



Analyzing the Impacts of Code-switching on Foreign Language Classroom Anxiety and English Language Problems through Path Analysis

Mechie L. Aparece^{a*} and Jocelyn B. Bacasmot^a

^a *The Faculty of Professional Schools, University of Mindanao, Matina, Davao City, Philippines.*

Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

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ABSTRACT

This study mainly intended to identify the mediating effect of code-switching on the relationship between foreign language classroom anxiety and English language problems. It also aimed to determine the level of the variables and to determine the relationships that naturally exist between them. It employed descriptive-correlational research design. The study was conducted in three private schools in Davao City, Philippines, between May 2022 and March 2023. This study included 300 senior high school academic track students from three private schools in Davao selected using stratified sampling technique. The data were gathered online using an adapted survey questionnaire which has been tested for content validity and checked for reliability using Cronbach Alpha. The data were analyzed using Mean, Pearson's r , and path analysis. Results revealed that code-switching had no mediating effect on the relationship between foreign language classroom anxiety and English language problems ($P=.509$). Additionally, it was indicated that there was a high level of foreign language classroom anxiety ($\bar{X}=3.61$) and code-switching ($\bar{X}=3.93$) and a

*Corresponding author: Email: m.aparece.444257@umindanao.edu.ph;

moderate level of English language problems ($\bar{X}=3.05$). It was also revealed that there is a significant and positive relationship between foreign language classroom anxiety and English language problems ($R=.624$, $P=.000$), foreign language classroom anxiety and code-switching ($R=.451$, $P=.000$), and code-switching and English language problems ($R=.257$, $P=.000$). Thus, the findings of the study showed that the use of code-switching neither removed nor significantly reduced the relationship between foreign language classroom anxiety and English language problems. This study prominently offered clarification on the ongoing global debate on whether code switching has beneficial or detrimental effect on English language learners.

Keywords: Language; foreign language classroom anxiety; English language problems; code-switching; mediation.

1. INTRODUCTION

A number of researchers revealed that there is a high level of code-switching among teachers and learners [1,2]. In fact, Larbah [3] clearly exposes that 90% of the study participants are conscious that they switch languages during classes. Subon and Tarmim [1] mentioned that one of the factors that can cause people to code-switch is to address language anxiety.

Accordingly, language anxiety is one of the known causes of English language problems; thus, the two variables are commonly linked. Previous studies found a strong direct relationship between these two variables. This means that if a learner feels anxious in the language classroom, there will be a negative effect on their language acquisition, process, and performance [4,5]. This simply means that language anxiety could result to language difficulties.

Horwitz et al. mentions that language anxiety is narrowed down into three components: communication apprehension, fear of negative evaluation, and test anxiety [6]. Among the anxiety-arousing sources are fear of being called upon by a teacher in class, worry of being laughed at, fear of being berated, a timid personality, and an excessive concern for assessment [7-9]. The direct correlation between FLCA and ENLP is a disturbing dilemma given that findings of several studies revealed a moderate to high level of language anxiety among language learners [9-11].

To reduce language anxiety in the classroom, code switching is often used by language teachers [12]. The advantages of COSW can justify this decision. Deliberate usage of COSW as a means for helping students experiencing emotional difficulty can make students feel more comfortable [13]. It can also lead to better understanding and comprehension [1,14,15]. If

students are not authorized to code-switch, this could make them feel more hesitant to use the target language [16].

However, researchers are still divided on the effect of code switching in addressing English language problems [12]. There are some researchers who support the use of code-switching in learning the language. For example, Shafi, et al. [17] firmly posits that COSW can facilitate students' language learning. On the other hand, people who advocate the sole use of target language in the second or foreign language classrooms think that code-switching disengages learners in paying attention to the target language. For instance, Sakaria and Priyana [18] oppose the use of code-switching. They believe that elimination of the first language in foreign or second language classroom settings will give room for the target language to be the only source of exposure.

Amid the ongoing debate on the impact of code-switching, previous studies have acknowledged that students experience various serious challenges in learning English as a second language [19,20]. Chand [21] specifically mentions that many students are reported to have major difficulties in spoken English. Language learners often have difficulties in expressing their thoughts using the target language (Ibid: 435). Vyomakesisri [22] further acknowledges the existence of English language problems among students and enumerates that grammar, vocabulary, slang, and pronunciation are the most challenging language aspects for students.

Because English is often regarded as a prominent language, several studies have focused on it, specifically on the challenges in learning the language and made significant contributions. For instance, there are researchers who specifically pointed out that college undergraduates lacked oral competence. This

resulted in a recommendation that curricular and pedagogical interventions should be applied [23,24]. Additionally, the study of Hossain [25] leads to the discovery that the English language difficulties of Bengali students mostly resulted in committing suicide by sipping poison, by burning fire, or by tossing themselves on railway s. It is vital to determine these language problems and identify solutions to address them because English is the world's lingua franca. This means that it is essential for students to be English-proficient to fit into the real world [26,20].

Aside from the abovementioned related studies, there are also theories which may help explain the hypothesized relationship between the variables in this study. The anchor theory used to explain the mediating effect of code switching on the relationship between foreign language anxiety and English language problems is the Monitor Model Theory (1982) of Stephen Krashen. It has five main hypotheses: acquisition-learning, monitor, natural order, input, and affective filter hypotheses. Among the five hypotheses, only the affective filter hypothesis and input hypothesis are used to explain the relationships between the variables.

As suggested by the affective filter hypothesis, the best learning and acquisition will occur in learning settings where student's anxiety is minimal, while high affective filter will possibly slow down learning or acquisition. When learners feel anxious, using the first language in the L2 classroom is inevitable to make them feel relaxed [27]. In addition, the input hypothesis suggests that individuals acquire or learn language if there is a comprehensible input [28]. With this, Al Tale and Alqahtani [29] proposed in their paper that teachers use code switching as a facilitating instructional technique to give learners emotional aid and give a more comprehensible input.

Horwitz, Horwitz and Cope's Theory of Foreign Language Anxiety (1986) further established the connection between foreign language anxiety and English language problems. It has been mentioned that a clear relationship was found to exist between FLA and difficulties in foreign or second language. It cannot be denied that language anxiety can both be a cause and an effect of language problems [30].

To establish the relationship between code switching and English language problems, the Sociocultural Theory, developed by Lev Vygotsky in the 1990s, stated that the learner's first language serves as a facilitator toward learning the second or foreign language. It works as a

scaffolding strategy to construct L2 cognition. With the complete absence of L1 in L2 learning, language problems might occur. Furthermore, Georgi Lozanov's Suggestopedia, which was first developed in the 1970s, establishes the link between code switching and language anxiety. It recommends that learning should occur in a soothing environment, away from psychological and affective barriers, with the aid of first language used along with the target language [31].

The mentioned theories also served as the primary bases for the conceptual design of the study as presented next.

Shown in Fig. 1 is the conceptual paradigm that illustrated the relationship of the three variables of this study, namely: code switching, foreign language classroom anxiety, and English language problems. In this research, code switching acts as the mediating variable. Code switching is generally explained as the alternating use of several linguistic codes without disrupting the flow of thoughts [32]. It serves as intercession on the correlation between the dependent and independent variable. This mediating variable is influenced by the research of Manar Suliman Larbah from Curtin University.

The predictor variable of this study is foreign language classroom anxiety which is supported by the research article of Jian-Ren Wang which used Horwitz, Horwitz, and Cope's Foreign Language Classroom Anxiety Scale. As defined by MacIntyre & Gardner, cited in the study of Amengual-Pizarro [9] foreign language classroom anxiety is considered a situation-specific anxiety present in both foreign and second language classrooms. This variable is further narrowed down to three indicators: communication apprehension, fear of negative evaluation, and test anxiety.

According to Munz and Colvin [33], communication apprehension is an individual's extent of anxiety associated with real or imaginary communication with other individuals. To discuss the second indicator, Malini and Janakavalli [34] said that fear of negative evaluation is the anxiety about other people's evaluations, worry over their hurtful evaluations, and prospect that other people would assess individual negatively. Lastly, the third indicator, test anxiety, is described as a situation in which students endure extreme stress and anxiety in examination situations which hinders their test performance [35].

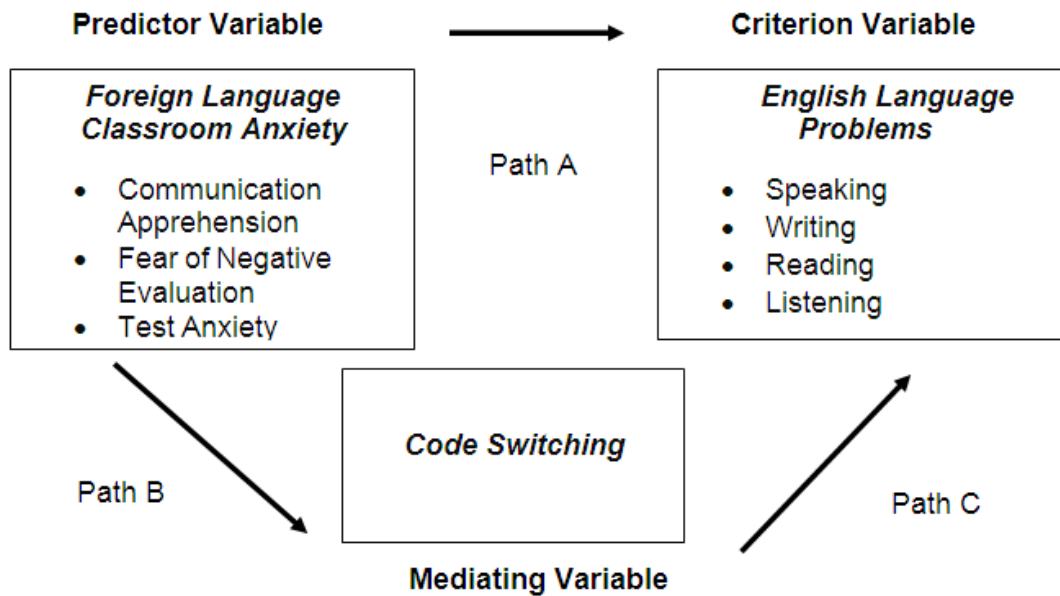


Fig. 1. The conceptual figure of the study

The criterion variable of this study is the English language problems influenced by the study of Ratana Pawapatcharadom at the King Mongkut's Institute of Technology. This variable is viewed through its four indicators which are the macro skills: speaking, writing, reading, and listening. Rao [36] defines speaking as a productive skill where students are anticipated to create phrases and sentences while thinking about vocabulary, grammar, and sentence structure. Along with speaking, writing is also an active skill which also requires production of language. Whereas, reading is defined as not merely identifying words, but it also involves creating a mental representation of the text [37]. Lastly, listening, as quoted by Deveci [38], is the dynamic process of attending, recognizing, interpreting, retaining, and responding to the convey verbal and nonverbal information offered by other individuals.

Evidently, students experience problems in several language aspects. In the Philippines, the data reported in the English Proficiency Index (EPI) reveal that the country's language proficiency has abruptly declined in 2019 and 2020, making the country seven places lower in the worldwide ranking [39]. This fast decrease of English competence calls for a rapid action and supports the urgency of conducting this research. Previous literature and theories established the fact that foreign language classroom anxiety and English language problems are not new phenomena. They are widely studied in the

global and national setting, but limited data are found in the local setting. There is also no specific study focusing on the mediating effect of code switching on the relationship between foreign language classroom anxiety and English language problems.

Thus, this study sought to realize the succeeding objectives. First, it aims to assess the level of foreign language classroom anxiety among the respondents in terms of communication apprehension, fear of negative evaluation, and test anxiety. Second, it also aims to ascertain the level of English language problems encountered by the respondents in terms of speaking, writing, reading, and listening. Third, it targets to describe the level of code-switching among the respondents. Fourth, it intends to determine if there is a significant relationship between foreign language classroom anxiety and English language problems, foreign language classroom anxiety and code-switching and code-switching and English language problems. Finally, this study intends to discover the mediating effect of code-switching on the relationship between foreign language classroom anxiety and English language problems.

On the basis of the mentioned research objectives, this study sought to prove or disprove the hypotheses that there is no significant relationship between foreign language classroom anxiety and English language problems, foreign language classroom anxiety and code-switching,

and code-switching and English language problems. Moreover, it also sought to accept or reject the hypothesis that code-switching has no mediating effect on the relationship between foreign language classroom anxiety and English language problems.

This study will prominently offer clarification on the ongoing global debate on whether code switching has beneficial or detrimental effect on English language learners. It will further contribute to the existing body of knowledge by identifying the specific language problems and specific level of language anxiety experienced by students. By determining the specific challenges faced by learners, the foremost step in solving the problem will have been taken. Furthermore, the results of this study can be used as basis in formulating solutions for problems in language anxiety and language difficulty- problems which are commonly experienced by a large population of ESL and EFL learners.

It will also be of profound benefit to the Department of Education, academic institutions and school administrators, teachers, language learners, and future researchers. The findings of this study can give helpful information to the Department of Education on whether to recommend the use of code switching in the classroom or not. Based on the data gathered and analyzed in the study, the sector will also be informed on the language anxiety level of the students as well as the specific English language problems that they are experiencing.

In addition, the findings of the study can also serve as the basis of academic institutions and school administrators to effectively decide whether to retain or adjust their policy regarding the use of English language in the classroom. It can also be the basis in designing their enhancement and enrichment language programs. Teachers can also benefit from this study because it can give them substantial data on the students' level of language anxiety, their language difficulties, and the effects of code switching. With this, they can modify their learning objectives, teaching methodologies, and assessment tasks to suit the needs of the learners.

Furthermore, the main beneficiaries of this study are the language learners. They will be well-informed on the effects of the use of code

switching in their language anxiety and their English language problems; hence, it can help them adjust their language learning strategies. Lastly, the information provided in this study can help future researchers supplement their future research.

2. METHODS

2.1 Research Respondents

The population of this study was made up of senior high school students enrolled in the second semester of the academic year 2021-2022 from three academic institutions in Davao City. The population included both Grade 11 and Grade 12 online learners with English as their second language from any of the following academic tracks: Science, Technology, Engineering, and Mathematics (STEM), Accounting, Business, and Management (ABM), Humanities and Social Sciences (HUMSS), and General Academic Strand (GAS).

For privacy and confidentiality, the research settings were called School A, School B, and School C. These three respective settings were all private institutions in Davao City, Philippines. School A was a medical school located in the first district of Davao City. Aside from offering college courses, it is also known for offering a Senior High School Program. School B was also a higher education institution which is also located in the city's District 1. It offers an SHS program and a grade school program. School C is a Catholic school located in the District 2 of Davao City. It took pride in offering grade school, junior high school, and senior high school programs. These research settings were chosen due to the localized intentions of the study, and the inclusion criteria of this study was primarily based on the curriculum designed for academic track students which included various language-related subjects, standards, and competencies.

The Slovin's formula, with 5% margin of error, was used to compute for the sample size of the study. As explained by Baraceros, the acceptable level of probability of the sample's representativeness is 0.05 (128). Additionally, the Slovin's formula allows the researcher to get a sample from the total population with a required degree of precision (Ellen). Since it was not feasible to sample the entire population, a smaller sample was taken using the Slovin's formula. Since the population was divided into different subgroups, the stratified sampling

technique was applied to randomly select samples from each subgroup. This sampling technique is generally used when there are variations within a population. This is to ensure that every subgroup is adequately represented [40].

To compute for the acceptable sample size, the following were the total populations of SHS students from the four academic tracks enrolled in the A. Y. 2021-2022 from the three institutions which served as the research locale of the study. In School A, the total population of SHS students in the academic track was 1,994. In School B, there was a total population of 1204 SHS students. Lastly, in School C, the total population of SHS students in the academic track was 231. Thus, from the given population, 209 students from School A, 126 students from School B, and 25 students from School C were selected as respondents of the study. In sum, out of an accumulated population of 3429, the total sample size of this study involved 360 senior high school students.

Excluded from the study were Grade 11 and Grade 12 SHS students with English as their native or foreign language because this study only focused on English as a second language. Since data were gathered online, the study also excluded students with printed and digital modular as their chosen mode of learning for the 2nd semester of A.Y. 2021-2022 due to their limited or lack of access to the internet and/or to any gadgets. It also excluded TVL (Technical, Vocational, and Livelihood) track students because their focus was more on practical activities related to their specialization. Lastly, the study did not cover SHS students who were not bona fide, who dropped or totally withdrawn, and/or who transferred to schools other than the study's setting.

2.2 Instrument

The instrument used to gather data in this study was a survey questionnaire consisting of three parts. Close-ended statements were given to help determine the participants' extent of foreign language classroom anxiety and English language problems, the relationship between the two mentioned variables, and the mediating effect of code switching on the relationship between foreign language classroom anxiety and English language problems.

The first part was adapted from the *Foreign Language Classroom Anxiety Scale (FLCAS)* of Horwitz, Horwitz, & Cope. The FLCAS is a 5-point Likert scale, ranging from 'Strongly Agree' to 'Strongly Disagree,' with 33 closed-ended statements. It consisted of the following dimensions: communication apprehension, fear of negative evaluation, and test anxiety. The questions in the original FLCA scale were categorized based on the three mentioned dimensions. Specifically, items 1, 4, 9, 14, 15, 18, 24, 27, 29, 30, and 32 were communication apprehension questions. Items 2, 7, 13, 19, 23, 31, and 33 were under fear of negative evaluation, and items 3, 5, 6, 8, 10, 11, 12, 16, 17, 20, 21, 22, 25, 26, and 28 were categorized under test anxiety [41]. In testing the reliability of the adapted instrument, Cronbach's Alpha was used, which revealed a coefficient of .979 suggesting a high reliability.

The second part was adapted from the study '*Investigation of Thai Students' English Language Problems and Their Learning Strategies in the International Program at Mahidol University.*' The original instrument was a frequency scale measuring how often students experience certain English language problems. In this study, the questionnaire was modified as a Likert scale measuring the extent to which the participants agree or disagree to the statements. It was divided into 4 subsections: speaking, listening, reading, and writing. The questionnaire was verified a professor at King Mongkut's Institute of Technology North Bangkok. It was also tested for reliability yielding a Cronbach Alpha of .982 suggesting a high reliability.

The third part was adapted from *the study on 'Code Switching in ESL Classrooms: A Study of Adult Arabic Learners.'* The instrument was originally a 4-point Likert scale which was later modified to be a 5-point Likert scale. It consisted of multiple-choice questions which measured the degree of agreement or disagreement to certain code-switching questions. The Cronbach Alpha coefficient of the adapted instrument is .967 indicating that the third part of the questionnaire is also of high reliability.

The following rating scale was used in the interpretation of the participants' responses in Foreign Language Classroom Anxiety, English Language Problems, and Code Switching questionnaires:

Range of Means	Description	Interpretation
4.20-5.00	very high	Measures of foreign language classroom anxiety, code-switching and English language problems are always manifested and/or observed.
3.40-4.19	high	Measures of foreign language classroom anxiety, code-switching and English language problems are often manifested and/or observed.
2.60-3.39	moderate	Measures of foreign language classroom anxiety, code-switching and English language problems are sometimes manifested and/or observed.
1.80-2.59	low	Measures of foreign language classroom anxiety, code-switching and English language problems are seldom manifested and/or observed.
1.0-1.79	very low	Measures of foreign language classroom anxiety, code-switching and English language problems are almost never manifested and/or observed.

After the research instrument has been modified and adapted to fit the study's context, it was submitted to the research adviser for comments and suggestions. Upon approval, the instrument was validated by four expert validators from the University of Mindanao Professional Schools and one expert validator from an external institution. The result of the validation yielded a mean score of 4.4 suggesting a very good validity.

2.3 Design and Procedure

This study made use of a non-experimental quantitative method. Quantitative research is an impartial, systematic, and empirical analysis of observable phenomena employing computational methods. It focuses on numerical evaluation of data anticipating that the numbers produce objective outcomes that can be generalized to a larger population and describe a specific observation [42].

Particularly, this paper applied the descriptive-correlational research design. Descriptive-correlational design describes the variables of the study as well as the correlations that naturally occur between them [43-45]. This method stresses objective measurement of the foreign language classroom anxiety and English language problems of the participants. It also accentuates statistical or numerical analysis of the relationship between FLCA and language problems and the mediating effect that the code-switching has on the relationship between the aforementioned variable.

In gathering the data, strict and proper procedures observing the Data Privacy Act of 2012 and the IATF guidelines were strictly

followed by the researcher. First, the researcher asked permission to conduct the study by sending a letter to the schools' Office of the Principal to request for approval for the conduct of this research. After the school principals affixed their approval, a second letter was sent to the school registrar to request for the list of senior high school students enrolled in the A.Y. 2021-2022. The lists of students were dealt with utmost confidentiality to avoid any forms of data leak.

Afterward, the resident guidance counselor and the class advisers were asked to go over the prepared consent and assent forms and the study instrument before administration. They were also involved in deciding which participants are emotionally and mentally ready to participate in the study to avoid any adverse effects on the students' learning and well-being. The guidance counselors of the school were invited to do the briefing and debriefing of the participants.

After obtaining permission from different offices, the researcher sent the letter of informed consent with the attached endorsement letter from the Office of the Principal to the respondents of the study. The respondents were fully informed of what the research is all about, and they were aware of their rights as research participants. For respondents of minor age, a minor assent form was given to them and a separate parent's consent form was given to their parent or legally authorized guardian. For the safety of both the participants and the researcher, data collection was done using Google Forms.

Subsequently, the researcher gathered and tallied all the data collected from the respondents with proper guidance from the statistician. The

results were then analyzed in relation to the research objectives of the study. After the research study concluded, data gathered from the research participants were properly disposed to prevent unauthorized use of data.

In computing the data, descriptive and inferential statistics were employed, particularly *Mean*, *Person's r*, *Regression Analysis*, and *Path Analysis*. The *mean* was used to determine the level of foreign language classroom anxiety in terms of fear of negative evaluation, communication apprehension, and test anxiety; the level of English language problems in terms of speaking, reading, writing, and listening; and the level of code-switching among the senior high school students. In addition, the *Pearson's r* measured the relationship between code-switching and foreign language classroom anxiety, code-switching and English language problems, and foreign language classroom anxiety and English language problems. Lastly, regression and path analysis were used to identify the mediating effect of code-switching on the relationship between foreign language classroom anxiety and English language problems.

3. RESULTS AND DISCUSSION

3.1 Level of Foreign Language Classroom Anxiety

Table 1 revealed that there was a high level of foreign language classroom anxiety among the senior high school students of Davao City with an overall mean score of 3.61. Shown below are the mean scores of each indicator under the study's independent variable. With a mean score of 3.56, 3.77, and 3.51, the levels of communication apprehension, fear or negative evaluation, and test anxiety were high.

Table 1. Level of foreign language classroom anxiety

Indicator	SD	Mean	Descriptive Level
Communication Apprehension	0.77	3.56	High
Fear of Negative Evaluation	0.80	3.77	High
Text Anxiety	0.78	3.51	High
Overall	0.72	3.61	High

Table 2. Level of english language problems

Indicator	SD	Mean	Descriptive Level
Speaking	0.85	3.37	Moderate
Listening	0.90	2.75	Moderate
Reading	0.91	2.82	Moderate
Writing	0.86	3.26	Moderate
Overall	0.75	3.05	Moderate

This was consistent with the study of Amengual-Pizarro [9] which revealed that 71.9% of the study's respondents, average to high levels of anxiety in the English language classroom. Similarly, Djafri and Wimbari [10] mentioned in their study that Japanese, Arabic, Korean, French, and English learners were recorded with the highest level of foreign language anxiety.

The result of this study was also in line with the findings of Labicane [11]. The researcher revealed that there was a high level of anxiety, specifically in speaking, observed among the participants. With this finding, teachers were urged to foster a classroom setting that is free from judgment, where learners' mistakes are seen as simply a normal aspect of the learning process.

3.2 Level of English Language Problems

Table 2 revealed that there was a moderate level of English language problems among the participants with an overall mean score of 3.05. It specifically shows the mean scores of each indicator under the study's dependent variable. With a mean score of 3.37, 2.75, 2.82, and 3.26, the levels of speaking, listening, reading, and writing problems among the respondents were only moderate.

As shown in the data above, the primary reasons for language difficulties in speaking, reading, writing, and listening were the difficulty to explain ideas using the English language; inability to comprehend the custom, attitude, and social circumstances of the native speakers of English; difficulty to deduce the meaning of new words; difficulty to comprehend English idioms; and difficulty to employ grammatical rules in writing paper.

The moderate level of English language problems revealed in this study was not at par with the findings of Pawapatcharandom [19] where it has been found that the participants always experienced a profound problem with the listening, speaking, writing, and reading skills. These difficulties were particularly existing because students did not understand the tone of voice; they could not clearly express ideas using the English language; they could not comprehend English idioms; and they could not write an essay if given limited time.

3.3 Level of Code-Switching

Table 3 specifically indicated an overall mean score of 3.93 which means that there was a high level of code-switching among the respondents. The mean scores of each item under the study's mediating variable were precisely indicated. All items got mean scores which were considered of high level.

This was consistent with the findings of Subon and Tarmim [1] wherein it was shown that there was a high frequency rate of code-switching among their Malaysian respondents. The research of Mauliddiyah et al. [2] also revealed that students' code-switching in class was fairly high, while teachers extent of code-switching was even higher.

Although the data analyzed by Larbah [3] showed that students had diverse answers on the use of code-switching, 90% indicated awareness of speaking two languages in class. Moreover, the study participants found it helpful to code-switch because it helped facilitate conversation, made learning quick and effortless, assisted language skill learning in two languages, and enabled speakers to express their identity.

3.4 Significance on the Relationship between Foreign Language Classroom Anxiety and English Language Problems

Results shown in Table 4a indicated that the null hypothesis stating that no significant relationship existed between foreign language classroom anxiety and English language problems was rejected because there was a significant and positive relationship between the two mentioned variables, with an overall R-value of .624 and a p-value of .000. This further means that the level of English language problems increased when the level of Foreign Language Anxiety increased.

Accordingly, several research studies found a strong inverse relationship between language anxiety and English language learning. This indicates that if a learner felt anxious in the language classroom, it would result to a problem in learning the language. The study of Tian and Mahmud [5], for instance, mentioned that language anxiety played a substantial but disadvantageous role in speaking as it was considered one of the leading causes of language difficulties.

Taha and Wong [7] specified that fear stemming from being called upon by a teacher was an anxiety-arousing source. This was usually complemented by fear of inaccurate pronunciation, varied accent between the sender and receiver, misinterpretation, low proficiency and formal situation. Additionally, the study of Nugroho, et al. [8] found out that their participants had a fear of being reprimanded, a fear of being subject to laughter, and a timid personality. As stated by Amegual-Pizarro [9], this excessive concern about the personal and academic evaluation of their use of the target language might deter students from developing their oral communication skills.

Lastly, various research studies indicated that test anxiety, the final component of foreign language classroom anxiety, also had substantial effects on the foreign language learning process. A study which was designed to determine the correlation between test anxiety and academic achievement of students in Ethiopia concluded that test anxiety increases mistakes in the learning process. It has been noted that students were extremely bothered during a test and thought too much about their test results that it interfered with their test performance. They also often got nervous that they forgot facts they learned [35].

3.5 Significance on the Relationship between Foreign Language Classroom Anxiety and Code-Switching

Results shown in Table 4b indicated that the null hypothesis asserting that no significant relationship was found between foreign language classroom anxiety and code-switching was rejected because there was a significant and positive relationship between the two mentioned variables, with an overall R-value of .451 and a p-value of .000. This further means that the level of Code-Switching increased when the level of Foreign Language Classroom Anxiety increased.

Table 3. Extent of code-switching

Item	SD	Mean	Descriptive Level
Using both mother tongue and English assists my learning of English.	0.82	4.01	High
Using both mother tongue and English leads to my success in English.	0.83	3.96	High
In learning a course, using both mothertongue and English is most beneficial to my learning.	0.86	4.00	High
In learning a course, using both mothertongue and English increases my chances of passing the exams.	0.85	3.92	High
Feeling aware that I am speaking two languages in class.	0.84	4.03	High
Feeling that it is natural to use mother tongue while learning English.	0.84	4.01	High
Feeling relaxed when I and my friends use mother tongue while learning English.	0.84	4.05	High
Preferring to use mother tongue whenever I am learning English in the classroombecause it helps me enjoy my lesson.	0.88	3.82	High
Preferring to use mother tongue wheneverI am learning English in the classroom because it helps me with my learning.	0.86	3.84	High
Preferring to use mother tongue wheneverI am learning English in the classroom because it makes me feel comfortable when learning English.	0.86	3.87	High
Preferring to use mother tongue whenever I am learning English in the classroombecause I feel less lost during the lesson.	0.87	3.78	High
Preferring the use of mother tongue with myfriends while learning English in the classroom because I am not good at English.	0.92	3.77	High
Preferring the use of mother tongue with myfriends while learning English in the classroom because it helps me to understand new words.	0.86	3.88	High
Preferring the use of mother tongue with myfriends while learning English in the classroom because it helps me to understand the difficult concepts.	0.83	3.95	High
Preferring the use of mother tongue with myfriends while learning English in the classroom because it helps me to understand English grammar.	0.89	3.91	High
Using mother tongue in English lessons helps facilitate communication.	0.87	3.94	High
Using mother tongue in English lessons makes learning fast and easy.	0.85	3.90	High
Using mother tongue in English lessons support skill learning in the twolanguages.	0.84	3.99	High
Using mother tongue in English lessons enables the speakers to express theiridentity.	0.83	3.96	High
Overall	0.69	3.93	High

Correspondingly, researchers who support code-switching believes that COSW should have a part in addressing language anxiety [13]. The study of Almoayidi [16] particularly mentioned that L1 supporters suggested the use of the mother tongue in learning the L2. It was believed

that COSW was beneficial in eradicating students' anxiety in language classrooms. As mentioned in previous literature, grown up learners were more inflexible in learning than children, and they were more inclined to be careful when learning. As such, using mother

tongue was vital to reduce language learning anxiety in the language classrooms. Furthermore, if a student was only allowed to use L2 alone, it could be a hindrance which might make students feel hesitant to use the target language, especially if they are not yet that adept. In China, it was found out that when teachers forced their students not to use their L1 in learning L2, there would be an adverse effect on them learning the target language.

For Malaysian students, code-switching happened due to various factors. Anxiety was one of the reasons together with being unfamiliar with English words and simplifying concepts and theories. It can be deduced from these findings that the students resorted to their first language when they encountered difficulties in voicing out their ideas in English and when they felt anxious [1]. Accordingly, the study of Pires [15] mentioned that grammar and speaking were better learned by French learners when code-

switching is permitted in language classrooms. It is likely that code-switching honed learners' metalinguistic awareness and mental abilities and lessened their anxiety, making them more inclined to comprehend language input and respond to test instructions better.

3.6 Significance on the Relationship between Code-Switching and English Language Problems

Results shown in Table 4c indicated that the null hypothesis asserting that no significant relationship was found between code-switching and English language problems was rejected because there was a significant and positive relationship existing between the two mentioned variables, with an overall R-value of .257 and a p-value of .000. This further means that the level of English language problems increased when the level of code-switching increased.

Table 4a. Significance on the relationship between foreign language classroom anxiety and english language problems

Foreign Language Classroom Anxiety	English Language Problems				
	Speaking	Listening	Reading	Writing	Overall
Communication Apprehension	.726** .000	.484** .000	.403** .000	.525** .000	.622** .000
Fear of Negative Evaluation	.608** .000	.316** .000	.243** .000	.386** .000	.450** .000
Text Anxiety	.738** .000	.535** .000	.440** .000	.487** .000	.641** .000
Overall	.755** .000	.486** .000	.395** .000	.509** .000	.624** .000

Table 4b. Significance on the relationship between foreign language classroom anxiety and code-switching

Foreign Language Classroom Anxiety	Code-Switching
Communication Apprehension	.409** .000
Fear of Negative Evaluation	.387** .000
Text Anxiety	.442** .000
Overall	.451** .000

Table 4c. Significance on the relationship between code-switching and english language problems

Code-Switching	English Language Problems				
	Speaking	Listening	Reading	Writing	Overall
	.352** .000	.120 .023	.131 .013	.287** .000	.257** .000

This result was consistent with the notions of the proponents of exclusively using the target language in second or foreign language classrooms. They proposed that by exclusively using the target language as a learning model habituated learners to structuring their own language system through communication practices, whereas code-switching made students lose interest in paying attention to the target language. For these studies, it was evidently assumed that the target language should be the primary language used in language classrooms, both as a medium of instruction and communication. Amongst the reasons attached to this belief was that extensive exposure to the target language would not only help learners attain a native-like command of the language, but the omission of L1 in language classrooms would also give opportunity for the target language to be the only primary source of exposure [18].

In contrast, there were studies which proved the advantages of code-switching. For instance, Subon and Tarmim [1] discussed in their paper that learners regarded code switching as helpful in achieving better understanding. In addition, Castillejo and Calizo [14] confirmed the significant relationship between the learners' frequency on the use of code-switching and their level of English competence. This finding further led to their recommendation that teachers should consider making excellent use of code-switching as a means of assisting students grasp the lessons better. On the students end, they should not be reluctant to code-switch whenever the need arises so that they could freely express their thoughts and could actively contribute in class discussions. Shafi, et al. [17] further opposed the notion that code-switching had a negative impact on L2 learning. Instead, it smoothed it.

3.7 Mediating Effect of Code-Switching on the Relationship between Foreign Language Classroom Anxiety and English Language Problems

Results shown below revealed that code-switching had no mediating effect on the relationship between foreign language classroom anxiety and English language problems. The most common way to obtain estimates of the path coefficients was to run the following series of regression analyses. In the first step, regression was used to predict English language problems (ENLP) from foreign language classroom anxiety (FLCA) without the mediating variable. The result in Table 5a and Fig. 2 yielded an estimate of .66 and a p-value of less than 0.001 which indicated that the effect of FLCA on ENLP was statistically significant.

In the second step, a regression was also performed to predict code-switching (COSW) from foreign language classroom anxiety (FLCA). As seen in Table 5b and Fig. 3, the result of this regression revealed an estimate of .432 and a p-value of less than 0.001 which was still statistically significant. In the third step, the same statistical treatment was performed to predict English language problems (ENLP) from code-switching (COSW); however, result revealed an estimate of -.033 and a p-value of .509 which indicated statistical insignificance. This result means that the third condition in the path analysis was not met; thus, there was no established ground for mediation. In this regard, the hypothesis that code-switching had no mediating effect on the association between foreign language classroom anxiety and English language problems was accepted.

Table 5a. Regression weights for foreign language classroom anxiety and english language problems

			Estimate	S.E.	C.R.	P	Label
ENLP	<---	FLCA	.656	.043	15.124	***	

Table 5b. Regression weights for foreign language classroom anxiety, english language problems, and code-switching

			Estimate	S.E.	C.R.	P	Label
COSW	<---	FLCA	.432	.045	9.579	***	
ENLP	<---	FLCA	.670	.049	13.803	***	
ENLP	<---	COSW	-.033	.051	-.660	.509	

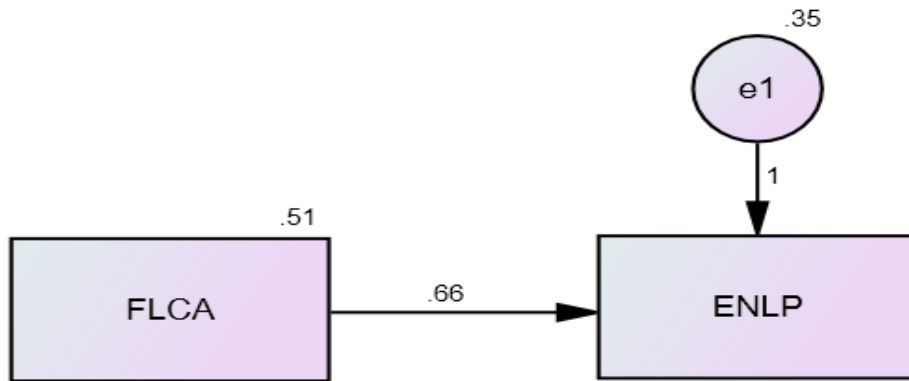


Fig. 2. Path diagram for foreign language classroom anxiety and English language problems

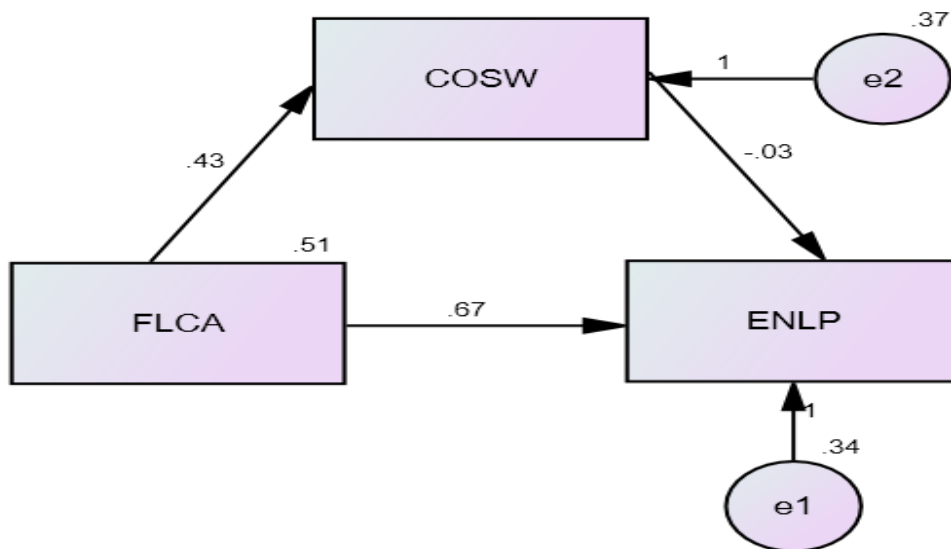


Fig. 3. Path diagram for foreign language classroom anxiety, English language problems, and code-switching mediation analysis

The result yielded from this mediation analysis supported the notions of the theoretical bases of this study. Horwitz, Horwitz, and Cope's Theory of Foreign Language Classroom Anxiety proposed that there was a significant relationship between FLCA and ENLP which was consistent with the generated result. Additionally, it was shown in this study that FLCA also had a significant relationship with COSW which was in line with what Lozanov's Suggestopedia indicated.

However, the proposed notion of Sociocultural Theory that there was a significant but inverse relationship between COSW and ENLP had been contradicted by the findings of the regression analysis performed. It also challenged the hypothesized idea of Affective Filter and Input Hypothesis under the Monitor Model of Stephen

Krashen since there was no established ground for mediation. Hence, even with the use of code-switching, foreign language classroom anxiety still predicted English language problems.

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

Based on the data analyzed, the succeeding conclusions were drawn. First, the study participants had a high level of foreign language classroom anxiety. A moderate level of English language problems was reported by the participants. Similar to FLCA, the respondents also had a high level of code-switching usage, attitude, and awareness.

Second, with the use of Pearson's r , it was found that there was a significant and positive relationship between foreign language classroom anxiety and English language problems, foreign language classroom anxiety and code-switching, and code-switching and English language problems. This means that when foreign language classroom anxiety increased, the level of English language problems and code-switching also increased; and when the level of code-switching increased, the level of English language problems also increased. After performing mediation analysis, it has also been revealed that code-switching had no mediating effect on the relationship between foreign language classroom anxiety and English language problems. Thus, the use of code-switching did not remove nor significantly reduced the relationship between the study's predictor and criterion variable.

These results supported the hypothesized idea of Horwitz, Horwitz, and Cope's Theory of Foreign Language Classroom Anxiety, and Lozanov's Suggestopedia. However, it did not totally agree with Vygotsky's Sociocultural Theory. The study suggested a positive relationship between code-switching and English language problems while the theory proposed otherwise. The findings also contradicted the study's major theoretical underpinning, Affective Filter and Input Hypothesis under the Monitor Model, since there was no established ground for mediation.

4.2 Recommendations

On the basis of the aforementioned conclusions, these recommendations have been drawn out:

The Department of Education may focus on strengthening the implementation of the department orders that would protect the learners from experiencing extreme language anxiety. Although the speaking, reading, writing, and listening problems of the respondents are only of moderate level, the English language curriculum may be redesigned to further lessen the problems in English language. Additionally, the department may also be clear on its stand about the use of code-switching in the classroom. They may take into consideration that the use code-switching, based on the findings of this study, cannot lessen the effect of foreign language classroom anxiety on English language problems.

The academic institutions and school administrators may concentrate on providing enhancement and enrichment programs to help students overcome their foreign language classroom anxiety and language difficulties. These programs could particularly focus on reducing language students' fear of negative evaluation and reading difficulties. If code-switching is found to be of frequent use, they may impose policies minimizing its use as it does not have any mediating role on the relationship between code-switching and English language problems. Aside from that, it has also been revealed that when learners code switch often, it can worsen their language difficulties.

The teachers may foster a safe learning environment that could lessen the language anxiety of the learners. Specifically, they can be more sensitive in giving out feedbacks since most students revealed that they have a fear of negative evaluation. They can also provide learning activities designed to improve their language skills, particularly their reading skills. Predominantly, they have to be more careful in using code-switching as a strategy in teaching the language.

The language learners may consider using other language learning strategies aside from code-switching since it does not have any mediating role in lessening the effect of language anxiety on their language problems. They also have to be mindful on the factors that can arouse their language anxiety and the specific language aspect that they have difficulties with.

Lastly, the future researchers may focus on identifying other language learning strategies that can have a mediating role on the relationship between foreign language classroom anxiety and English language problems.

CONSENT

As per international standard or university standard, respondents' written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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