%)(16.17%)(20.83%)(10.29%) (8.33%)	23 (33.80%)	10 (41.66%)	11 (16.17%)	23 10 11 5 7 2%)(33.80%)(41.66%)(16.17%)(20.83%)(10.29%) (8	7 (10.29%)	2 (8.33%)

In terms of the significance of sex in the students' perception of codeswitching and its benefits in their academic performance, the findings presented in table 7 show that sex is not that significant in the connection between the students' use of codeswitching and their academic performance. In fact, a logistic regression analysis was performed to examine the influence of "it does not make any difference," "to increase

attention span," "to feel more confident about what the teacher is saying," "to produce an answer," and "to follow instructions on sex." This statistical analysis showed that the model as a whole was not significant $(\chi^2(1) = 2.77, p = 0.096, n = 2)$. As can be seen, not just the values for both male and female students are higher than 0.05, but also both male and female students rate the five response categories in a slightly similar way. This points to the argument that both female and male students have similar interest in rating the reasons why codeswitching is important in their academic performance. First, frequencies amongst the responses associated to the response categories point to the argument that both male and female students bear the same interest when it comes to the relevance of codeswitching in their academic performance. The most valued response category for both male and female students is "feeling confident about what the teacher is saying," followed by "the production of answers." The third category includes the students who believe codeswitching does not make any difference. The category of attention span comes fourth right before the response category associated with following the instruction, which comes last. Second, the fact that some students (19.11% of male and 16.66% of female) believe codeswitching does not make any difference in their academic performance may favor the argument that even though codeswitching is perversive in ESP classes, the purpose for which each student codeswitch cannot always be academically related. Nevertheless, what is presented in both tables 6 and 7 falls within Adendorff's (389) argument according to which codeswitching [can] serve as a "communicative resource which enables the . . . students to accomplish a considerable of social and educational objectives."

The perception of the codeswitching and its connection with the students' academic performance is also examined from age perspective following similar control variables used for sex.

Table 8. Codeswitching and academic performance according to age

	It does not make any difference	nake	To increase attention spa	To increase attention span		To feel more confident abo what the teach saying	To feel more confident about what the teacher saying	t er is	To feel more confident about To produce an what the teacher is answer saying	an	To follow instructions	w ons	
Age	Age 18–20 21–24 25+ 18–20 21–24 25+ 18–20 21–24 25+ 18–20 21–24 25+ 18–20 21–24 25+ 18–20 21–24 25+ 18–20 21–24 25+ (n37) (n47) (n8) (n37) (n47) (n8) (n37) (n47) (n8) (n37) (n47) (n8)	4 25+) (n8)	18–20 (n37)	21–24 (n47)	25+ (n8)	18–20 (n37)	21–24 (n47)	25+ (n8)	18–20 21–2 (n37) (n47	24 25+ 7) (n8)	18–20 2 (n37) (1–24 na47)	25+ (n8)
Q5	Q5 11 6 (29.72%)(12.76%)	0	7 (1891%)	8 (1202%)(1 12.50%	15)(40.54%)(22 (4680%)(8	7 87.50%	7 8 1 15 22 7 8 8 (1891%)(12.02%)(12.50%)(40.54%)(46.80%)(87.50%)(21.62%)(17.02%)	0 %	6 3 (1521%)(638%)	3 538%)	0

While proponents of English-only in the classroom may attempt to argue that an ESP classroom is a context in which English should be used exclusively, the reality, as illustrated in both tables 7 and 8, is that the students are mostly open to including Spanish in their teaching and learning process. In other words, the concept of English only does not always match the in-classroom reality of language teaching and learning (Raschka et al.). For example, the fact that most students, regardless of their age cohorts, report to feeling more confidence in what the teacher is saying can be interpreted as if the use of Spanish in ESP classrooms is, in a way, a confidence booster for the students.

However, some variations within each age cohort can be noticed. Students aged between 18 and 20 are the most diverse group. As shown in table 8, 29.72% of the 18-to-20 students believe codeswitching does not make any difference in their academic performance. While this percentage is lower than the one associated with "feeling of confidence in what the teacher is saying" (40.54%), it is, however, higher than ones associated with response categories such as "increase attention span" (18.91%), "produce an answer" (21.62%), and "follow the instructions" (16.21%). Similar results are apparent among the 21-24 group. Here, while the response category associated with "feeling more confidence about what the teacher is saying" is the most rated (46.80%), it is the response categories associated with "increasing attention span" (18.91%) and "produce an answer" (17.02%) that outperform the response categories associated with "it does not make any difference" (12.76%). This diversity, however, may be associated with the students' ways of learning. One may argue that different students may have different approaches to second language learning. Those who believe that codeswitching does not make any difference are certainly under the impression that their learning approach is unrelated to their ability to switch language. On the other hand, one may also argue that the belief that codeswitching does not make any difference may be rooted in language proficiency in that students with a higher level of English may be confident in their proficiency, which in turn, may boost confidence in how the students perceive codeswitching. In the meantime, the students who relate codeswitching with their academic performance outnumber those who think codeswitching does not make any difference. Finally, regression analysis, which was performed to examine the influence of "it does not make any difference," "to increase attention span," "to feel more confident about what the teacher is saying," "to produce an answer," and "to follow instructions" on variable "age" to

predict the values "18/20," "21/24," and "25+," revealed that the model as a whole was not significant ($\chi^2(2) = 3.82$, p = 0.148, n = 3). In other words, age and sex alike, as presented in both tables 7 and 8, do not appear to impact the link between codeswitching and students' academic performance.

5. DISCUSSION

This paper set out to examine codeswitching and its role in the ESP classroom and determine the extent to which age and sex affect (or do not affect) the students' attitudes towards codeswitching. Four research questions were addressed: (1) Is codeswitching positively or negatively perceived? (2) How does sex affect the students' attitudes to codeswitching? (3) How does age affect the students' attitudes to codeswitching? and (4) What motives are there for students to codeswitch?

With respect to the first research question, the findings indicate that codeswitching is not only positively perceived, but most importantly, codeswitching is a common practice within the classroom. In fact, as shown in tables 5 and 6, most students have occasionally, sometimes, often and very often codeswitched, against a slim number of students who claim to never or hardly codeswitch. In other words, the role played by codeswitching in the students' academic performance is undeniable. Moreover, and as shown in tables 7 and 8, the students tend to associate the manifestation of codeswitching with academic and pedagogical gains such as increase students' attention span, feel more confident about what the teacher is saying, produce an answer and follow the instructions. The implication here is that rather than being used as a distraction mechanism, codeswitching allows the students to engage with the teaching and process. In this regard, the use of Spanish in the ESP classroom allows the students to manage and negotiate the concepts of rights and obligations (see Myers-Scotton) in such a way as both Spanish and English are seen as valuable tools in process of learning English. This aligns with the argument that bilingualism is an opportunity for the students to not only express their feelings and thoughts, but also shape their identities (Tsoumou). Furthermore, codeswitching, as has been indicated, allows the students to connect the experience of learning English with thoughts and ideas already developed in Spanish. Among other motives, codeswitching is prompted by many different motives, including translation of target words, word finding, content enhancement as well as change in the topic being

discussed. This is an indicator that codeswitching makes meaning clearer and helps students keep up with the academic gains of the rest of the class in this context, as suggested by Ariza.

Regarding the second research question, both ANOVA and regression analysis showed no clear-cut connection between sex and codeswitching. In other words, both female and students tend to rate their responses to the three categories of the questions in a similar way. For example, by testing the students' attitudes to codeswitching based on sex (Tables 1 and 3), the trend is that both male and female students have positive attitudes towards codeswitching. Likewise, in examining the frequencies of codeswitching practices based on sex (Table 5), the revelation is that sex was not significantly influential. In fact, both male and female students highly rated sometimes and occasionally in a similar way.

As for the third research question, the findings show that overall age does not have a significant incidence in the way the students perceive and rate the use of codeswitching in the classroom. Regardless of the students' age, they all are likely to rate codeswitching favorably, which confirms the second hypothesis of the study. The examination of the students' attitudes to both teacher-induced codeswitching (Table 2) and students-induced codeswitching (Table 4) shows that the three age cohorts have similar attitudes; that is, the students, regardless of age, tend to positively rate the use of codeswitching.

Regarding the fourth research question, the analysis of the pragmatic and academic motives for codeswitching (Table 7) reveals that sex is less impactful in the connection between the students' use of codeswitching and their academic performance. The absence of the effect of sex on the way students rate codeswitching is suggestive that codeswitching is indeed a common practice that is primely valued based on its usefulness and academic benefits regardless of the students' sex, thus confirming hypothesis 1. Moreover, the examination of the association between codeswitching and academic performance indicates that all the students strongly feel confident about what the teacher is saying through codeswitching. However, even though age does not substantially affect the perception of codeswitching, some variations within each age group may be noticed when it comes to the way the students relate codeswitching with academic performance. For example, the 18–20 group is the only group to report that codeswitching does not make any difference in their academic performance.

The fact that neither age nor sex significantly affects the students' attitudes to codeswitching is an indication that the exclusive use of English in the ESP classroom does not often fulfill the students' expectations and needs. The understanding of attitudes, as presented in this paper is likely to influence pedagogical decision. Against the argument that teaching entirely through the target language makes the language real, allows learners to experience unpredictability, and develops the learners' own inbuilt language system (Macaro), codeswitching becomes a useful tool that allows a better understanding of ESP.

Although normatively the configuration of ESP classes would set English as the unmarked choice and any other language as a marked choice, the findings indicate that overall, the students are enthusiastic about the use of both Spanish and English by themselves and by their teachers. Any argument to suggest that the rights and obligations in an ESP context would compel the participants to favour English is thus challenged by the findings in this paper. In other words, the difference between marked and unmarked choices is blurred in that the students overtly claim Spanish as an uncontested tool in their English learning process. Resorting to Spanish while learning English thus contributes to enhancing learners' learning experience and making it more effective, as has been indicated in previous studies (Effiong; Santos; De la Cruz).

CONCLUSION

This paper has demonstrated that codeswitching is idiosyncratic in ESP classrooms. This idiosyncrasy highlights the impact of codeswitching and its ability to shape language teaching and learning. The fact that codeswitching does not depend on factors such as age or sex leads to the assumption that dismissing or ignoring codeswitching would threaten the possibility of an inclusive learning process. In other words, this paper supports the argument that attitudes towards codeswitching—both positive and negative—are key not only to the success or failure of teaching and learning practices but, more importantly, may determine how students assimilate the culture of the target language while connecting the experience with thoughts and ideas already developed in their L1. In other words, codeswitching is not only independent but also an undeniable sociopsychological phenomenon that must be taken into account if one wishes to generate an inclusive learning environment.

The study is limited in terms of its focus, as it only centers on the students enrolled in one Business Administration alone. Future research should examine other bachelor's degree programs to determine whether the present findings can be compared or contrasted.

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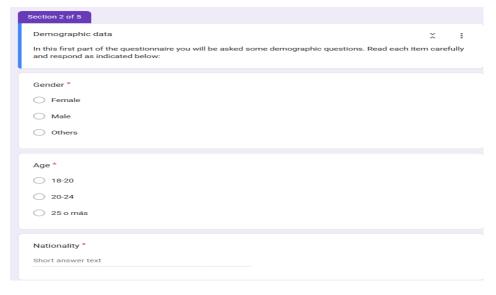
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APPENDIXES

APPENDIX 1: THE QUESTIONNAIRE



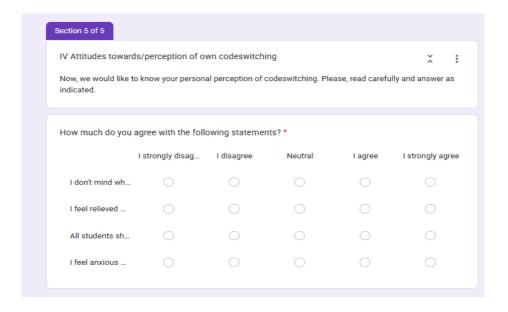


	III
In w	hich Faculty do you study? *
0	School of Biomedical and Health Sciences
0	School of Sports Sciences
0	School of Social Sciences and Communication
0	School of Architecture, Engineering and Design
Now,	choose your degree *
1. Gr	ado en Criminología 100% online
2. Gr	ado en Musicología 100% online
3. Gr	ado en Medicina
4. Gr	ado en CAFYD
5. Gr	ado en Gestión Deportiva 100% online
6. Gr	ado en Gestión Deportiva (Global Bachelors Degree in Sport Management)
7. Gr	ado en Marketing
8. Gr	ado en Marketing 100% online
9. Gr	ado en Marketing-Alcobendas
10. G	irado en Farmacia_Semipresencial
11. 6	irado en Farmacia; y G. en Bio; y G. Farmacia y G. en Nutrición Humana y Dietética
12. G	irado en Fisioterapia Hcap/Grado CAFYD Semipresencial (online)
13. G	irado en Psicología
14. G	irado en ADE
15. G	rado en Ingeniería Civil
16. G	irado en ADE 100% inglés
17. G	rado en ADE_Alcobendas
18. G	irado en ADE 100% Online
19. E	oble grado en ADE/Doble Business analytic
20. E	oble Grado en Fundamentos de la Arquitectura y en Diseño/Fundamentos
21. G	irado en Física
22. G	irado en Ing. de Sistemas de Telecomunicación

She	ort answer text	
Но	ow many languages can you speak besides your native language? *	
1.	None	
2.	1 language	
3.	2 languages	
4.	3 languages	
5.	4 languages	
6.	More than 4 languages	
If s	so, could you name the different languages you speak?	
o.	ort answer text	

0	Never or hardly ever
0	Occasionally
0	Sometimes
0	Often
0	Very often
Wha	t do you think your English level is? *
0	Beginner
0	Intermediate
0	Advanced
0	Near native
0	Native
	ction 2 Continue to next section
	on 3 of 5
11 - (Current ESP context
	leswitching is the use of two or more languages simultaneously during an English class. This section is igned to understand your perception of codeswitching as it occurs in the ESP class.
Hov	w often do you swicth or mix languages in the ESP classroom? *
0	Never or hardly ever
	Occasionally
0	Sometimes
0	
0	Often

_					
It doesn't make any	difference				
To increase attention	on span				
To feel more confir	dent about what th	e teacher is sayir	ng		
To produce an answ	wer				
To follow instruction	ens				
codeswitch in the cla	* assroom:				
When I don't know	the meaning of a w	ord in English			
Because I want to d	check my understan	nding of the topic	that the teacher	is explaining	
Because I want to d	discuss a topic that	is not related to	the one being dis	cussed in Englis	sh
Because most my	order of the control				
Because most my of section 3 Continue to			÷		
Section 4 of 5	o next section		٠		
section 3 Continue to	o next section		٠		×
Section 4 of 5	o next section	odeswitching in	general	g. Please, read d	11100000
Section 3 Continue to Section 4 of 5 III Attitudes toward In this part, we woul	o next section ds/perception of co d like to know your of	odeswitching in general opinion ab lowing statemen	general rout codeswitchin		carefully and ans
Section 3 Continue to Section 4 of 5 III Attitudes toward In this part, we woul as indicated.	o next section ds/perception of co	odeswitching in general opinion at	general bout codeswitchin	g. Please, read o	carefully and ans
Section 3 Continue to Section 4 of 5 III Attitudes toward In this part, we woul as indicated.	o next section ds/perception of co d like to know your of	odeswitching in general opinion ab lowing statemen	general rout codeswitchin		11100000
Section 3 Continue to Section 4 of 5 III Attitudes toward In this part, we woul as indicated. How much do you	ds/perception of conditions of the distribution of the distributio	odeswitching in general opinion at lowing statemen I disagree	general out codeswitchin ts? * Neutral	l agree	carefully and ans
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APPENDIX 2: THE DATA ANALYZED IN THIS STUDY

Q1. How much do you agree with the following statements?

- Q1a. When the teacher uses Spanish to clarify the meaning of key information, I find it useful.
- Q1b.When the teacher uses Spanish to introduce a new topic or a new activity, I pay more attention.
- Q1c.When the teacher uses Spanish to make a joke or to catch students' attention, I feel more interested.
- Q1d. The occasional use of Spanish in the classroom helps understand the lesson (s) better.
- Q1e. The occasional use of Spanish in the Classroom contributes to building a better teacher/student relationship.

Q2. How much do you agree with the following statements?

- Q2a. I don't mind when my mates use Spanish in the classroom to communicate with the teacher.
- Q2b. I feel relieved when I can express myself in Spanish to communicate with the teacher.
- Q2c. All students should be allowed to communicate in Spanish when they are unable to do it in English.

- Q2d. I feel anxious when my teacher does not allow me to express myself in Spanish.
- Q3. How often do you use more than one language?
- Q4. How often do you switch between languages or mix them?
- Q5. Choose one or more reasons why switching languages helps you in your academic performance in ESP