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IAFOR Journal of Education: Language Learning in Education

Volume 9 – Issue 3 – 2021

Edited by Melinda Cowart
Texas Woman's University (TWU), USA

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Editorial Advice

Preparing a submission to the *IAFOR Journal of Education* is more than writing about your research study: it involves paying careful attention to our submission requirements. Different journals have different requirements in terms of format, structure and referencing style, among other things. There are also some common expectations between all journals such as the use of good academic language and lack of plagiarism. To assist you in reaching the review stage for this or any other peer-reviewed journal, we provide the following advice which you should check carefully and ensure that you adhere to.

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Plagiarism is a practice that is not acceptable in any journal. Avoiding plagiarism is the cardinal rule of academic integrity because plagiarism, whether intentional or unintentional, is presenting someone else's work as your own. The *IAFOR Journal of Education* immediately rejects any submission with evidence of plagiarism.

There are three common forms of plagiarism, none of which are acceptable:

1. ***Plagiarism with no referencing***. This is copying the words from another source (article, book, website, etc.) without any form of referencing.
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2. Meeting the Journal Aims and Scope

Different journals have different aims and scope, and papers submitted should fit the specific journal. A "scattergun" approach (where you submit anywhere in the hope of being published) is not sound practice. Like in darts, your article needs to hit the journal's "bullseye", it needs to fit within the journal's interest area. For example, a submission that is about building bridges, will not be acceptable in a journal dedicated to education. Ensure that your paper is clearly about education.

3. Follow the Author Guidelines

Most journals will supply a template to be followed for formatting your paper. Often, there will also be a list of style requirements on the website (font, word length, title length, page layout, and referencing style, among other things). There may also be suggestions about the preferred structure of the paper. For the *IAFOR Journal of Education* these can all be found here:
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The *IAFOR Journal of Education* only accepts papers written in correct and fluent English at a high academic standard. Any use of another language (whether in the paper or the reference list) requires the inclusion of an English translation.

The style of expression must serve to articulate the complex ideas and concepts being presented, conveying explicit, coherent, unambiguous meaning to scholarly readers. Moreover, manuscripts must have a formal tone and quality, employing third-person rather than first-person standpoint (when feasible), placing emphasis on the research and not on unsubstantiated subjective impressions.

Contributors whose command of English is not at the level outlined above are responsible for having their manuscript corrected by a native-level, English-speaking academic prior to submitting their paper for publication.

5. Literature Reviews

Any paper should have reference to the corpus of **scholarly** literature on the topic. A review of the literature should:

- Predominantly be about contemporary literature (the last 5 years) unless you are discussing a seminal piece of work.
- Make explicit international connections for relevant ideas.
- Analyse published papers in the related field rather than describe them.
- Outline the gaps in the literature.
- Highlight your contribution to the field.

Referencing

Referencing is the main way to avoid allegations of plagiarism. The *IAFOR Journal of Education* uses the APA referencing style for both in-text citations and the reference list. If you are unsure of the correct use of APA please use the Purdue Online Writing Lab (Purdue OWL), – https://owl.english.purdue.edu/owl/resource/560/01/ – which has excellent examples of all forms of APA referencing. Please note APA is used for referencing not for the general format of the paper. Your reference list should be alphabetical by author surname and include DOIs whenever possible.

This short guide to getting published should assist you to move beyond the first editorial review. Failure to follow the guidelines will result in your paper being immediately rejected.

Good luck in your publishing endeavours,

Dr Yvonne Masters
Executive Editor, *IAFOR Journal of Education*

Table of Contents

Foreword **1**
Joseph Haldane

Editor's Introduction **2**
Melinda Cowart

Notes on Contributors **4**

Perceived Impact of EMI on Students' Language Proficiency in Vietnamese Tertiary EFL Contexts **7**
Thi Hoai Thu Tran
Rachel Burke
John Mitchell O'Toole

The Impact of Accent among Non-Native English-speaking Biology Lecturers on Student Comprehension and Attitudes **25**
Alexandra Kolesnikova
Alina Liubimova
Elena Muromtseva
Anton Muromtsev

Exploring the Effects of Automated Pronunciation Evaluation on L2 Students in Thailand **41**
Simon Moxon

Implementing Art and Music in Maltese Courses for Non-Native Adults **57**
Jacqueline Żammit

Exploring the Impact of Peer Assessment on EFL Students' Writing Performance **77**
Eleni Meletiadou

Teachers' Misbehaviours in Class and Students' Reactions: A Case Study **97**
Reem Alkurdi
Sharif Alghazo

Reviewers **115**

Foreword

It is my pleasure to introduce this issue of the *IAFOR Journal of Education: Language Learning in Education* issue, so wonderfully edited by Melinda Cowart, Texas Woman's University (TWU), USA. This represents the result of a great deal of effort on the part of the authors, but also the editor, associate editors and the reviewers, and the IAFOR publications team, who worked to get this issue ready for publication.

As a language learner myself, it is a source of particular pride to be able to see this journal come to fruition, and especially given that the majority of authors in this issue are not-native speakers of English, but are using the language as a communicative tool to reach a large audience and inform them of language learning in different and local cultures and contexts. In this issue, we see perspectives from Russia to Vietnam, Malta to Jordan, and the UK to Australia.

In many cases, different languages and cultures are what divide us, and are used to divide us. The learning of another language is one of the most important acts a student can engage in, to both ensure a continuing humility in the face of new knowledge and a strong statement of desire to engage in a global community. In this way language learning unites us, and enjoins us to understand, empathise, and be compassionate. The study of language and languages offers us, and our students, a new way of belonging to the world, and a new way of contributing to its betterment.

Happy Reading!

Joseph Haldane
Editor-in-Chief
IAFOR Journal of Education

From the Editor

Greetings readers! Welcome to the *IAFOR Journal of Education: Volume 9 – Issue 3 – Language Learning in Education*.

Since the last issue of the *IAFOR Journal of Education: Language Learning in Education*, much has changed for most of the world. With the advent of the COVID-19 worldwide pandemic, citizens of every country on earth have become witness to and victim of the same worldwide crisis. A complete transformation of what had been considered normal living has ensued. Jobs have changed, ways of communicating have been modified, lives have been altered, and countless prospects are adjusted to reflect an unsettling version of the "new normal." Numerous people who previously coped well, have become less capable of managing because of the manifold stressors generated by the pandemic. One matter that the pandemic has been unsuccessful in accomplishing is stifling the ongoing urgency for the language learning journey that exists globally.

Multilingualism, second language acquisition, and second language learning continue to take place in every nation. Even with temporary pandemic-related travel bans, the movement of peoples from country to country has slowed very little. The number of second language learners throughout the world increases constantly, reminding educators, scholars, and researchers that investigating the complex processes of second language acquisition and language learning in addition to researching promising new methods, materials and trends is imperative to the improvement of second language teaching and learning. Motivations for learning another language notwithstanding, the persistent question concerns how to improve second language instruction in order to enhance and appropriately facilitate second language acquisition. Furthermore, discovering what signifies efficacious practice among those who teach child and adult language learners requires educators to look ahead for novel initiatives while simultaneously continuing to use strategies and methods that are research proven. Finally, it is important to explore the teacher behaviors that will enhance rather than inhibit language development. These precise topics are addressed in the variety of articles provided by the diverse group of authors who contribute their research and scholarship to this issue of the *IAFOR Journal of Education: Language Learning in Education*. The reader will gain knowledge of several issues affecting language learning in a wide assortment of nations and will find that similar discussions emerge in schools and EFL classrooms transnationally.

Article 1
In the first article, Thi Hoai Thu Tran, Rachel Burke, and John Mitchell O'Toole, authors of "Perceived Impact of EMI on Students' Language Proficiency in Vietnamese Tertiary EFL Contexts", look at how English as a medium of instruction (EMI), an increasingly popular educational model in non-English-speaking countries, has been implemented not only in English as a Foreign language (EFL) courses, but also in communication, business, and other content area courses to build English language proficiency at an international level. Through the research that is revealed, the authors delve into how lecturers and students perceive the effectiveness of such a model in accomplishing its goals.

Article 2
Alexandra Kolesnikova, Alina Liubimova, Elena Muromtseva, and Anton Muromtsev explore the mindsets of postgraduate biology students attending three highly ranked Russian universities regarding the foreign accents of non-native English-speaking lecturers in "The Impact of Accent among Non-Native English-speaking Biology Lecturers on Student

Comprehension and Attitudes". The authors and researchers investigated a common criticism of non-native speakers of English who teach university level courses in the sciences – the failure to speak in a manner that reflects near native competence, making lectures more comprehensible. The findings of the research offer insights that may inform the revision of diverse programs with similar issues.

Article 3
The possibility of using speech recognition technology to improve pronunciation among undergraduate language learners sets the parameters of the discussion in the third article. In "Exploring the Effects of Automated Pronunciation Evaluation on L2 Students in Thailand", Simon Moxon details his investigation of ways to build awareness of and facilitate accurate reproduction of phonetic sounds that do not exist in a language learner's L1. The goal of the research was to determine if improved pronunciation would be the result of the effective use of speech recognition technology.

Article 4
In "Implementing Art and Music in Maltese Courses for Non-native Adults", Jacqueline Zammit examines the effective use of music and art with adult Maltese language learners (ML2s). Noting that art and music can play an important role in second language acquisition, such as motivating communication in L2, promoting retention of new vocabulary, and enriching comprehension skills, Zammit designed a qualitative study to explore the impact of utilizing music and art to foster greater achievement in ML2.

Article 5
Eleni Meletiadou, author of "Exploring the Impact of Peer Assessment on EFL Students' Writing Performance", implemented a study that researched the impact of peer assessment on the writing of 200 adolescent Greek-Cypriot EFL students. What she found was that guided peer assessment over the course of a year contributed to writing improvement in 5 areas. The findings of the research provide recommendations for ways in which EFL teachers might use peer assessment to improve the writing of secondary EFL students.

Article 6
In, "Teachers' Misbehaviours in Class and Students' Reactions: A Case Study", Reem Alkurdi and Sharif Alghazo investigated the misbehaviours of English as a Foreign Language (EFL) teachers' in class and the subsequent reactions of the EFL students to these misbehaviours. This comprehensive study was supported by multiple classroom observations in which the affronts occurred, a survey that elicited plentiful student reactions regarding teacher communication styles, and numerous teacher interviews. The results reveal thought-provoking insights about the teacher-student relationship in EFL classes.

Happy reading!

Melinda Cowart
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Notes on Contributors

Article 1: Perceived Impact of EMI on Students' Language Proficiency in Vietnamese Tertiary EFL Contexts

Dr Thi Hoai Thu Tran is a lecturer of English at Hue University of Foreign Languages, Vietnam, where she has long been in charge of classes and research involving EFL, ESP and EMI. Her research interests focus on policy and practices of English as a Medium of Instruction in Vietnamese tertiary EFL contexts.
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Dr J. M. O'Toole, PhD, MEd(Hons), BSc(Ed), has long been involved in the preparation of resources for science teachers who have become conscious of the language component of their expectations of students at various levels of education. He is currently employed by the University of Newcastle, Australia, School of Education, with continuing responsibility for supervision of a wide range of Research Higher Degree projects. Mitch's major research interests are in curriculum change, the impact of language style on science teaching, the interaction between student and teacher understandings of the history and nature of science; the environment; and information and communication technology. He has published many articles in both national and international journals as well as textbooks and research-based teacher resource books for secondary science.
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Article 2: The Impact of Accent among Non-Native English-Speaking Biology Lecturers on Student Comprehension and Attitudes

Dr Alexandra Kolesnikova is an Associate Professor at the Faculty of Foreign Languages and Area Studies at Lomonosov Moscow State University, Russia, from which she has a PhD in pedagogy. She has a number of publications on ELT, teaching phonetics and assessing phonological competence. She is a member of the National Association of Applied Linguistics (Russia), and the National Association of Teachers of English (Russia). Her fields of expertise are Phonology and Phonetics: Instruction and Assessment.
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Article 3: Exploring the Effects of Automated Pronunciation Evaluation on L2 Students in Thailand

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Article 4: Implementing Art and Music in Maltese Courses for Non-Native Adult

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Article 5: Exploring the Impact of Peer Assessment on EFL Students' Writing Performance

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Article 6: Teachers' Misbehaviours in Class and Students' Reactions: A Case Study

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Perceived Impact of EMI on Students' Language Proficiency in Vietnamese Tertiary EFL Contexts

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Abstract

English as a Medium of Instruction (EMI) has been widely adopted at the tertiary level in non-English speaking countries and Vietnam is no exception. Vietnamese universities and the Vietnamese government have anticipated significant linguistic benefits for student outcomes through the implementation of EMI. Using a mixed-methods design of surveys, interviews, and focus groups with students and lecturers at six Vietnamese universities, this study investigates lecturer and student perceptions of the impacts of EMI on students' language proficiency in Vietnam. The study indicates that both students and lecturers were optimistic about students' language improvement. This study recommends some implications for students, lecturers, and further research regarding EMI in the Vietnamese EFL context. Among the recommendations to emerge from this study, assessment on students' language ability before they commence EMI courses and lecturers' adequate language competence for EMI programs should be considered.

Keywords: EMI, English language proficiency, EFL contexts, language skills, Vietnam

The Socialist Republic of Vietnam, hereafter Vietnam, is a country in Southeast Asia where Vietnamese, the national language, is the main medium of instruction in schools at all levels of education. Meanwhile, English is used as a foreign language in limited situations such as for international communication, business purposes, or international education. English language teaching in Vietnam has experienced various changes based on socio-political and economic developments in different historical stages. However, since Doi Moi (Renovation), English has consolidated its role as one of the most important foreign languages in globalization and internationalization in Vietnam.

First introduced in Vietnam in the 1990s, English as a medium of instruction (EMI) has become one of the country's current English language teaching (ELT) trends. Considered to be the first written policy document regarding the implementation of EMI, the Resolution on Higher Education Reform Agenda (HE) issued in 2005 officially documents English as a tool to teach and learn other subjects at the tertiary level. Since then, the implementation of EMI has been encouraged, but not compulsory, in Vietnamese tertiary EFL contexts as a response to globalization. The Vietnamese government expects EMI courses to assist with equipping Vietnamese graduate students with English language proficiency and academic expertise necessary for studying, working, and communicating efficiently in global contexts (Tran, Burke, & O'Toole, 2021). EMI has been implemented in some selected Vietnamese universities that meet the requirements set by the Ministry of Education and Training (e.g., with regards to teaching staff, resources, and facilities). Vietnamese students have the right to enroll in an EMI program if they satisfy specific criteria, such as passing the national university entrance examination and meeting the language requirements.

Literature Review

In recent years, the EMI approach has become a global phenomenon (Dearden, 2014; Goodman, 2014; Kirkpatrick, 2011a; Lei & Hu, 2014; McKay, 2014; Othman & Saat, 2009; Smala, 2009; Taguchi, 2014). Many researchers note that EMI has a significant role in the higher education systems of Asian and European countries as a part of universities' strategies for internationalization as many universities - and indeed governments – see EMI as integral to improving learners' English language competence (Byun et al., 2011; Chapple, 2015; Le, 2012; Wächter & Maiworm, 2014). However, the benefits of EMI to students' language competence are contested across cultures and nations. While some students believe that they can improve their language ability through EMI courses (Tatzl, 2011; Wächter & Maiworm, 2014; Yeh, 2014), others find that EMI does not have any influence on their English proficiency (Lei & Hu, 2014). A study conducted by Collins (2010) with 1011 students and 117 instructors in an English-medium university in Turkey reveals that students' self-perceived low language proficiency is the reason why "they feel disadvantaged during their college years (Collins, 2010, p.97). However, Collins (2010) also notes that EMI is a solution for non-English speaking countries like Turkey "to survive in the international market" (p.97). Lecturers and students in his study perceived the importance of the implementation of EMI as well as its linguistic benefits and employability to university students. Dearden (2014) defines EMI as "the use of the English language to teach academic subjects in countries or jurisdictions where the first language (L1) of the majority of the population is not English" (p.4). This approach aims to broaden learners' subject-area knowledge and promote their English proficiency and professional expertise in English. In this way, English seems to be a "tool for academic study, not as a subject itself" (Taguchi, 2014, p. 89). Similarly, many scholars point out some advantages of EMI, such as improving English, fully participating in international

communication (Cots, 2013; Seitzhanova, et al., 2015), encouraging international students to enroll, improving the university rankings, and promoting the learning of English (Cots, 2013).

Tatzl (2011) conducted a questionnaire survey and individual interviews on English-medium masters' programs at an Austrian university of applied sciences and indicated that the student participants perceived the positive influence of EMI courses on their English language skills. Tatzl (2011) notes that this is "the greatest benefit of English-medium instruction" (p. 258). The lecturer participants in his study stated that students are encouraged to practice the language in EMI courses. They believe that their EMI students are more confident in speaking skills.

In Korea (Republic of Korea), scholars (Byun et al., 2011; Lee, 2014) show that EMI approaches have been implemented at the tertiary level and expected to improve students' English skills to prepare them to work in the global environment. The findings from surveys and focus groups conducted by Byun et al. (2011) and the Centre for Teaching and Learning at Korean University indicate that students feel satisfied with EMI courses at Korean University (KU) as these courses are believed to help improve students' English proficiency. As noted by Byun et al. (2011), the EMI policy at Korean University seems to be successful, or "at least the outcome of EMI policy has so far been in line with the broader policy goal of internationalizing KU" (p. 438). However, the students believe that their English abilities need to be improved to take EMI courses more effectively, even though the findings show that English competence does not significantly affect their understanding of the subject-area knowledge.

A study undertaken with 476 EMI students at six Taiwanese universities by Yeh (2014) stated that there are various reasons students take EMI courses. Their lecturers' expertise in the content-area knowledge and their demands for improving their English ability are the most frequently cited. As with the findings of Byun et al. (2011), the participants in Yeh (2014) believe that EMI courses have a positive influence on students' English language skills, especially their listening and reading skills.

However, in other contexts, the benefits of EMI for students are perceived differently. For example, Lei and Hu (2014) conducted a study to examine whether EMI had any impact on students' English proficiency and affect in English learning and use from an undergraduate EMI program at a Chinese university. Their findings indicate that EMI courses do not improve students' English proficiency nor have a positive impact on English learning and use. Even, the students in their study perceived that "the intensive English listening and speaking instruction that the EMI students received in freshman year appeared to be more effective in improving their English proficiency than the EMI itself" (Lei and Hu, 2014, p. 122).

Interestingly, as with other scholars (Byun et al., 2011; Yeh, 2014), the findings of Chapple (2015), who conducted a mixed-method study using questionnaires and interviews with Japanese EMI teachers and students in two private universities in Western Japan, reveal that EMI courses in Japan are mainly implemented to improve the English proficiency of university students. However, as 34% of the students in these classes "failed to complete them and either gave up or officially withdrew" (Chapple, 2015, p. 5), the linguistic gains through EMI courses were described by the researchers as "dubious" (p. 4). Specifically, the findings of Chapple (2015) show that 33% of Japanese students in their study rate "*Some*" for the linguistics benefits from EMI, 18% think they have "*Considerable*" improvement in language proficiency, while 24% confirm that there is no change in their English ability through EMI courses. The rest of

the students are unsure about the impact of EMI on their language ability. Significantly, some issues that influence the effects of this approach on teaching language skills are also presented in Chapple (2015), such as one-way and teacher-centered Japanese teaching style and lecturers' lack the ability to "teach EMI classes effectively" (Chapple, 2015, p. 4).

The perceived impact of EMI on students' linguistic competence from previous studies in different contexts helps identify the issues that need to be addressed in the present study, including whether students and lecturers perceive EMI to have an impact on Vietnamese students' language proficiency and its impact on particular language aspects (listening skills, reading skills, writing skills, speaking skills, knowledge of grammar and vocabulary). This study was conducted to gain insights into lecturers' and students' perceptions of the impact of EMI on students' language proficiency using surveys and interviews at six universities located in Northern Vietnam, Central Vietnam, and Southern Vietnam.

Research Methods

An explanatory sequential mixed methods design, including surveys (students and lecturers), interviews (lecturers), and focus groups (students), was adopted in this study. As suggested by scholars (Creswell, 2012; Mills & Gay, 2016; Pole, 2007), this design provides a better understanding of the research problems or issues than either research approach alone. Closed questions in questionnaires with five-point Likert items were adapted from Byun et al. (2011), Yeh (2014), and Tatzl (2011). Particular Likert items of this study are shown in Table 1. The items in the questionnaires seek an understanding of participants' perceptions of the linguistic benefits of EMI to students. Meanwhile, the semi-structured questions were used for in-depth interviews with lecturers and focus group interviews with students to refine, consolidate and explain the quantitative findings.

Table 1
Five-Point Likert Items Used in the Study

Student Questionnaires		**Lecturer Questionnaires**	
Categories	Likert items	Categories	Likert items
Self-satisfaction with language proficiency in EMI courses	*1 = Not at all satisfied, 2= Not satisfied, 3 = Partially satisfied, 4 = Satisfied, 5 = Highly satisfied*	Students' language competence before commencing EMI courses	1 = *Not at all*, 2 = *Not much*, 3 = *Neutral*, 4 = *Somewhat*, 5 = *Very much*.
Self-assessment of four language skills	*1= Poor, 2= Below average, 3= Average, 4 = Above average, 5 = Excellent*	Students' language proficiency improvement through EMI courses	1 = *Strongly disagree*, 2 = *Disagree*, 3 = *Neutral*, 4 = *Agree*, 5 = *Strongly agree*.
Language proficiency improvement through EMI courses	1 = *Strongly disagree*, 2 = *Disagree*, 3 = *Neutral*, 4 = *Agree*, 5 = *Strongly agree*.		

Research Site and Participants

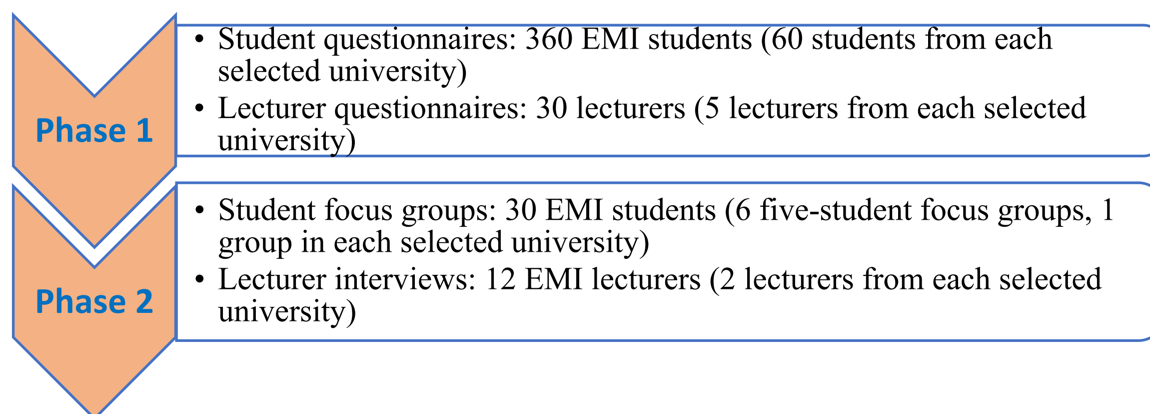
To understand the perceived impact of EMI on Vietnamese students' language proficiency, six Vietnamese universities in the southern, northern, and central parts of Vietnam were selected to participate in this study, two universities in each part. These selected universities featured and implemented EMI programs in their curriculum. The descriptions of content lecturers and EMI students involved in this research are presented in Figure 1 and the next section. The selected EMI students were enrolling in EMI courses when participating in this study and the lecturer participants had at least one year of experience in EMI programs. As suggested by Creswell (2012), the participants were selected randomly from the target universities to ensure that they had an equal opportunity of being selected and the samples could be representative of EMI students and lecturers.

Data Collection Procedures

The present study included two phases. In the first phase, the quantitative data were collected through questionnaires for students and lecturers. Thirty content lecturers were invited, of which five lecturers were from each selected university. Meanwhile, 360 EMI students were randomly selected to respond to the questionnaires, of which 60 students were from each selected university. The questionnaires were each composed of a number of scales, consisting of groups of Likert items. This paper rests on data from the two *Impact* scales, consisting of 31 items on the student questionnaire and 32 items on the lecturer questionnaire.

In the second phase, focus groups with 30 students and interviews with 12 lecturers were used to collect the qualitative data, in which two lecturers and one five-student focus group were interviewed in each target university.

Figure 1
Participants of the Study



To ensure the participants fully understood the questions, the questionnaires, focus groups, and interviews were conducted in Vietnamese. Then, in the stage of analysis and discussions, codes, nodes, and quotes were translated into English by the main researcher author, who is bilingual and familiar with the concepts of the study.

Data Analysis Procedures

Data from the student and lecturer questionnaires was entered into SPSS 25 for quantitative analysis. SPSS is a statistical software, including "a wide range of statistical procedures" to help researchers obtain results that are "suitable for use in a research report" (Cronk, 2019, p.iii). Descriptive analysis of each questionnaire yielded demographic data for both the student

and lecturer samples and reliability measures suggested that the scales were internally consistent (Cronbach's $\alpha = 0.9$ for both student and lecturer scales).

The qualitative data were organized and coded using NVivo 22 which helps researchers manage data from messy records into organizing and implementing a qualitative project, get ideas rapidly, see the relationship among ideas and concepts and then "report from the data" (Bazeley & Jackson, 2013, p. 3). As the content analysis was the main focus and aim of the analytical process in this study, both the content and context of documents from lecturer interviews (Spencer, et al., 2003) were analyzed to identify key themes, categories, and concepts (e.g., frequency of their occurrence, cluster), with the link to other variables (e.g., gender, regional locations, teaching experience), including lecturers' perceptions of the impact of EMI on students' language proficiency. Meanwhile, the relationships between themes were also examined. In addition, the qualitative data from student focus groups were analyzed using content analysis as the qualitative approach with a combination of two content analysis techniques. Signs according to their meanings were classified through the semantic content analysis in which "the frequency with certain objects (or persons, institution, or concepts) are mentioned" and "characterized" (Stewart & Shamdasani, 2007, p. 119). At the same time, the classical content analysis (Onwuegbuzie, et al., 2009) was also used to "create small chunks of the data and then placing a code with each chunk," and then, these codes "are placed into similar groupings and counted" (Onwuegbuzie et al., 2009, p. 6). A matrix adapted from Onwuegbuzie et al. (2009) was also applied for analyzing the data from student focus groups, shown in Table 2.

Table 2
Matrix for Focus Group Analysis

Categories	**Groups and Respondents**						Total
	Group 1	**Group 2**	**Group 3**	**Group 4**	**Group 5**	**Group 6**	
1	Members	Members	Members	Members	Members	Members	(n)
2	Members	Members	Members	Members	Members	Members	(n)
3	Members	Members	Members	Members	Members	Members	(n)

Research Question

The findings of the quantitative and qualitative data of this study addressed the following research question:

> What is the perceived impact of EMI approaches on students' English language proficiency?

Findings and Discussions

Students' Data

Students' self-satisfaction with language proficiency in EMI courses. Students in this study showed that they were satisfied most with their reading skills (Mean = 3.6 out of 5), followed by general vocabulary and listening skills. Meanwhile, they were moderately content with their writing skills, speaking skills, listening skills, knowledge of technical terms, and grammar, in which writing skills received the lowest mean ratings at 3.0. More detailed descriptive statistics of students' self-satisfaction with their language competence are presented in Table 3.

Table 3
Students' Self-Satisfaction with Language Proficiency in EMI Courses

Students' Self-Satisfaction (*N* = 360) *(1 = Not at all satisfied, 2= not satisfied, 3 = Partially satisfied, 4 = satisfied, 5 = Highly satisfied)*		
Items	**Mean**	**SD.**
Reading skills	3.6	0.8
General vocabulary	3.5	0.8
Listening skills	3.4	0.9
Technical terminology	3.3	0.9
Grammar	3.3	0.8
Speaking skills	3.2	0.9
Writing skills	3.0	0.8

Students' self-assessment of their four language skills. Overall, students rated their "*Understanding discussions during the lesson"* (listening skills) and "*Understanding instructions and questions in reading tasks*" (reading skills) with the highest scored at 3.8 while "*Using appropriate academic style*" and "*Coherence and cohesion in writing*" of writing skills were self-assessed with the lowest mean score at 3.3 and 3.2, respectively. More detailed descriptive statistics of students' self-assessment on their subskills of language competence are presented in Table 4.

Table 4
Students' Self-Assessment of their Four Language Skills

Assessment on listening skills (N=360) *(1= Poor, 2= Below average, 3= Average, 4 = Above average, 5 = Excellent)*		
Items	**Mean**	**SD.**
Understanding discussions during the lesson	3.8	0.8
Understanding the lecturer's oral instructions	3.7	0.9
Understanding conversations outside the classroom	3.7	0.9
Listening and taking notes during lectures in class	3.7	0.9
Listening and understanding the content of lectures in class	3.6	0.9
Assessment on speaking skills (N=360) *(1= Poor, 2= Below average, 3= Average, 4 = Above average, 5 = Excellent)*		
Discussing the subject-area knowledge in groups	3.5	0.8
Oral presentation skills	3.4	0.9
Expressing ideas about lectures	3.4	0.8

Assessment on reading skills (N=360) *(1= Poor, 2= Below average, 3= Average, 4 = Above average, 5 = Excellent)*		
Understanding instructions and questions in reading tasks	3.8	0.8
Reading and understanding the content of the lectures in class	3.7	0.8
Scanning and skimming skills to identify main ideas and specific information	3.6	0.8
Answering reading comprehension questions	3.6	0.8
Summarizing lectures	3.5	0.8
Assessment on writing skills (N=360) *(1= Poor, 2= Below average, 3= Average, 4 = Above average, 5 = Excellent)*		
Completing course assignments in papers	3.4	0.8
Summarizing subject-area knowledge	3.4	0.8
Using appropriate academic style	3.3	0.8
Coherence and cohesion in writing	3.2	0.9

Some students in focus groups revealed that they had "*sufficient language ability to understand the lesson*" (DG2 - Focus Group 4, 25 February 2017) or "*average*" (DG4, DG5 - Focus Group 4, 25 February 2017) as they attended general English classes or ESP/AEP classes before they commenced EMI classes. Generally, student participants believed that they gained linguistic benefits through EMI courses. More details of the students' comments are presented in Table 5.

Table 5
Students' perceptions of their English proficiency improvement through EMI courses

	Groups and Respondents						Total
	AG	**BG**	**CG**	**DG**	**EG**	**FG**	
Reading skills	AG1, AG2	BG3	CG1, CG4	DG1, DG2, DG2, DG4, DG5	EG3		11
Listening skills	AG2	BG1, BG2, BG4	DG1, DG2, DG3, DG4, DG5	EG1, EG4			11
Speaking skills	AG5	BG1, BG4, BG5		DG1, DG2, DG3, DG4, DG5	EG1		10
Writing skills		BG2, BG3, BG4, BG5	CG1		EG3, EG4		7
Technical terms	AG1, AG2				EG1	FG2	4

As with the quantitative data, students believed that their reading and listening skills were improved most:

> In the past, I read, but I did not understand it much, I meant I had to read very slowly. However, now I can read, scan, and understand faster (CG1- Focus Group 3, 24 February 2017).
>
> In the first year, I could read very slowly because there were a lot of complicated technical terms that I did not know. Later, after one year [in EMI courses], the speed of

> my reading skill is improved, and my listening skill is better. I can understand the lesson completely in class (AG2- Focus Group 1, 16 March 2017).

Students' writing skills and vocabulary (technical terms) were believed to be improved through EMI courses:

> I have to read extra books in English; thus, I can learn a lot of new words, technical terms in English. In addition, the subjects require students to write reports or do assignments in English. I think my writing skill is much enhanced, better than listening and speaking skills' (EG4- Focus Group 5, 24 February 2017)

> Personally, I think it [language ability] has been improved a lot, but in terms of technical terms of Business rather than communication skills or something like that (EG1 - Focus Group 5, 24 February 2017).

Unlike Tatzl's (2011) findings of students' confidence in speaking skills, the quantitative and qualitative findings of this study indicate that students feel more satisfied with their receptive skills (reading and listening skills) than their productive skills (speaking and writing skills). According to Davies (1976), knowledge of a foreign language is divided into three main stages. Receptive skills at the first and second stages enable students to "understand texts of various degrees of complexity in the foreign language" and "understand the spoken language" (Davies, 1976, p. 441). Meanwhile, at a higher level of stage three, students with productive skills are able to communicate actively in the foreign tongue to speak it and write it. The data of this study show that students have negative views of their productive skills, which is in line with the findings of lecturers' opinions of English abilities that students need to improve before commencing EMI courses (see details below).

Students' perceptions of the impact of EMI on their language proficiency are also reflected in their self-assessment on each sub-language skills, in which the overall mean scores of listening skills (Mean = 3.7 out of 5) and reading skills (Mean = 3.6 out of 5) are higher than writing skills (Mean = 3.4 out of 5) and speaking skills (Mean = 3.4 out of 5). Accordingly, students' self-assessment of receptive skills tends to be closer to "*Above average*" while productive skills are perceived at "*Average*" level. For example, they can comprehensively listen and understand the content and take notes during lectures (listening skills). Meanwhile, students believe that they can understand the content-area knowledge and scan and skim skills to identify main points or specific information (reading skills).

Students' perceptions of their language proficiency improvement in EMI courses. The quantitative findings indicate that students rated their language competence improvement with a range of mean scores from 3.3 to 4.0. More detailed descriptive statistics are shown in Table 6.

Table 6
Students' Perceptions of their Language Proficiency Improvement in EMI Courses

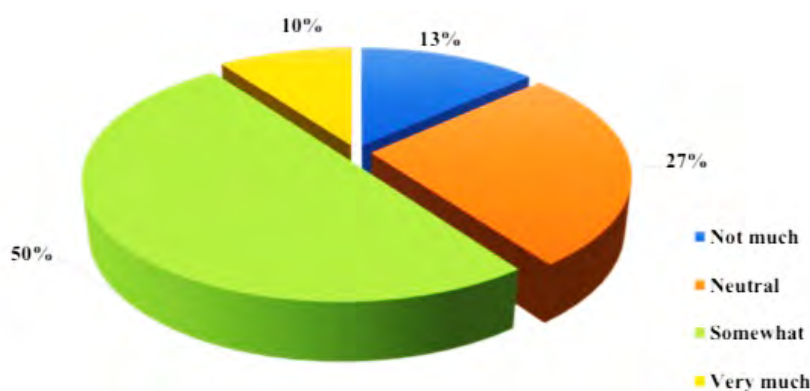
Students' language proficiency improvement (N=360) *(1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Disagree)*		
EMI courses help enhance my…	**Mean**	**SD.**
knowledge of technical terminology	4.0	0.7
listening skills	3.7	0.8
reading skills	3.7	0.7
speaking skills	3.7	0.8
general vocabulary	3.7	0.8
writing skills	3.6	0.8
knowledge of grammar	3.3	0.9

Overall, students perceived that EMI had a positive impact on their language proficiency. The data show that students' knowledge of technical terminology was most improved, followed by reading skills, listening skills, and speaking skills, while their knowledge of grammar is believed to be improved least. As presented by Tran et al. (2021), who conducted a study to explore challenges facing EMI students in Vietnamese EFL contexts, students had to read textbooks and extra materials and prepare new words before class, which may explain why their reading skills and knowledge of vocabulary were perceived to be improved most. As explained in focus groups, students' language proficiency improvement is linked to learning and teaching strategies and their own English level before commencing EMI courses, lecturers' language proficiency, and students' learning attitudes.

Lecturers' Data

Lecturers' assessment on students' language competence before EMI courses. Figure 2 shows that half of the lecturer respondents rated students' English proficiency before they commenced EMI courses at "*Somewhat*", 27% rated at "*Neutral*", 13% at "*Not much*", while only 10% believed that their students' language competence "*Very much*" meets the language requirements for EMI courses.

Figure 2
Lecturers' Assessment on Students' English Ability Before EMI Courses



The findings are consolidated in students' responses when they rated most of the items (5 out of 7) of their satisfaction of language proficiency below 3.5 (*see Table 2*). Tran (2020) noted that there is a lack of consistency in language requirements for EMI programs among

universities in Vietnam, which may lead to the fact that EMI lecturers have various opinions of the levels of students' required English proficiency.

Students' language proficiency improvement in EMI courses. Table 7 demonstrates the statistics of lecturers' ideas about students' language ability improvement in EMI courses. As with students, most of the lecturers see linguistic benefits of EMI courses to students' English level. Significantly, the highest score was at students' technical terminology knowledge (*Mean* = 4.6), followed by reading skills and general vocabulary (*Mean* = 4.5*)*. The least strong agreement was rated at "*Knowledge of grammar*" (*Mean* = 3.8).

Table 7
Lecturers' Perceptions of Students' Language Ability Improvement Through EMI Courses

Students' language proficiency improvement (N=30) *(1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree*		
	Mean	**SD.**
Knowledge of technical terminology	4.6	0.6
General vocabulary	4.5	0.6
Reading skill	4.5	0.6
Writing skill	4.3	0.6
Listening skill	4.2	0.7
Speaking skill	4.0	0.8
Knowledge of grammar	3.8	0.9

As with the quantitative findings, some lecturer respondents in the interviews stated that the students' vocabulary and reading skills were most improved, as stated:

> The students' knowledge is better after EMI courses. At least, their vocabulary and reading skills are improved (1E – Lecturer, interview, 10 March 2017).

The data also show that lecturers had more positive attitudes towards students' improvements in language proficiency through EMI courses while students seemed to be more modest about their improvements. As noted by Tran et al. (2021), students were most challenged by vocabulary difficulty. However, the findings of this study reveal that students' knowledge of technical terms was believed to be improved most through EMI by both lecturers and students. As mentioned above, teaching and learning strategies that are intended to help overcome vocabulary difficulty may help students improve this aspect of language competence.

Students' improvements of four language skills in EMI courses. Overall, lecturers agreed that students made progress in terms of language learning through EMI courses, in which using writing skills to complete course assignments and reading skills to reading and understand the content of the lectures in class were perceived to be most improved (Mean = 4.4). Meanwhile, understanding conversations outside the classroom (listening skills) was the least score at 3.8.

Table 8
Descriptive Statistics of Lecturers' Perceptions of Students' Listening Skills

Students' improvement in listening skills (N=30) *(1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Disagree)*		
EMI courses help students improve their abilities in	**Mean**	**SD.**
Listening and understanding the content of lectures in class	4.2	0.8
Understanding lecturer's oral instructions	4.2	0.7
Understanding discussions during the lesson	4.2	0.7
Listening and taking notes during the lectures in class	4.1	0.5
Understanding conversations outside the classroom	3.8	0.8
Students' improvement in speaking skills (N=30) *(1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Disagree)*		
Oral presentation skills	4.2	0.8
Discussing the subject-area knowledge in groups	4.2	0.8
Expressing ideas about lectures	4.1	0.8
Students' improvement in reading skills (N=30) *(1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Disagree)*		
Reading and understanding the content of the lectures in class	4.4	0.5
Understanding instructions and questions in reading tasks	4.3	0.5
Scanning and skimming skills to identify main ideas and specific information	4.3	0.6
Answering reading comprehension questions	4.2	0.7
Summarizing lectures	4.0	0.7
Students' improvement in writing skills (N=30) *(1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Disagree)*		
Completing course assignments	4.4	0.7
Using appropriate academic style	4.1	0.6
Summarizing content-area knowledge	4.1	0.7
Coherence and cohesion in writing	4.0	0.7

The qualitative data findings show that although four language skills are thought to be necessary for the students in EMI courses, lecturers believe that reading skills and listening skills are the most important. They think that students need to read many documents/textbooks in English and understand lectures (listening skills) in class as "*In my major, students need to read lots of books*" (2A – Lecturer, interview, 14 March 2017). However, speaking skills are perceived to be the least important. Although EMI courses were believed to help students improve their language proficiency, how much progress was actually made was explained differently, as admitted: "*not the same to all students*" (2E – Lecturer, interview, 13 March 2017). Some lecturers added that students' language ability improvement depended on lecturers' and students' efforts with no clear explanations of specific efforts or how they worked to enhance students' language proficiency.

> With 6-years' experience in teaching in English, I find that whether students can improve English or not depends on the effort of both teachers and learners. The majority of students' language ability is improved. However, to what extent of the improvement depends on the level of effort of the learner. In a class, about 20% of students make significant progress and their English ability has been improved from the first year to their graduation, but 30% of them are at a low level (2D – Lecturer, interview, 22 February 2017).

As with students' data, the lecturers' data show that students' English level before they commence EMI courses and lecturers' language proficiency influence students' improvement in English competence.

> Students' language ability will be improved a lot if lecturers pronounce correctly; if they do not, there is no improvement (1C – Lecturer, interview, 16 March 2017).

More specifically, lecturers explained that students' language proficiency was improved because they used English as an everyday habit in class and during lesson preparations and having lectures in EMI classes.

> Of course, their language proficiency has been improved. What you work with every day, think of it every day, concern about it every day, it [English] will become yours. …. Supposing the students are lazy, they do not want to study English at home. However, at school, they study in an environment where English is used completely; their language proficiency must be different [improved]. For example, they may not understand a word for the first time, but when they hear that word repeatedly for the second time, the third time, they will get it. Having experienced with 5 or 6 EMI courses in the Advanced Programs, I have found that students' language level is much improved (1D – Lecturer, interview, 16 March 2017).

As mentioned above, the students are modest about their progress in their language competence through EMI courses. As noted by many scholars (Chapple, 2015; Tran et al., 2021), content lecturers seem not to see their roles in students' language learning and use through EMI courses as their main responsibilities in EMI courses are believed to deliver content-area knowledge in English. Content lecturers believe that students' understanding of the content is the most important. As a result, they tend to deny their responsibilities for teaching English in EMI courses. Furthermore, Tran (2020) stated that Vietnamese lecturers did not perceive the effectiveness of collaboration between language lecturers and content lecturers in EMI courses in terms of linguistic support for students. The lecturers' lack of language proficiency and EMI training was also found in her study, which influences the way lecturers deliver the lecture in English, learners' engagement in the classroom, and the role of language and content teaching in EMI courses. Accordingly, students blame lecturers' language proficiency, especially lecturers' accents and pronunciation, for the quality of EMI lectures and lecturers' focus on delivering the content but avoid communicating with students in English during EMI lectures (Tran et al., 2021). These factors may explain the findings of students' perceived satisfaction with their improvements in language competence in this study.

Limitations

The strength of this study is the mixed-methods design with the incorporation of lecturer and student voices to address the perceived impact of EMI on students' language proficiency in

multiple perspectives. However, this study is based on the participants' reported perceptions and beliefs, and these may not adequately reflect practices happening in real EMI classrooms such as which language skills are practiced and how much the first language is used. In addition, the participants may not respond honestly when they give some comments on sensitive items such as students' responses to self-assessment on their own language ability because they are concerned about losing face. Furthermore, two of the target universities nominated the participants for the study; therefore, the respondents may avoid being disloyal to their employers or lecturers. Finally, the target research sites of this study are focal universities in big cities of three parts of Vietnam; consequently, the results may not be generalized to other Vietnamese universities in other parts of Vietnam.

Recommendations

EMI courses at the tertiary level are expected to bring students linguistic and non-linguistic goals (Tran, 2020). However, in an under-resourced context like Vietnam, the implementation of EMI needs to be well prepared and deployed to help students gain linguistic benefits. The findings of the present study suggest some implications for implementers (students, lecturers, and universities) and further research in Vietnamese tertiary EFL contexts.

First, EMI students need to well perceive the importance of their English level before commencing EMI courses. Students' English competence needs to be assessed through standardized benchmarks such as IELTS, TOEFL, "which are tailored to academic skills" (Nguyen et al., 2017, p. 43). In addition, English language teaching should prepare students for language competence from secondary and tertiary levels. Even when students meet the language requirements for EMI programs, English for specific purposes and English for Academic Purposes courses should be considered to equip them with skills of using language academically before they attend EMI courses.

Second, as discussed above, lecturers' lack of language proficiency may affect students' language learning. Therefore, lecturers should be aware of the roles of professional development, especially in preparing language competence for delivering the content-area knowledge in English, particularly their communicative skills (e.g., accent, pronunciation, accuracy, and fluency of expression in EMI lectures, and in dealing with questions) and the use of English in the academic environment. For example, they should attain language certificates such as IELTS, TOEFL or take part in international conferences and training courses for EMI lecturers. They also should consider consultancy or collaboration with language lecturers.

The findings of this study were mainly based on lecturers' and students' opinions. More research should be undertaken to understand better the actual impact of EMI on students' language learning. For example, classroom observations may provide evidence of how four language skills are practiced and how much English is used in EMI courses. Pretests and posttests are also a good way to assess students' language improvement.

Conclusions

The Vietnamese government encourages the implementation of EMI programs in tertiary EFL contexts in the expectation that they will improve students' language ability "as part of the national internationalization agenda" (Tran, Burke, & O'Toole, 2021, p.49). In this study, students' and lecturers' positive attitudes toward the impact of EMI on students' language proficiency, especially on students' receptive skills (Listening and Reading), suggest alignment between the government's intentions and student and lecturer perceptions. The current study's

findings provide one baseline for research on other EMI programs within Vietnam and in non-English speaking countries or for other additional languages as a medium of instruction programs.

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The Impact of Accent among Non-Native English-speaking Biology Lecturers on Student Comprehension and Attitudes

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Abstract

This study examined the attitudes of postgraduate biology students of three top-ranked Russian universities towards the foreign accents of non-native English-speaking lecturers. Fifty participants responded to a questionnaire, the main purpose of which was to explore the listeners' perceptions of professors' accents and their influence on students' ability to concentrate on and comprehend the lecture material. The research included a quantitative analysis of gathered descriptive data. The results of the study show Russian students' tolerant attitudes to foreign accents of non-native lecturers and demonstrate their readiness to comprehend non-standard English-medium speech of non-native representatives of the international natural sciences academic community.

Keywords: accent perception, foreign accent, non-linguistic professional discourse, Russian-speaking students, sociolinguistics, students' attitudes

The current global sociolinguistic paradigm welcoming non-standard varieties of English and inculcating tolerant attitudes to their spoken realisations has defined the shift from so-called "nativeness" and foreign accent reduction to achieving intelligibility and comprehensibility of an utterance in international non-linguistic professional discourse (Chien, 2014; Gill, 1994). The phenomenon of foreign accent softening, rather than total accent reduction, is said to be intertwined with maintaining a person's national identity while removing phonological barriers constraining effective intercultural communication (Gill, 1994; Johnson & Frederick, 1994; Nelson, 2011). In the context of English being a means of international communication among speakers with different L1 backgrounds and various professional pursuits, the analysis of non-native interlocutors' oral speech perception in natural sciences academic discourse presents a challenge for modern sociolinguistic research.

The objective of this study is to determine the evaluative judgements of Russian postgraduates towards non-native English-speaking biology lecturers in order to assess their level of tolerance to accented speech in an academic context. Accent bias has been linked to career possibilities, including those in academia, as non-native lecturers are commonly judged against native speaker pronunciation standards and ranked lower on dimensions relevant to teaching, such as competence and teaching quality (Hendriks et al., 2018). Native English accents have been historically highly regarded in Russian higher education, being associated with good education and prestige, making the probability of the presence of accent bias quite high. Maslova (2017) tapped into the perception of non-native speakers' (NNS) foreign accent within the linguistic community of other NNSs. This study, however, seeks to explore Russian students' attitudes toward non-native lecturers' accents and assess their readiness to comprehend non-standard English-medium speech in the academic context. The most essential question in this study is whether the presence of a negative attitude towards a foreign accent stops the listener from making the effort to concentrate on the content of a lecture.

Literature Review

The concept of English as a Lingua Franca (ELF) has irreversibly changed the role of pronunciation, both its acquisition and instruction, in English as a second language (ESL) class. Much of the current research suggests that there is less emphasis on ESL students struggling to sound native-like (Chien, 2014; Derwing, 2010; Nelson, 2011) as the focus in language acquisition has shifted to intelligibility and comprehensibility as the most important features of ESL learners' speech of any L1 backgrounds, as according to Nelson (2011),

> Far from being an issue only across 'native' and 'non-native' varieties, intelligibility is a concern across any varieties, whether broadly or narrowly construed (p.33).

Still, much evidence coming from empirical studies shows that there is a huge gap between the requirements for those who use English as a professional tool and those who use it as a means of communication in non-linguistic professional environments. Regardless of the ELF status and enormous worldwide influence of English, in Wach's study (2011), which involved 234 subjects, the majority of respondents (98% in Group A (n=132) and 83% in Group B (n=102)) agreed that it was preferable for teachers of English to have native-like pronunciation. The study by Coskun (2011) discovered that 38 out of 47 respondents, senior students of the English Language Teaching department, found having native-like pronunciation very important for a teacher of English. In the study by Maslova (2017), a questionnaire was administered to 23 teachers and 41 undergraduate students at Lomonosov Moscow State University (MSU). The results revealed that Russian teachers and ELT majors believed that "it was necessary to follow a particular

pronunciation norm while teaching English to those for whom this language is a professional tool" (p.10). At the same time, appealing back to ELF advocates (Modiano, 2009; Dimova, 2018) in non-native speaker (NNS) to NNS oral interaction in ELF, it becomes clear that

> the traditional prescriptivism of English language teaching (ELT) in the Expanding Circle, which emphasizes the benefits of imitating the educated native speaker of SE [Standard English], has become unacceptable (Dimova, 2018, p.51).

Thus, due to the study's focus on the role of pronunciation in communication between non-native speakers who use English as a lingua franca**,** those who belong to the professional linguistic environment have been excluded. The aim was to study accent perception in non-linguistic academic communication, namely, in the natural sciences academic community, in order to find out whether postgraduate students of biology of three top-ranked Russian universities give much attention to foreign accents of non-native speaking lecturers and to what extent a foreign accent might be an obstacle in processing accented speech.

Research in foreign accent perception or rating often involves native speakers as listeners and experts assessing the level of intelligibility of the accented speech of NNS (Gill, 1994; Johnson & Frederick, 1994; Lazaraton, 2005; Lowenberg, 2002; Seidelhofer, 2001) Moreover, experts and scholars themselves, being frequently zealous advocates of ELF, in their research compare NNS accents to native pronunciation. For example, Kennedy and Trofimovich (2008) assessed "how closely the pronunciation of an utterance approaches that of a native speaker" (p.461), while Julkowska and Cebrian (2015) looked at how similar the pronunciation of an L2 speaker is to the pronunciation of a native speaker of a particular language, which seems to contradict the idea of ELF in terms of sociolinguistic diversity and equality. Therefore, this study was planned as the one establishing a purely non-native English-speaking environment with both listeners and speakers of non-native L1 backgrounds, who use English as a lingua franca for research in the field of natural sciences.

Research Questions

In this study, the participants' attitudes were collected in order to answer the following research questions:

RQ1: When students listen to a lecture on biology in English delivered by a non-native speaker, is it important for them that the lecturer does not have a foreign accent? If so, how important?
RQ2: Does the presence of the lecturer's foreign accent prevent the students from concentrating on the content of the lecture? If so, to what extent?
RQ3: To what extent can students agree with the statement that non-native lecturers in their professional field should strive to reduce their foreign accents?

Apart from that, Russian-speaking students assessed foreign accents of the representatives of the international academic community that came from countries of the expanding circle of English whose contribution to the further development of every branch of biological sciences was equally significant and most prominent. The analysis of the classification of academic and research-related institutions outlined in the SCImago Institutions ranking of 2018 revealed that the three top countries in this regard were China, Germany, and France. Hence, specified pairs of questions (2 per country) were designed:

RQ4 – RQ6: How easy was it for the students to understand the content of a fragment of a lecture delivered in English by a professor from China (RQ4), Germany (RQ5) and France (RQ6)?
RQ7 – RQ9: When students listened to a fragment of a lecture delivered by a lecturer from China (RQ7), Germany (RQ8) or France (RQ9), did the lecturer's foreign accent prevent the students from concentrating on the content of the lecture?

Finally, some additional statistical tests were performed in order to look for possible meaningful correlations. It was hypothesized that the more the student was concerned about the presence of a national accent in a foreign lecturer's speech, the more it would impede their concentration on the lecture content.

Methodology

The participants in this study were 50 postgraduate biological sciences majors who belong to the natural sciences academic community of Lomonosov Moscow State University (MSU), Saint-Petersburg State University and Information Technology, Mechanics and Optical design (ITMO) University. The participants were chosen by the means of convenience sampling from these top-ranked Russian universities as they had established academic links with Lomonosov MSU where the study was based. Out of these 50 participants, 41 majored in Biology and 9 in Bioengineering and Bioinformatics. All the participants had attended or were still attending compulsory classes of English as a Foreign Language for biologists at the Upper-Intermediate level of language proficiency (marked B2 in Common European Framework of References) or higher (CEFR, 2018).

Prior to conducting the research, the study was piloted on a trial group of 10 participants – students of Lomonosov Moscow State University. Taking into consideration respondents' feedback and comments, several changes were introduced into the questionnaire.

In the first part of the study, all the participants were administered an anonymous online questionnaire, which was specifically designed for this study (Appendix 1, Part 1). The items in the questionnaire matched the research questions of the study. The main aim of the questionnaire was to explore the participants' attitudes towards the presence of a foreign accent in the speech of a non-native English-speaking lecturer from their professional field, and reveal the effects of accented speech on students' ability to concentrate on the material without being distracted.

The questionnaire consisted of eleven 7-point Likert items, given that 7-point rating scales can be referred to as "balanced" (Friedman & Amoot, 1999, p. 119), which tends to increase the degree of "precision" of participants' answers (Cohen et al., 2017, p. 327). Each scale point was labelled by the researchers to minimise inaccuracies stemming from individual interpretation of numbers.

Anonymity of the questionnaire responses was ensured due to ethical considerations; no personal data was collected. Out of sustainability reasons the researchers opted for an online questionnaire; the study was conducted via Google Forms. The participants were provided with detailed written instructions for each part of the survey. By submitting the questionnaire, the participants consented for their responses to be used for research purposes. Each participant could access the questionnaire link only once to prevent answer falsification.

In the second part of the study, the students were asked to listen to a fragment of a lecture delivered by non-native English-speaking lecturers from China, Germany, and France (Appendix 1, Part 2). The respondents were instructed to fill in their answers after listening to the recording once. To prevent the participants from making unnecessary appearance-based judgements, the researchers removed the visuals and solely played an audio version of the fragment of each video. The main criteria for the choice of the video fragments were as follows:

- the lecture had to address a biology-related topic;
- the speaker had to come from a country which belongs to the Expanding Circle;
- the speaker's mother tongue was not English;
- the speaker was proficient in English;
- the speaker specialised in one of the branches of biology;
- the speaker belonged to the international academic community.

To ensure that the students' answers to both parts of the questionnaire were adequate, a separate fill-in-the-blank activity (Appendix 2) was designed, based on the script of each lecture fragment, and was aimed at checking their real understanding of its key topic points.

Results

Part 1 Descriptive Statistics (RQ1-RQ3)

To analyse the data, the participants' questionnaire responses were entered into JASP software[1]. Responses for Questions 1 to 3 were treated as scale variables with possible integer values (1 to 7) corresponding to the questionnaire scale points. The descriptive statistics of the data gathered in the first part of the survey (N = 50) can be seen below in Table 1:

Table 1
Descriptive Statistics of the Gathered Data (Questions 1-5)

	RQ1	RQ2	RQ3		RQ1	RQ2	RQ3
Valid	50	50	50	Skewness	0.068	-0.055	-0.057
Missing	0	0	0	Std. Error	0.337	0.337	0.337
Mean	3.56	4.88	4.66	Kurtosis	-0.586	-0.501	-1.279
Median	3	5	4.5	Std. Error	0.662	0.662	0.662
Mode	3	5	6	Min	1	3	2
Std. Dev.	1.215	1.081	1.319	Max	6	7	7

[1] https://jasp-stats.org/

RQ1: When students listen to a lecture on biology in English delivered by a non-native speaker, is it important for them that the lecturer does not have a foreign accent? If so, how important?

For Question 1, the seven-point Likert scale ranging from "does not matter at all" to "fundamentally important" received the following responses. Most students stated that they found the foreign accent of a non-native English-speaking lecturer "somewhat unimportant" (n=20), followed by "somewhat important" (n=12), "neutral" (n=8), "not important" (n=6), "does not matter at all" (n=2), "really important" (n=2) and "fundamentally important" (n=0). Based on this descriptive data, approximately 56% of the participants in this study regard the presence of the foreign accent in the speech of a non-native lecturer in their professional field tolerantly. It can be hypothesized that the students are paying more attention to what the speaker is saying rather than how much in common their speech has with the pronunciation patterns of a native speaker of the English language.

RQ2: Does the presence of the lecturer's foreign accent prevent the students from concentrating on the content of the lecture? If so, to what extent?

For Question 2, most participants stated that a foreign accent of a non-native lecturer "mostly does not interfere" (n=19) with their ability to concentrate on the lecture content, this answer was followed by "somewhat interferes" (n=11), "hardly interferes" (n=11), "moderately interferes" (n=6), and "does not interfere at all" (n=3). Generally, it can be concluded that approximately 66% of the participants in this study could concentrate on the lecture even if the speech of a non-native lecturer was characterized by the presence of a foreign accent. Such student experience does not seem surprising: nowadays, when English is being widely used as a lingua franca, it is hard to imagine a university lecturer who would be unintelligible to the point that it would seriously impede students' concentration. Moreover, considering the extensive amount of non-native English input that students presumably receive in and out of the university due to open social media and other Internet resources, an even higher percentage of students reporting unaffected concentration would be anticipated.

RQ3: To what extent can students agree with the statement that non-native lecturers in their professional field should strive to reduce their foreign accent?

In the final question of the first part of the survey most students stated that they agreed with the given statement for the most part: although 17 participants "totally agreed" with it, these students did not consider it "crucial" for a lecturer to achieve native-like proficiency when it came to their pronunciation. Other students shared that they either "rather agreed, than disagreed" (n=13), or "rather disagreed, than agreed" (n=11); some respondents "partially agreed" (n=6) with the statement or considered it crucial and "absolutely agreed" (n=2). Only one respondent "disagreed" (n=1). Overall, 76% of the participants in this study were in favour of non-native speaking lecturers involved in English-medium instruction at the university level reducing their foreign accents. These results appear slightly contradictory to students' responses in RQ1 and RQ2 and can be interpreted as a reflection of native speaker bias, as regardless of the reported satisfactory lecturers' speech comprehensibility and intelligibility, the students expect their professors to match the native-speaker standard. This situation has been previously reported in higher education in other national contexts (e.g., the Netherlands) (Hendriks et al., 2018).

Part 2 Descriptive Statistics (RQ4-RQ9)

Responses for Questions 4 to 9 also were treated as scale variables with possible integer values (1 to 7) corresponding to the questionnaire scale points. The descriptive statistics of the data gathered in the second part if the survey (N = 50) can be seen below in table 2.

Table 2
Descriptive Statistics of the Gathered Data (Questions 4-9)

Descriptive statistics (3)						
	RQ4	**RQ5**	**RQ6**	**RQ7**	**RQ8**	**RQ9**
Valid	50	50	50	50	50	50
Mean	5.820	5.680	4.980	5.160	3.980	3.940
Median	6	6	5	5	4	4
Mode	6	6	5	5	4	4
Std. Dev	0.873	1.077	1.270	1.251	1.332	1.376
Descriptive statistics (4)						
	RQ4	**RQ5**	**RQ6**	**RQ7**	**RQ8**	**RQ9**
Skewness	-0.400	-0.642	-0.709	-0.445	0.415	0.161
Std. Error of Skewness	0.337	0.337	0.337	0.337	0.337	0.337
Kurtosis	-0.392	-0.074	1.081	-0.290	-0.334	-0.340
Std. Error of Kurtosis	0.662	0.662	0.662	0.662	0.662	0.662
Minimum	4	3	1	2	2	1
Maximum	7	7	7	7	7	7

RQ4 – RQ6: How easy was it for the students to understand the content of a fragment of a lecture delivered in English by a professor from China (RQ4), Germany (RQ5) and France (RQ6)?

In Question 4, most students stated that they found understanding the content of the lecture fragment delivered by the Chinese lecturer “easy” (n=23), this answer was followed by “mostly easy” (n=12), and “very easy” (n=11). There were no instances of a student who would find the content of the lecture fragment somewhat difficult to comprehend.

Answering **RQ5,** 90% of the participants stated they were quite comfortable when listening to a lecture delivered by a German professor regardless of their foreign accent. However, the French speaker (**RQ6**) in English seemed to be more challenging to understand for the participants in this study, because more than a third (36%) of them reported difficulty in understanding.

Another set of questions tapped into the students' ability to concentrate on the content of the lecture regardless of the lecturer's non-native accent (**RQ7 – RQ9)**. The results are demonstrated in table 3.

For Question 7, most participants stated that the foreign accent of the Chinese lecturer "hardly interferes" (n=19) with concentrating on and comprehending the content of the lecture fragment, followed by "mostly does not interfere" (n=12), "does not interfere at all" (n=12), "somewhat interferes" (n=5), and "moderately interferes" (n=2). Generally, it can be concluded that the vast majority of the participants in this study (86%) had no trouble understanding the lecture delivered by a Chinese professor from their professional field.

As for the German lecturer, most participants stated that his foreign accent "mostly does not interfere" (n=16) with concentrating on the lecture content. Other students shared that the German accent in English "hardly interferes" (n=14) with it, this point was followed by "does not interfere at all" (n=7), "somewhat interferes" (n=7), "moderately interferes" (n=5) and "interferes very much" (n=1).

As for the French professor, most participants stated that his foreign accent "somewhat interferes" with their ability to concentrate on the lecture content. Other students shared that the French accent in English "mostly does not interfere" (n=11), "moderately interferes" (n=11), "very much interferes" (n=7), "hardly interferes" (n=4), "does not interfere at all" (n=2), and "completely impedes concentration" (n=1). See table 3. Generally, it can be concluded that only 34% of the participants in this study did not experience much difficulty concentrating on the content of the lecture delivered by the French professor.

Table 3
Students' Responses to Questions 7-9

RQ	Completely impedes concentration	Interferes very much	Moderately interferes	Somewhat interferes	Mostly does not interfere	Hardly interferes	Does not interfere at all
RQ7 (Chinese)	0	0	2	5	12	19	12
RQ8 (German)	0	1	5	7	16	14	7
RQ9 (French)	1	7	11	14	11	4	2

Part 3 Additional Tests
Another goal was to reveal if there was any correlation between students' attitudes to the importance of the absence of accent in their non-native lecturer's speech and its link to students' self-reported concentration and comprehension abilities. Spearman's correlation coefficient statistics indicated the following (see table 4):

Table 4
Spearman Correlation Coefficient

Variables		Spearman's rho	p	Lower 95% CI	Upper 95% CI
RQ1	RQ2	-0.341	0.016	-0.565	-0.069

The results indicate that there is a statistically significant moderate negative correlation between variables, that is, the more important the absence of accent, the more the foreign accent of the non-native lecturer speaking English impedes concentration on and understanding of the lecture content, as reported by the students. These findings might suggest that if a participant sees the lecturer's foreign accent as an issue, it prevents that individual from making a special effort to become accustomed to the phonological peculiarities of the lecturer's speech in an effort to make sense of the lecture content, which explains the self-reported absence of understanding.

Discussion, Limitations and Recommendations for Further Research

In Part 1 of this study, most participants reported that they wanted the non-native biology lecturers to strive to reduce their foreign accents (RQ3). Combined with the results of RQ1 and RQ2, this finding seems slightly contradictory. Most students report their tolerance in RQ1 by stating that having or not having an accent is generally not crucially important for a biology lecturer, as well as admitting that it does not typically impede concentration on the lecture content (RQ2). However, most respondents still believe that non-native lecturers should try to reduce their accent, which probably reflects the native-speaker bias persistent in their minds, as has been previously reported by other researchers in the field (e.g., Kelch & Santana-Williamson, 2002).

In Part 2, the students' reported ease of comprehension of accented speech varied according to the lecturers' L1 accent, and the Chinese lecturer was judged as the most comprehensible. The French lecturer was reported as the least comprehensible, with his accent affecting the students' ability to concentrate on and understand the content of lecture. However, generally, most students still stated that the effect that the non-native accent had on their concentration in the lecture was minimal, except for the French lecturer. The significance of the research also lies in the finding that the more important the absence of accent was to a particular student, the more difficult it was for that student to comprehend the content of the lecture and to concentrate on it. From previous research it is known that speech can be accented but still perfectly comprehensible (Kang et al., 2010). Therefore, the current findings might suggest that if a participant views the lecturer's foreign accent as an issue, it prevents them from making a special effort to become accustomed to the phonological peculiarities of the lecturer's speech in order to make sense of the lecture content. This would explain the self-reported absence of understanding. The ability to concentrate and comprehend therefore seems to be subjective. Clearly, self-reported measures are not fully reliable when it comes to comprehension as they only portray the students' individual viewpoints. More studies are warranted to compare the students' reported comprehension of non-native lecturers' accented speech with their actual quantitative comprehension scores on the same task. It seems that, considering the data gathered in Part 1, it could be expected that the students' actual comprehension will be better than what they report due to the presence of the native-speaker bias.

However, some limitations should be noted, namely, there is no indication of whether any of the participants in this study (1) are simultaneous bilinguals, (2) have extensive experience in third language acquisition of Chinese, German, or French, or (3) have completed their bachelor's degree in the same professional field as their master's. Future research could exclude from the sample those respondents who come from other professional backgrounds, primarily focusing on the students who have successfully completed their bachelor's studies with the major in natural (biological in particular) sciences and have been attending a compulsory English for Special Purposes class for at least 3 academic years while not being simultaneous bilinguals.

Conclusion

Overall, this study demonstrated that a majority of study participants regard the presence of the foreign accent in speech of a non-native lecturer in their professional field tolerantly. This neutral attitude points to the students' probable readiness to comprehend non-standard English as a medium of instruction from non-native representatives of the international natural sciences academic community. However, the presence of native-speaker bias even in non-linguistic academic environments was also noted. It is hoped that with the continuous future spread of English as a lingua franca the native-speaker ideology will give way to an enhanced acceptance of academic professionals from a variety of L1 backgrounds in the eyes of university students so that greater learning may be the result.

This study and similar studies in other national contexts might prompt other universities dealing with the same issue to start actively promoting intelligibility-based pronunciation instruction instead of following a native-speaker model. If intelligibility were to actually become the main criteria for assessing spoken language of a non-native speaker in an academic environment, NNS lecturers and students would be more likely to participate in conferences and other international events in academia without the fear of being misjudged for failing to sound like a native speaker.

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Appendix 1 Part 1

1. When you listen to a lecture on biology in English delivered by a non-native speaker, is it important for you that the lecturer does not have a foreign accent? If so, how important?

1	2	3	4	5	6	7
Does not matter at all	Not important	Somewhat unimportant	Neutral	Somewhat important	Really important	Fundamentally important

2. Does the presence of the lecturer's foreign accent prevent you from concentrating on the content of the lecture? If so, to what extent?

1	2	3	4	5	6	7
Completely impedes concentration	Interferes very much	Moderately interferes	Somewhat interferes	Mostly does not interfere	Hardly interferes	Does not interfere at all

3. To what extent can you agree with the statement that non-native lecturers in their professional field should strive to reduce their foreign accent?

1	2	3	4	5	6	7
Strongly disagree	Disagree	Rather disagree that agree	Rather agree than disagree	Partially agree	Totally agree, but it is not crucial	Absolutely agree, it is crucial

Appendix 1 Part 2

4. How easy was it for you to understand the content of a fragment of a lecture delivered in English by a professor from China?

1	2	3	4	5	6	7
Extremely hard	Very hard	Somewhat hard	Somewhat easy	Mostly easy	Easy	Very easy

5. How easy was it for you to understand the content of a fragment of a lecture delivered in English by a professor from Germany?

1	2	3	4	5	6	7
Extremely hard	Very hard	Somewhat hard	Somewhat easy	Mostly easy	Easy	Very easy

6. How easy was it for you to understand the content of a fragment of a lecture delivered in English by a professor from France?

1	2	3	4	5	6	7
Extremely hard	Very hard	Somewhat hard	Somewhat easy	Mostly easy	Easy	Very easy

7. When you listened to a fragment of a lecture delivered by a lecturer from China, did the lecturer's foreign accent prevent you from concentrating on the content of the lecture?

1	2	3	4	5	6	7
Completely impedes concentration	Interferes very much	Moderately interferes	Somewhat interferes	Mostly does not interfere	Hardly interferes	Does not interfere at all

8. When you listened to a fragment of a lecture delivered by a lecturer from Germany, did the lecturer's foreign accent prevent you from concentrating on the content of the lecture?

1	2	3	4	5	6	7
Completely impedes concentration	Interferes very much	Moderately interferes	Somewhat interferes	Mostly does not interfere	Hardly interferes	Does not interfere at all

9. When you listened to a fragment of a lecture delivered by a lecturer from France, did the lecturer's foreign accent prevent you from concentrating on the content of the lecture?

1	2	3	4	5	6	7
Completely impedes concentration	Interferes very much	Moderately interferes	Somewhat interferes	Mostly does not interfere	Hardly interferes	Does not interfere at all

Appendix 2

Audio segment from video 1. Chinese lecturer. Central nervous system and blood brain barrier

Listen to the speaker and fill in the gaps in the text with the words given below. There are some extra words which you do not need to use.

•drain them •spinal cord •diencephalon •lymph drain bearer •brain stem •die encephalon •telencephalon •blood-brain barrier •cerebellum •gore-tex •vellum •spiral core •cortex

There're four parts, four big parts of our brain. One is telencephalon here, the biggest part of our brain including cortex. Diencephalon here, the middle part, the inside part of our brain. Cerebellum, this part here and brain stem. Brain stem connects our brain with the spinal cord. Before we get into the four major parts of our brain, let's look at the blood-brain barrier.
There're four parts, four big parts of our brain. One is _____________ here, the biggest part of our brain including _______________. __________________ here, the middle part, the inside part of our brain. ____________, this part here and brain stem. _______________ connects our brain with the ____________. Before we get into the four major parts of our brain, let's look at the ______________.
https://www.coursera.org/learn/advanced-neurobiology1/lecture/jLUk8/1-1-2-central-nervous-system-and-blood-brain-barrier

Audio segment from video 2. German lecturer. Folic Acid: Preparing for Pregnancy

Listen to the speaker and fill in the gaps in the text with the words given below. There are some extra words which you do not need to use.

•fall eight •methylate DNA •petal wealth •folate supply •contraception •bear out
•B vitamins •maternal •be vitamins •penetrate RNA •vitamin B9 •nocturnal
•phosphate supply •vital benign •fetal health •folates •preconception period

There are specific nutritional aspects in the preconception period which are of importance for both maternal and fetal health. In particular, folate supply is essential to support healthy fetal development. Folates comprise a group of substances that belong to the B vitamins. Folate is also known as vitamin B9. It is essential fornumerous body functions. The human body, for example needs folate to synthesise, repair and methylate DNA.

There are specific nutritional aspects in the ________________ which are of importance for both ___________ and ________________. In particular, _________________ is essential to support healthy fetal development. _______________ comprise a group of substances that belong to the ______________. Folate is also known as ______________. It is essential for numerous body functions. The human body, for example needs folate to synthesise, repair and _________________.
https://www.coursera.org/learn/nutrition-pregnancy/lecture/CJs4d/folic-acid-preparing-for-pregnancy

Audio segment from video 3. French lecturer. Treating oxidative stress as a way of dealing with the African AIDS epidemic

Listen to the speaker and fill in the gaps in the text with the words given below. There are some extra words which you do not need to use.

•c'est la vie •nutrition •hatred of the prius •ox sedative press
•chronically infected •equilibrated •HIV •trance mission •tonically inspected
•oxidative stress •maltuition •transmission •get rid of the virus

The scientist is answering to the question: "Is treating oxidative stress one of the best ways to deal with the African AIDS epidemics?"

I think this is one way to approach, to decrease the rate of transmission, because, I believe, HIV, we can be exposed to HIV many times without being chronically infected, our immune system will get rid of the virus within the few weeks if you have a good immune system, and this is also the problem of African people. Their nutrition is not very equilibrated, they are in oxidative stress, even if they are not infected with HIV, so their immune system doesn't work well already.
I think this is one way to approach, to decrease the rate of __________ , because, I believe, _______ , we can be exposed to HIV many times without being ________________, our immune system will _______________ within the few weeks if you have a good immune system, and this is also the problem of African people. Their ______________ is not very ______________ , they are in ______________ , even if they are not infected with HIV, so their immune system doesn't work well already.
https://www.youtube.com/watch?v=JrzV_xnhlGY

Exploring the Effects of Automated Pronunciation Evaluation on L2 Students in Thailand

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Abstract

A significant barrier to effective communication in a second language is the awareness and accurate reproduction of phonetic sounds absent in the mother tongue. This study investigated whether the automated evaluation of phonetic accuracy using speech recognition technology could improve the pronunciation skills of 105 (88 female, 17 male) Thai undergraduate students studying English in Thailand. A pre-test, post-test design was employed using treatment and control sample groups, reversed over two six-week periods. Treatment group students were given access to an online platform on which they could record and submit their speech for automated evaluation and feedback via SpeechAce, a speech recognition interface designed to evaluate pronunciation and fluency. Independent samples t-test analysis of the results showed statistically significant improvement in pronunciation accuracy of students in the treatment group when compared to those in the control group (t (89) = 2.086, p = .040, 95% CI [.083, 3.423]), (t (89) = -4.692, p < .001, 95% CI [-5.157, -2.089]). Pearson's correlation analysis indicated a weak to moderate, but statistically significant correlation between frequency of practise and pronunciation test score (r =.508, p < .001), (r = .384, p = .021). The study has limitations as the sample group was predominantly female, and time constraints limited students' use of the software. Future studies should investigate possible gender differences and experiment with different forms of visual feedback.

Keywords: phonetics, pronunciation, speech recognition, SpeechAce

Although considered the most important of the four language skills for second language (L2) students, impractical student to teacher ratios and a greater emphasis on teaching grammar means speaking is often neglected in the classroom (Gerald, 2000; Leong & Ahmadi, 2017). To effectively correct pronunciation errors, the student must receive corrective feedback at the time of the error (Huang & Jia, 2016), yet this can often prove to be impractical in the classroom unless the lesson's focus is pronunciation and class sizes are manageable. Assuming that receiving feedback in an environment where students felt secure and less exposed might alleviate their anxiety, the present study investigated the influence on students' pronunciation skills after using online speech recognition software. The software is capable of analysing phonetic accuracy and fluency and delivering instant evaluation and feedback. The study sought to answer the following research questions:

1. Can the use of speech recognition software positively influence students' English pronunciation?
2. Is there a correlation between the frequency of use of the software and improved pronunciation test scores?

During this research, the author taught speaking, listening, and phonetics in two-hour sessions to class sizes in excess of 40 students, making one-on-one tutoring impractical. It was observed that the voicing of word ending sounds, such as the /saIz/ of "exercise", and pronunciation of specific phonemes, such as the voiceless dental fricative "th"/θ/ as in "thin", were problematic for many of the students.

English major students at Walailak University have a broad range of English-speaking ability and experience in communicating with native English speakers. Some students studied in English programmes during compulsory education and had regular contact with native English speakers from a relatively early age. Other students studied English in traditional programmes with Thai staff or other non-native English speakers. However, the students with more accurate English speaking and pronunciation skills and overall speaking confidence were not necessarily those who studied in English programmes or with native English speakers. Possible reasons for this may be the insufficient practice of pronunciation or a greater fear of making a mistake in front of a native speaker. Research has shown that a significant factor in students' speaking ability is their self-confidence (Aiello & Mongibello, 2019; Ayulistya, 2016; Leong & Ahmadi, 2017). Limited pronunciation skills can often lead to communication breakdown and raised anxiety (Dewaele, 2007; Dewaele, Furnham, & Petrides, 2008) and a loss of self-confidence (Donovan & Macintyre, 2004; Gilakjani, 2012). Fear of making a mistake or mispronouncing a word in the presence of their peers can lead to anxiety that prevents the student from speaking. Conversely, the teacher may refrain from giving correction for fear of hurting the student's feelings (Huang & Jia, 2016).

Considerable research has attempted to define the indicators of fluent speech (De Jong, 2018; Ejzenberg, 2000; Lennon, 1990; Yang, 2014a). However, based on their survey of 84 L2 teachers teaching English as a Foreign Language (EFL), Tavakoli and Hunter (2018) state that accurate pronunciation, including accent and intonation, is commonly rated as a critical indicator of what Lennon describes as fluency in its broad sense (Lennon, 1990). With increasing demands on students to pass standardised tests such as the International English Language Testing System (IELTS), where pronunciation is a key descriptor of speaking ability (International English Language Testing System [IELTS], n.d.), the students' need to practice and receive evaluation and correction of their L2 speaking is significant. Despite this, L2 students often have limited time inside and outside the classroom in which to practise speaking

with a native speaker (Leong & Ahmadi, 2017) or are taught by non-native speakers who may be lacking in the required L2 teaching skills or grasp of English pronunciation (Kanoksilpatham, 2007).

Literature Review

Pronunciation Barriers

Incorrect pronunciation can often be a barrier to social interaction and lead to misunderstanding (Aiello & Mongibello, 2019; Ayulistya, 2016; Fraser, 2000; Leong & Ahmadi, 2017), which in turn may cause anxiety and loss of confidence in the speaker (Dewaele, 2007; Dewaele et al., 2008; Gilakjani, 2012). Mother tongue influence, such as missing sounds, intonation, and tonal use, are often attributed to causing pronunciation error (Gilakjani, 2011; Jahandar, Khodabandehlou, Seyedi, & Abadi, 2012; Lai, Tsai, & Yu, 2009; Latha & Ramesh, 2012). The listener may also interpret such influences on pronunciation as disfluency in the target language (Brumfit, 1984; De Jong, 2018; Derwing & Munro, 2005; Ejzenberg, 2000; Latha & Ramesh, 2012; Lennon, 1990; Richards, Platt, & Weber, 1985; Yang, 2014b).

Another problem that arises in terms of pronunciation accuracy and perceived accuracy from the listener's perspective (Christiansen, 2011) is that the English language is no longer a single standard. Globalisation has led to many English language strains, with different accents producing different vowel sounds (Hariri, 2012). According to Gilakjani (2012), learners require significant exposure to the target language to be proficient enough to speak. Still, lack of contact with native speakers and exposure to the target language often hinders their progress. Khamkhien (2010) found that problems with Thai students' pronunciation of English words increased with the number of syllables, which reflects this viewpoint. Following his assessment of pronunciation of multi-syllabic words by 90 Thai students, he suggests that the issue derives from word stress and that teaching attention should focus on this area of phonics.

Although exposure to the native language is a significant factor in accurate pronunciation (Kenworthy, 1987), lack of contact and communicative opportunities with a native speaker is commonplace in some Thai provinces. This issue is more noticeable in rural areas and areas less frequented by western tourists, where the student to teacher ratio can render one-to-one communication impractical or impossible (Ngamkaiwan, 2018). Conversely, in cases where students have contact with nationals from different English-speaking countries, watch English movies, or listen to English pop music, it is not uncommon to detect the influence of such exposure on their pronunciation and vocabulary. While the listener may perceive different accents acquired by the L2 students as disfluency or poor pronunciation, Hariri (2012) argues that pronunciation accuracy is not native-like pronunciation but a measure of speech clarity. Her study of related literature looked specifically into the role of gender on pronunciation accuracy. While her findings regarding gender differences in accuracy of pronunciation support other research findings (Hincks, 2003; Jahandar et al., 2012; Khamkhien, 2010), she concluded that teaching style did not influence the gender difference.

Pronunciation Pedagogy

Fraser (2000) argues that even in the presence of other errors, such as grammar, successful discourse can be achieved through good pronunciation. However, research has shown that the teaching of pronunciation in the classroom is often overlooked or allocated the least amount of time and attention (Derwing et al., 2012; Derwing & Munro, 2005; Fraser, 2000; Gilakjani, 2011; Hariri, 2012), or completely absent from curricula after the introductory stage (Gilakjani, 2011). When faced with teaching pronunciation, a lack of professional development,

knowledge in incorporating pronunciation instruction into the classroom, and reduced opportunity to implement pronunciation pedagogy based on research findings, have led to teachers depending more on textbooks and instinct than evidence-based guidance (Derwing & Munro, 2005; Derwing et al., 2012). L2 English, taught by inexperienced non-native speakers, is also a factor in the fossilisation of incorrect pronunciation in students' dialect (Kanoksilpatham, 2007). Derwing et al. (2012) also found notable inequalities in task and teaching between textbooks within a series and a lack of clarity in the explanation for students and teachers. They called for greater integration of pronunciation in the various textbook tasks.

In his research, Gilakjani (2011) concluded that teachers should encourage students to practise their English-speaking skills beyond the classroom's confines. However, while this is good in practice, students are often unable to make appropriate use of the English they learn in class beyond the classroom's boundaries (Gumbaridze, 2013). In Thailand, particularly for students in remote and rural areas, the concept is not so readily and effectively put into practice as opportunities to converse with native English speakers may be scarce and, in the case of practising pronunciation, void of adequate corrective guidance. In the absence of proper correction, speakers may be unaware of their errors, and hence, mispronunciations become fixed in their regular discourse (Hincks, 2003; Swain & Lapkin, 1995). Hincks (2003), who used an application called "Talk to Me (English)", observed that an improvement in pronunciation accuracy was only noticeable in those students deemed to have poor pronunciation attributed to their mother tongue accent.

Correcting mispronunciation and providing remedial help to students has been debated considerably in the research literature. While teachers and students may agree that receiving corrective feedback is necessary (Huang & Jia, 2016), the type of feedback and the timing of its giving can be problematic and create barriers to accurate pronunciation (Heift & Schulze, 2007; Huang & Jia, 2016). According to Gumbaridze (2013), the schedule for and method of giving corrective feedback is a controversial topic regarding teaching methodology as it may be inappropriate, intrusive, or result in demotivating the student. In terms of correcting mispronunciation, Hincks (2003) states that the time required to evaluate pronunciation, and inconsistency between raters, are critical factors in error correction. She also notes that uncertainty on the appropriate form of corrective feedback creates a barrier for teachers in the classroom. Hincks states that fear of receiving corrective feedback in front of their peers may prevent students from speaking in the classroom, an argument supported in other research (Gumbaridze, 2013; Huang & Jia, 2016; Terrell, 1997).

Pronunciation Software

With the wide use of mobile technology in the classroom, students have many tools to practice and assess their pronunciation. Considerable research exists in the area of automatic speech recognition (ASR) software for language learning, and findings have supported some correlation between its use for phonetic training and improved pronunciation (Ayulistya, 2016; Haggag, 2018; Hincks, 2003; Lai et al., 2009; Olson, 2014). However, the research literature also suggests a disconnect between research findings and classroom application (Derwing et al., 2012; Derwing & Munro, 2005; Olson, 2014).

ASR offers several advantages over human evaluation, such as instant feedback (Haggag, 2018), reduced demand on teacher time, consistency of rater, and quantitative feedback on accuracy to a very detailed level (Hincks, 2003). As a tool for students to self-assess their accuracy (Lord, 2005) and gain valuable practice time beyond class hours, ASR has much to offer the L2 student in terms of guidance (Hincks, 2003) and accurate identification of

mispronounced segmentals (Srikanth et al., 2012). However, Kim (2006) expressed concern regarding the reliability of scores generated by a computer algorithm. In cases where the ASR software uses the Hidden Markov Model (HMM), the software compares the sounds received with phoneme sounds stored in a database to find a probabilistic match (Hincks, 2003). While this may have some potential for producing false positives when evaluating pronunciation accuracy, most systems can accurately determine the percentage of deviation between the received and stored sounds and calculate an accuracy rating (Hincks, 2003).

Opinion on the use of ASR as a tool for practising pronunciation is mixed. According to Haggag (2018), ASR promotes autonomous and collaborative learning while offering automatic evaluation and feedback. In his study of 23 trainee English language teachers, he also found that user satisfaction and appreciation in using the software were high. However, Setter and Jenkins (2005) argue that more advanced systems, such as Praat, are intended for researchers and are too complicated for teachers and students to understand. Referring to Praat, Brett (2004) concluded that, as the software was not intended for this form of use by pronunciation learners, the interface is not suitable and needs redesigning. Olson (2014), however, rejects these claims and believes ASR systems, such as Praat, could be successfully used in the L2 classroom. In his research, he found that students reported the visual representation of the phoneme sounds, which the software generates automatically, helped many compare the difference between the pronunciation of non-native and native speakers, while only a few experienced problems using the software. Echoing the benefits regarding the visual representation of sounds, Hincks (2003) found that displaying contours to represent pitch changes was attributed to improved intonation. The software used by Hincks, "Talk to Me (English)", can generate a waveform representation of the sound, similar to Praat, with visual guidance regarding mouth and tongue positions. However, Hincks raises a significant concern, pointing out that a focus on pronunciation using ASR software can lead to students deliberately slowing their speech to emphasise on clarity, consequently having a negative impact on their speaking fluency.

The literature offers much debate regarding the suitability of software, such as Praat, in autonomous learning, but agreement on the effectiveness of waveform representation of sounds generated by such systems diverges. Conversely, there is little in the literature to show that waveform representation alone, i.e., void of any corrective guidance, is any more informative to the student than a numerical rating for each phoneme sound.

Method

Voice Recognition Technology

Prior to this investigation, students were encouraged to use the built-in voice recognition features of their laptops and other mobile devices, such as the voice-to-text and voice command accessibility features in Microsoft Windows, or translation applications such as Google Translate. While these give some form of visual feedback on pronunciation accuracy, that is, the text and speech are the same, they offer no corrective feedback when the text and speech differ. It was also found that the technology could sometimes assume the intended word, possibly based on rhythmic patterns, or assumed context, even when mispronounced, thus giving false feedback to the student. For example, using some translation applications with built-in ASR, a phrase such as "We wish you a Merry Christmas" could be badly mispronounced, yet the ASR could often assume and display the correct version of the text on the screen if the rhythmic aspect of the utterance were accurate enough.

A web-based platform was chosen as it would enable easy access for the typical devices currently used by the students. It would also allow students to access the system remotely while allowing the teacher to update content and monitor usage without manually updating student devices. The SpeechAce application programming interface (API) was selected as it offered the ability to interface with the existing web-based Learning Management System (LMS) used for the course. It also gave feedback on each attempt at sentence, word, syllable, and phoneme levels while enabling the recording of each feedback response in the LMS database. SpeechAce also requires the submittal of a transcript to compare against each submitted sound, which reduced the potential for encountering the false positives observed in sound only ASR applications. The website communicated with the programming interface provided by SpeechAce using a secure socket layer (SSL) (Figure 1). Ten pronunciation exercises were programmed into the LMS each week for students to attempt. In each exercise, the LMS presented students with a short sentence on their screen and recorded their voice while saying the sentence. Students could review and re-record their attempt before submitting for analysis by SpeechAce. For each pronunciation exercise attempt, the SpeechAce interface returned detailed feedback in the form of a structured array packet. After saving it to a database, the LMS parsed each packet for the user to see on their screen (Figure 2). The system highlighted evaluation scores below 70% in graduated shades of red to facilitate the students' interpretation of the feedback and draw their attention to problematic pronunciation.

The LMS was programmed to offer two forms of exercise; assessment exercise, which allowed each student to submit only a single attempt at each sentence, and practise exercise, which allowed unlimited attempts. All students had access to the assessment exercises, but only students in the treatment group had access to the practice exercises.

Figure 1
Process Flow of Voice Recognition Technology

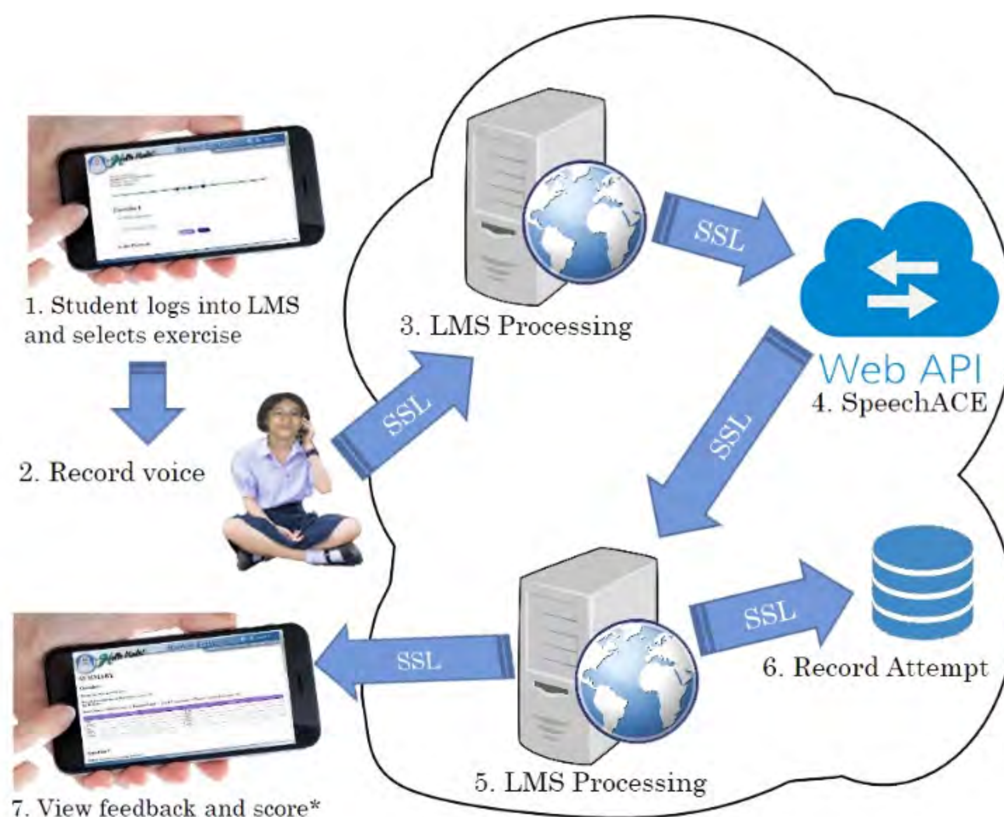


Figure 2
SpeechAce Feedback, Parsed for the User

Evaluation Summary	
Overall score (Average of all phonemes score): 85%	
Word count 6	Syllable count 12
Phone count 28	Fidelity CORRECT

Word	Score
That	61%
is	96%
a	97%
truly	94%
fantastic	82%
activity	85%

Syllable	Score
that	61%
is	96%
a	97%
tru	100%
ly	87%
fan	87%
ta	54%
stic	92%
ac	80%
ti	68%
vi	98%
ty	93%

Phoneme	Score
dh	88%
ae	44.5%
t	49.61%
ih	93.35%
z	98.5%
ey	97.17%
t	99.56%
r	100%
uw	99%
l	74.14%
iy	99.69%
f	97.39%
ae	69.67%
n	94.3%
t	94.4%
ae	12.78%
s	98.5%
t	93%
ih	78.75%
k	96.33%
ae	61%
k	99.33%
t	99%
ih	36.17%
v	100%
ah	97%
t	87.5%
iy	99.38%

Context and Participants

This study was conducted in an English language programme within the Faculty of Liberal Arts at Walailak University, Nakhon Si Thammarat, Thailand. The faculty has approximately 750 students studying in English, Chinese, Thai, and ASEAN programmes at bachelor's degree level. Within the context of this study, the population consisted of first-year English major students aged between 18 and 19 (n = 105, 88 female, 17 male) and studying in the English programme.

Sample

Permission was obtained from the University to complete the study before inviting students to participate. The risks to students participating in this study were no different from attending

class or routinely browsing the Internet. The entire population, 105 students, were invited to participate in the research and advised that their participation was voluntary and that they could opt-out at any point during the 12 weeks. They were also informed that any scores collected during the study would not impact on their course grades. For generalisation purposes, a minimum sample size of 83 was calculated using the formula defined by Krejcie and Morgan (1970), with a confidence level of 95% and a 5% margin of error. Students were randomly assigned to one of two groups, Group A and Group B, and instructed on using the website and SpeechAce interface.

Data Collection and Preparation

The research instrument compares the means of pre-test and post-test scores using t-tests (Hincks, 2003). Data were collected during two separate phases of the study and compared using t-test analysis. First, all students were invited to attempt an assessment exercise, which would form their pre-test scores. Students in Group A (treatment group) were then allowed to complete the practise exercises at their leisure for six weeks while Group B (control group) had no access to the system. At the end of the first six weeks, all students were invited to attempt the second assessment exercise, which would form their post-test scores for the first phase and their pre-test scores for the second phase. The groups were then reversed (Group B now the treatment group), and the study ran for a further six weeks before all students were invited to attempt the third and final assessment exercise, which would form their final post-test scores.

All data were screened for erroneous values and to exclude data from students who did not complete all speaking tasks for each of the three assessment exercises. Fourteen students failed to fully complete all three assessment exercises, leaving data from 91 students usable for further analysis. The remaining data were then screened for violations of the assumptions of the t-test and Pearson Correlation analysis methods. Shapiro-Wilk tests showed no significant departure from normality for Test 1 ($W(91) = .982$, $p = .225$), Test 2 ($W(91) = .990$, $p = .692$), Test 3 ($W(91) = .980$, $p = .178$), and the number of practise attempts for Group 1 ($W(47) = .968$, $p = .221$), and Group 2 ($W(44) = .967$, $p = .230$). No outliers were detected.

Results

Independent samples t-test analysis showed that scores for Test 1 were not significantly different between the groups, (t (89) = 1.396, $p = .166$, 95% CI [-.684, 3.917]), suggesting no significant difference in the level of pronunciation accuracy between the two groups before treatment. The independent samples t-test was calculated to compare differences in pre-test and post-test scores between the two groups. The t-test was significant for the first round of pre-test and post-test, (t (89) = 2.086, $p = .040$, 95% CI [.083, 3.423]) and also the second round of pre-test and post-test, (t (89) = -4.692, $p < .001$, 95% CI [-5.157, -2.089]). An additional t-test analysis showed that the difference between Test 1 and Test 3 scores was also significantly different between the two groups, (t (89) = -2.055, $p = .043$, 95% CI [-3.682, -0.570]). Pearson's correlation coefficient analysis was used to measure the correlation between the students' frequency of practice and the difference between their pre-test and post-test scores. The analysis was statistically significant for Group 1, ($r = .508$, $p < .001$), and Group 2 ($r = .384$, $p = .021$).

Discussion

This research set out to address two questions regarding ASR software use on students' pronunciation accuracy. Addressing research question one, asking whether the use of speech recognition software can positively influence students' English pronunciation, the results of this study are encouraging and suggest the use of the speech recognition software did have a positive influence on students' pronunciation test scores, which supports the findings in the research literature (Ayulistya, 2016; Haggag, 2018; Hincks, 2003; Lai et al., 2009; Olson, 2014; Srikanth et al., 2012). In both rounds of testing, the treatment group displayed a statistically significant improvement in pronunciation accuracy scores when compared against the control group. Comparison between Test 1 and Test 3 scores showed that, overall, both groups attained a level of improvement in their pronunciation accuracy with the improvement being more noticeable in the scores for group 2.

Research question two explored the possible correlation between the frequency of use of the software and improved pronunciation test scores. Although the correlation between practise attempts and the difference in pre-test and post-test scores was significant, the strength of the correlation (r_{xy}^2 = .258 for Group 1 and r_{xy}^2 = .147 for Group 2) was considered weak to moderate (Salkind, 2012). It is proposed that repeated practise of the exact pronunciation phrase was not overly helpful in improving pronunciation accuracy because students may have been unable to make appropriate use of the feedback to correct their mispronunciation. This viewpoint reflects the research literature (Brett, 2004; Setter & Jenkins, 2005). In the present study, the feedback was given as percentages against each word, syllable, and phoneme and highlighted in shades of red to reflect degrees of inaccurate pronunciation. While the extent to which students examined the feedback is not apparent, limitations in the students' phonetical knowledge could have made it too difficult for many of them to convert the feedback into corrective measures. The author suggests that a visual representation of the problematic phonemes, using waveform and mouth/tongue position diagrams, such as the "Talk to me" software used by Hincks (2003), would make it easier for students to self-correct their errors. As animated diagrams or video instruction would be expected to offer better remedial guidance, having the ability to directly link to such media by clicking on a phoneme in the feedback would provide greater independence to the student in terms of pronunciation practice in the absence of a native speaking instructor.

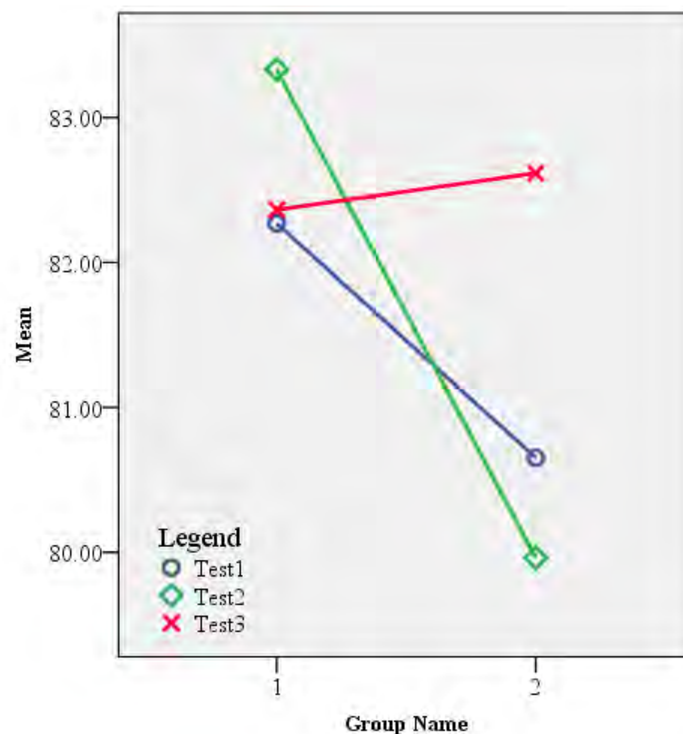
Another aspect that may have caused a weaker correlation between practise and test scores is that each practice exercise consisted of an entire phrase rather than individual words or phonemes. The practise effect may have been a more significant influence if the interface had been able to identify the problematic words and phonemes for each student and allow individuals to practise each in isolation rather than as part of a phrase.

It is noteworthy that a decrease in pronunciation accuracy was observed in each group during the period when they were not using the interface (Figure 3). This decrease could be attributed to a general lack of pronunciation practise while not using the interface, which is reflective of the findings of other studies relating to pronunciation pedagogy (Derwing et al., 2012; Derwing & Munro, 2005; Fraser, 2000; Gilakjani, 2011; Hariri, 2012).

Overall, it was found that Group 2 displayed significantly higher improvement than Group 1 between Test 1 and Test 3, (t (89) = -2.055, p = .043, 95% CI [-3.682, -0.570]). It could be argued that recency effect contributed to Group 2's better performance in Test 3 as Group 1 had not practised with the software during the six weeks prior to the third test. However, as

pronunciation scores for Group 2 in Test 2 were observed to decrease below what was considered their baseline level (Test 1), it is felt that other factors, besides practice, may have had an influence on student pronunciation in this study.

Figure 3
Mean Test Scores



Recommendations

A concerning observation regarding students' pronunciation in this study was the deterioration in their accuracy during periods when they did not have access to the practice interface. The implications for this suggest that pronunciation practice receives insufficient classroom time, or students lack environments where they can practise independently outside of the classroom. Students in this study had four hours of contact per week in the classroom with a native speaker, which significantly reduces their frequency of practice and rate at which they can develop their speaking proficiency. As suggested by Derwing et al. (2012), the practice of pronunciation should form an integral part of all EFL teaching rather than be taught independently from other skills. Based on observations and the research findings, the author echoes this suggestion and recommends that teachers adopt existing ASR applications and incorporate them into their independent study and flipped classroom sessions. Teachers should be mindful of their students' ability to interpret and respond to feedback from ASR systems to prevent them from feeling incapable of improving despite repeated attempts.

Another issue raised in this research was the quality and effectiveness of corrective feedback. ASR systems can significantly facilitate the evaluation and feedback process in terms of processing time, consistency, and protecting students' emotions. However, those systems intended for independent study purposes need to consider the user's ability to interpret feedback and make the appropriate corrections to their pronunciation. In the case of this study, the numerical feedback given by the SpeechAce interface, while adequate to identify problem

areas, does not appear to have been sufficiently user friendly to enable the students to effectively self-correct their mistakes. This shortfall can potentially demotivate the student if they fail to achieve higher pronunciation scores despite multiple attempts. Future research should look into more effective ways for independent study ASR systems to provide corrective feedback and how best to incorporate remedial practice tasks that pinpoint the user's specific pronunciation problems. A more intelligent system should detect a problematic phoneme and present the user with remedial practice specific to it. However, a future study should also investigate any significant benefit in presenting evaluation scores to the user in graphical or numerical form.

Based on the unusual decrease in pronunciation accuracy observed in Group 2 during the first round of this study, future research should investigate the factors that may lead to such reduced accuracy, which, as proposed by the author, may go beyond insufficient pronunciation practice. A future study should also examine potential gender differences in practising with the SpeechAce interface.

Conclusion

Pronunciation plays an essential part in effective communication (Fraser, 2000) and is often assessed in isolation during the standardised tests that EFL students often must complete as part of induction screening or course evaluation processes. As discussed in the research literature, teacher and student problems regarding feedback stem from limited contact time and how and when teachers should give feedback. The potential for loss of face is considered a prime reason for students not wishing to receive corrective feedback in front of their peers. It is hoped that advances in artificial intelligence software and mobile technology will create a clear pathway that offers students applications that can identify pronunciation errors and provide corrective instruction through user-friendly interfaces.

Limitations

Although the findings in this research reflect a positive outcome of using ASR for practicing pronunciation, two factors may have influenced the results, namely sample and time. Limitations on transactions permitted through the SpeechAce subscription forced a restriction in terms of the number of participants. First-year students were selected because it was felt they would have less fossilisation of errors and were also heterogeneous in their prior pronunciation training. However, this meant the sample was relatively small and predominantly female, which prevented any meaningful analysis by gender. Several studies in the research literature reported gender differences in different aspects of pronunciation accuracy (Hariri, 2012; Hincks, 2003; Jahandar et al., 2012; Khamkhien, 2010), which may also have influenced the results in this investigation. Time constraints on this study meant that students had a relatively short time using the technology and learning how to interpret the feedback scores to self-correct their pronunciation errors.

Declarations

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Conflicts of Interest

In my ethical obligation as a researcher, I am reporting that I am employed by and received funding from Walailak University. The University had no involvement in the design,

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Implementing Art and Music in Maltese Courses for Non-Native Adults

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Abstract

Malta has currently attracted numerous non-natives who consider the island conducive for business, investment and work. To enhance their working and living experience in Malta, several foreigners are learning Maltese as a second language (ML2), which could be challenging to learn, especially its grammar, if second language (L2) learners do not know Arabic. Furthermore, ML2 is a new subject with a lack of research in its pedagogical approaches. Second language acquisition (SLA) can be quite challenging for adults. Various evidence-based interventions including the use of art and music have been used to enhance SLA. Art and music play an important role in SLA, such as stimulating communication in L2, memorising new words and enhancing comprehension skills. The purpose of this study is to explore the impact of using music and art to enhance adults' success in ML2. A qualitative methodology with convenience sampling was used to select 37 adult learners of ML2 who took part in a one-on-one interview via Zoom. The interviews were analysed, and the study results revealed that the use of art and music could contribute significantly in enhancing an adult learner's academic achievement in ML2, whereas according to the participants, art and music are not currently used in ML2 courses. Therefore, the study recommends the use of art and music in both traditional and online classes to enhance adult learners' academic achievement in ML2.

Keywords: academic achievement, adult learners, art, Maltese as a second language, music, second language acquisition

Malta has increasingly experienced an influx of non-native workers, investors and residents. According to the Global Immigration Service Group (GIS, 2020), approximately 70% of foreigners who have settled in Malta consider it beneficial to trade, investment and jobs. Many non-natives study Maltese as a second language (ML2) to improve their working and living conditions.

Second language acquisition (SLA) is when a student learns a second language (L2) or subsequent languages after the original subconscious acquisition of an individual's first language (L1). Adult learners enjoy significant benefits when they learn an L2, including stronger motivation to succeed, cognitive benefits, improved communication skills, integration, enhanced direct connection to other cultures and competitive advantages as a bilingual or plurilingual. However, according to the critical period hypothesis, adult SLA neural mechanisms are slower and less successful than those of children who are younger than 18 (Muñoz, 2017). For example, even though SLA is important for adults since they urgently require L2 usage, they need to overcome some cultural barriers, have limited amounts of L2 to listen to and have restricted time to devote to L2 tasks due to adult commitments (Rose, 2016). Moreover, adults' SLA is influenced by various factors, such as personality, motivation, intelligence, commitment and age (Rose, 2016).

An Introduction to the Maltese Language

Maltese is predominantly spoken in Malta. Malta's geographical position between the continents of Europe and Africa, 80 kilometres south of Italy, 284 kilometres east of Tunisia, and 333 kilometres north of Libya (Bonanno, 2008), therefore in the midst of two conflicting cultural and political powers, and Malta's history, have made Maltese an intriguing and peculiar language (Mifsud, 1995). Aside from being a variation of Arabic, Maltese is a mixed language that uses the Roman alphabet and is part of the South Arabic branch of Central Semitic, with components of Maghrebi/Siculo-Arabic, Romance (Sicilian, Italian), and English (Camilleri and Sadler, 2016).

Furthermore, 95% of Maltese grammar is Semitic, despite being influenced by both the Italian/Sicilian and English languages (Mifsud, 1995). While some participants in this research spoke Semitic languages as L1 or L2, the majority had no knowledge of any Semitic language. The Maltese grammar can be challenging for ML2 learners who lack such knowledge.

Problem and Purpose Statement

Numerous factors, including extralinguistic and linguistic factors, have significant impacts on SLA and could be challenging for adult learners. The learners' linguistic background, such as the starting age of SLA and the phoneme inventory of the learner's L1, influences SLA performance. Similarly, L2 proficiency and phonology are influenced by extralinguistic factors, which include attention control, working memory, the learner's motivation, short-term memory, and lexical learning (Gorin & Majerus, 2019).

Various evidence-based interventions have been used to enhance SLA. Some interventions include the use of art and music in L2 classes. Art, music and language have similar neural resources for processing prosody, semantics and syntax (Calma-Roddin & Drury, 2020). Similarly, art and music have diverse effects on language learning (Chobert & Besson, 2013). For example, the features of L1 and L2 speech processing, which include the rhythmic structure of speech, supra-segmental vocalic discriminations, segmental vocalic discriminations, and prosodic modality, are significantly impacted by music, especially music expertise (Jekiel & Malarski, 2021). Besides enhancing enjoyable, engaging and productive lessons, art education

promotes discipline-neutral critical thinking and promotes thinking, reasoning, imagination, interaction and L2 achievement (Shulsky & Kirkwood, 2015). Consequently, this study focuses on exploring adult learners' perceptions of the use of art and music in ML2 courses. This is important as ML2 is a new subject in the Maltese curriculum due to the ongoing influx of foreigners, and a lack of literature on ML2 pedagogy (Camilleri Grima, 2015; Żammit 2020).

Research Question

Is it beneficial to use art and music while learning Maltese as a second language?

Literature Review

The Impact of Art in SLA

Teachers have incorporated the use of manipulatives, such as photographs or visual images, posters, ceramics, modelling clay, pictionary game, painting, wordless books and drawing to improve student's SLA and enhance their holistic academic outcomes (Hartle et al., 2015). The integration of art in SLA has been shown to promote student engagement, stimulate L2 communication, encourage creativity, increase L2 comprehension, and reduce anxiety associated with learning, while fostering discipline-neutral critical thinking, self-expression, and accommodation of learning styles, thus leading to effective SLA (Ghandibari, 2015).

Furthermore, the use of art contributes significantly in creating long-lasting memories and strong impressions in students, while contributing to their success. Teachers have increasingly used pictures to explain specific concepts and language pedagogy approaches since visuals arouse students' interest, leading to increased student engagement and SLA (Shulsky & Kirkwood, 2015). Visual art can improve learners' understanding of L2 and enhance students' L2 by establishing positive student-teacher relationships, enhancing collaborative learning, providing autonomy support and creating a meaningful engagement (Lastra, 2017)). Specifically, the use of arts in learning focuses on inducing sensory perception and thoughtful experiences, which increase students' cognitive abilities in SLA.

The Impact of Music in SLA

Music is exceedingly relevant in SLA. Specifically, musical factors have diverse effects on adults' success in the L2. These factors include extralinguistic effects, for example, connection to the L2 culture and regulation of mood, musical presentation during instruction, musical expertise and musical aptitude.

Musical presentation is defined as musical tasks/activities, such as songs, which tend to be utilised as a part of the L2 teaching process, and includes musical class exercises, rhythmic training, singing and listening to music (Rose, 2016). Incorporating music activities, for example, songs in L2 teaching, and in authentic texts to present L2 vocabulary, pronunciation and grammatical aspects, has positive impacts on numerous SLA aspects (Bokiev, D., Bokiev, U., Aralas, Ismail & Othman, 2018). Therefore, songs do not only improve learners' musical aptitude but also the efficiency of SLA, resulting in improved academic success in the L2 (Degrave, 2019).

Effects of Musical Expertise and Training

Musical expertise is defined as the productive and discerning or insightful musical capability that a person gains through all-embracing or comprehensive informal practice and formal musical studies and has significant effects on SLA (Chobert & Besson, 2013). For example, music improves auditory discrimination according to rhythmic cues and pitch, hence

facilitating the perception of suprasegmental and segmental dissimilarities/differences. As a result, improved auditory discrimination would lead to enhanced L2 attainment. Brain functions and brain organization are greatly influenced by musical expertise. Furthermore, neurophysiological, and behavioural levels show that musical expertise significantly influences numerous features of speech processing in SLA, which include the production of speech and auditory perception, leading to enhanced SLA (Chobert & Besson, 2013).

Music training and expertise improve perceived word stress or lexical stress cues and influence lexical stress processing in SLA, which develops the understanding of speech sound segmentation, leading to improved L2 speaking and listening skills (Garami et al., 2017). Jekiel and Malarski (2021) investigated the effects of musical listening abilities of 50 Polish learners of English as an L2 before and after a standardized accent training programme. They found that musical ability contributes to the production of more native-like L2 vowels and a potential relationship between rhythmic memory and L2 vowel acquisition before training, and years of musical experience after training, suggesting that specific musical skills and music practice can be an asset in learning an L2 accent.

Bokiev et al. (2018) found that musical training improved the L2 productive phonology, working memory, pitch perception and musical training/expertise of 45 native English students learning Spanish as an L2. Moreover, musical training and expertise enhanced phonological memory, which resulted in better grammar, improved word order and L2 speaking skills. Consequently, Bokiev et al. (2018) recommended the integration of musical training or musical expertise in L2 lessons, as it would significantly enhance L2 pronunciation and phonology, which collectively contributes to adult learners' SLA.

Impact of Musical Aptitude

Musical aptitude, which is characterised as the ability to discern patterns in sound sets, is having a fine sense of rhythm and thus the ability to understand or appreciate music intuitively and, particularly, to differentiate off-key and off-pitch music (Borland, 2015). Irrespective of music training and experiences, musical aptitude is unique to every individual. Musical aptitude can play a vital role in facilitating L2 skills. Therefore, persons who have higher performances on musical aptitude tests tend to have higher cognitive abilities and better L2 learning skills (Borland, 2015).

Borland (2015) found that L2 aptitude, which is independent of general intelligence, is significantly related to musical aptitude. Adults' musical aptitude is also attributed to improved L2 pronunciation and speaking skills and the retrieval of novel word sequences (Borland, 2015). Therefore, the use of musical aptitude is strongly assumed to improve SLA in adults.

Methodology

Qualitative Research Method

This study used a qualitative research method to understand the possible effect of the implementation of art and music in ML2 courses for adults. According to Umeshkumar, Kothari, and Awari (2016), a qualitative research method offers a deeper understanding of the study phenomena. Although qualitative research methods do not generate numerical data, they provide a clear understanding of participants' relations, behaviours, attitudes, experiences, and beliefs (Hennink et al., 2020).

The main rationale for choosing a qualitative research method was that it could provide insights into the research problem and an understanding of the underlying motivations, reasons and

views of the participants concerning the use of art and music to enhance adults' ML2. In addition, qualitative research methods uncover trends in opinions on the current study problem, which is the use of music and art to enhance adults' SLA (Rahman, 2017).

The Participants

The researcher used convenience sampling to select samples from the target population (Umeshkumar, et al., 2016). The sampling criterion required that participants were above 18 years old and were learning ML2 at an intermediate level (Level B2).

In this sampling method, all individuals who met the sampling criterion were invited to participate in the study (Umeshkumar, et al., 2016). To accomplish the objective of the present research, the participants had to be easily accessible and available, and they agreed to be interviewed online due to COVID-19 pandemic for the benefit of reaching their and future adult learners' potential in learning ML2.

Determining the study population and calculating the sample size are important issues to research success (Garg, 2018). In this research, the sample size included 37 adults who were learning ML2 at lifelong learning centres and in private lessons taking place in Malta. The participants consisted of different professionals from diverse countries, who were working in Malta and interested in learning ML2. The participants' professions included doctors, nurses, construction workers, students, managers, salespersons, chefs, beauticians, masseurs, surgeons, nuns, iGaming managers, receptionists and teachers. Some teachers who were colleagues of the author recommended the participants who were then recruited on a voluntary basis via email. All study participants could withdraw from the study without prejudice (Garg, 2018). The interviews were conducted at the participants' discretion and at their preferred time, in compliance with the guidance established by McGrath et al., (2018). With the participants' consent, the online interviews were recorded.

Data Collection Process

Research instrument. One-on-one interviews consisting of 6 unstructured questions were conducted via Zoom to collect data from 37 participants. The aim of the interviews was to develop a holistic understanding of the use of art and music to enhance adults' SLA, to achieve the study objectives (Umeshkumar, et al., 2016) and to answer the research question.

Development of the interview. Before the study took place, the researcher obtained ethical consent from the Faculty Research Ethics Committee (FREC) of the University of Malta. The researcher then designed an interview guide and held interviews. The participants were aware that their identities would remain anonymous in the research. The interview questions were confidential and the respondents' names were not required (Surmiak, 2018).

The main interview questions were:

1. Does your Maltese teacher use art and music in class to enhance your Maltese learning?
2. How would you feel if your Maltese teacher used art or music in class?
3. Did the teacher in your home country use music and art in class while teaching you a second language?
4. What are the benefits and challenges of using art while learning a second language?
5. What are the advantages and disadvantages of using music while learning a second language?
6. Do you think that you learn more when art and music are used in the language class?

Validity and Reliability

After interviewing the respondents, the researcher used member-checking to assess construct validity by distributing the transcripts to the participants for approval. Hence, the researcher sought to reduce potential cases of personal bias. According to Thomas (2017), member checks are critical in obtaining respondents' permission to use quotes, particularly where the respondent's identity is at stake.

To achieve a valid sample size, the researcher used convenience sampling of the population. When using member-checking, the researcher also maintained procedural accuracy and used self-correcting techniques (Candela, 2019).

Data Analysis

The 37 online interviews took roughly 37 hours since each recorded online interview lasted approximately one hour. These interviews were recorded between February 11 and February 26, 2021 and were later transcribed. The interview results were categorised into themes and then thematically analysed and interpreted. The themes emerged from what the participants said. During analysis, two main themes were developed. The first theme was using art to enhance adults' ML2, and the second theme was using music to enhance adults' ML2. The information collected was evaluated using content evaluation and the results were summarised into reports. The NVivo 10 software confirmed the established trends, enabling the researcher to analyse more of the qualitative findings, uncover additional insights and draw explicit, plausible hypotheses backed by empirical data while saving time and working more efficiently (Zamawe, 2015). The possible hypotheses were that using art and music is essential in ML2 classes, and that participants would report more benefits than challenges in using music and art in L2 classes.

Findings and Discussion

This section will report the participants' perspectives regarding benefits and drawbacks of using art and music in ML2 classes. Their responses will attend to the research question: Is it beneficial to use art and music while learning Maltese as a second language? It is hoped that the results will serve to inform the effective practice of future teachers of ML2.

Using Art to Enhance Adults' SLA

In this study, it was interesting to find that since ML2 is a new subject, most Maltese teachers were trained on how to teach Maltese as a first language and thus, not how to teach ML2. This was due, in part, because the postgraduate course in ML2 pedagogy started in 2018 (Żammit, 2020). Consequently, all participants agreed that art and music were not used in ML2 classes. These participants were accustomed to the use of music and art in L2 classes when they learned an L2 in their home country or learned English as an L2 (ESL), even in Malta.

Maltese teachers who teach ESL/EFL or any other L2 have coursebooks on how to teach L2 and follow internationally recognised courses such as TEFL (Teaching English as a Foreign Language), TESL (Teaching English as a Second Language), TESOL (Teaching English to Speakers of Other Languages), CELTA (Certificate in Teaching English to Speakers of Other Languages), and the Trinity DipTESOL or Cambridge DELTA (Diploma in Teaching English to Speakers of Other Languages) without the requirement of a degree. These courses provide teachers with an internationally recognized certification to teach English worldwide in a range of contexts, and address concepts such as how to use art and music to teach students in a fun and creative way that motivates them to want to learn (Degrave, 2019).

Art has many benefits for ML2 learning. All 37 participants agreed with Rose (2016) who claimed that using art could improve learners' understanding of the cultural aspects and the contemporary issues of L2 society. For example, one participant said:

> *If the teacher can show us artistic pictures or if we can attend an art exhibition, I can understand more the cultural aspects and political issues of Maltese society.* (Indian nurse, Interview: 11/02/2021)

Likewise, another participant asserted:

> *Since we, third-party nationals are learning both the Maltese language and its culture to obtain our permanent residence permit, artistic pictures could be used so that Maltese teachers can teach us Maltese literature, history, culture and geography and we can learn and experience Maltese like native speakers.* (Burkinabè builder, Interview: 24/02/2021)

Correspondingly, another participant stated:

> *I can better understand the contemporary issues of Malta through its contemporary art.* (Serbian doctor, Interview: 18/02/2021)

All participants supported Martello (2017), who asserted that using art in class enables learners to learn new vocabulary. Additionally, 34 participants discussed how art could be used in ML2 online classes. For instance, one participant claimed:

> *It is fun to learn new vocabulary by playing pictionary and guessing our colleague's drawing. This game could also be played online due to COVID-19 restrictions. I would definitely learn the vocabulary better than when the teacher translates Maltese words for us or when she gives us a lot of drilling exercises.* (Syrian builder, Interview: 26/02/2021)

Similarly, another participant explained:

> *I wish that the teacher could show us an artwork online or in class and ask us to describe the emotions that the artwork brings out. I would surely learn a lot of vocabulary in this way. I remember that our English teacher used this kind of technique to teach us adjectives, and I still remember the English adjectives through this teaching method.* (Palestinian plumber, Interview: 15/02/2021)

Besides learning new vocabulary and motivating the learners to write or discuss the visuals, this study continues to build on Martello (2017), since according to 32 participants, using art during ML2 classes could improve their grammatical concepts, especially if it reflects the learners' cultural context and motivations, as the following participants asserted:

> *It is important that if our Maltese teacher selects some artistic pictures, the teacher should first consider our cultural background and interests so that we will be more interested in learning the new vocabulary or grammar.* (Somali builder, Interview: 11/02/2021)

> *Besides learning the vocabulary, my Arabic teacher used to teach us verb conjugations and prepositions by describing what we were seeing in the pictures.* (German iGaming manager, Interview: 26/02/2021)

Building on Rose (2016) concerning music in L2 classes and motivation, 30 participants revealed that besides music, art can also help them develop a positive attitude towards ML2, as for example, one participant claimed:

> *I love art, especially abstract and surrealist art. It would be great if the teacher could project some artwork, as I would surely be motivated and have a positive attitude towards the Maltese language. I will remember the new words more by describing artwork. In Sweden, I learned English in this way.* (Swedish iGaming consultant, Interview: 22/02/2021)

Thirty-five participants asserted that through visuals, teachers can encourage them to discuss images with their peers using ML2. As a result, continuous practice of ML2 through this technique would enhance the student's ML2, as the following participants explained:

> *The teacher can also ask us to show her some pictures on our iPhones, and we can describe these images or talk in Maltese about our personal stories that our iPhone pictures depict.* (Pakistani nurse, Interview: 16/02/2021)

> *We can bring our photo albums to our class or share our photos online, and we can talk about them with our peers. Our peers can ask us questions about our photos, and we can answer them. In this way, we can practise the Maltese language through our personal photos.* (Czech student, Interview: 17/02/2021)

Thirty-two participants contended that using famous artworks of their home country might encourage them to describe them in Maltese, besides learning more about different cultures through an intercultural teaching approach, thus confirming Griffith et al., (2016). According to one participant:

> *It would be nice if our teacher could ask us to present a picture of any famous painting or monument of our country, and describe it in Maltese. The teacher could obviously help us when we do not know how to express certain words, and we could show the objects on the pictures rather than translating from English to Maltese.* (Ukrainian doctor, Interview: 15/02/2021)

Additionally, 33 participants supported Lastra (2017),who asserted that using art in L2 classes can develop L2 listening, writing, comprehension, speaking and reading skills, as the following participants said:

> *In my home country, my English teacher used both our personal photos and fine art paintings to develop our listening, writing, comprehension, speaking, and reading skills. She used to motivate me a lot to learn English. That's what the Maltese teacher should do. I am sure that in this*

> *way, I will remember the words and the verb conjugations better in Maltese.* (Italian chef, Interview: 25/02/2021)

> *It would be awesome if our Maltese teacher would use pictures or make us play pictionary to teach us Maltese vocabulary because that would make me feel more comfortable to practise Maltese whilst describing the pictures or what another student is drawing during pictionary. In this way, I wouldn't be afraid of making mistakes, and I guess that more attention would be given to the picture description rather than to the kind of verbs that we'd be using.* (Pakistani housewife, Interview: 12/02/2021)

According to a participant who was also a teacher, teachers use pictures, wordless books and film clips to improve learners' writing skills:

> *It would be great if our Maltese teacher would show us artistic pictures and wordless books; like I do during a writing activity to teach German as a foreign language. I show a painting to my students and they write their answers to specific questions about the painting, such as the emotional expression of the girl in the painting or the reason for embracing the moon.* (German teacher, Interview: 11/02/2021)

Comparably, a participant asserted:

> *The teacher could provide a written text for us to read and understand. In this text, there could be background information, such as the historical context of the artwork that the teacher could show us or insert it in the reading text.* (Serbian surgeon, Interview: 23/02/2021)

Similarly, another participant claimed that L2 teachers had used pictures to improve her speaking skills in L2:

> *l remember that the German teacher used to show us artworks to get familiar with the German culture and also as an opportunity for us to speak in German by describing what we were seeing in the picture and why the painter might have painted in that way or drawn a particular person or used such colours or texture.* (Polish receptionist, Interview: 19/02/2021)

Apart from music, as claimed by Bokiev et al. (2018), 35 participants stated that visuals can improve their concentration in ML2. For instance, one participant claimed:

> *An artistic picture can make me concentrate more, reflect and help me think, besides relating it to my personal experiences. In this way, I can definitely learn and remember more.* (Moroccan student, Interview: 11/02/2021)

The Disadvantages of Using Art in ML2 Class

Although many scholars have mentioned the benefits of using art in an L2 class (Lastra, 2017), 13 participants mentioned some disadvantages of using images during ML2 class. For example, the following participants explained that a picture can distract them from the lesson:

> *Sometimes, when a teacher used to show me a painting to learn English, I used to miss the point of the lesson as I thought of something personal or cultural.* (Palestinian builder, Interview: 22/02/2021)

> *Complicated pictures, such as abstract paintings, are very distracting, and I end up not learning anything related to the new language.* (Somali tile layer, Interview: 16/02/2021)

Although Martello (2017) claimed that art can enhance L2 learners' vocabulary, 13 participants expressed their concern that they might not learn all vocabulary associated with a specific image. For example, one participant claimed:

> *The picture can be so appealing to me that I keep on focusing on two or three important objects in the picture and learn only those two or three new words....no more*! (Venezuelan maid, Interview: 24/02/2021)

Using Music to Enhance Adults' SLA

Based on the interview results, the study found that music has significant benefits for enhancing adults' ML2 learning. The study supports Rose's view (2016) and reveals that all participants would be very motivated to learn ML2 through Maltese music. For instance, a Sicilian doctor stated:

> *I will be very enthusiastic to attend Maltese classes if the teacher will teach us through Maltese songs.* (Sicilian doctor, Interview: 17/02/2021)

Another participant added:

> *As a shy person, I would participate more if the Maltese language class was combined with music.* (Kenyan nun, Interview: 12/02/2021)

Similarly, a participant claimed:

> *I really wish that our Maltese teacher would play some Maltese music for us. Besides learning more about the Maltese culture, I would surely participate more in the lesson.* (Pakistani nurse, Interview: 16/02/2021)

The comments of thirty-six participants confirmed Shulsky and Kirkwood (2015) and Bokiev, et al. (2018), who revealed that using music makes learning enjoyable, improves the learners' concentration and enhances participation, which results in improved SLA. It is also worth noting that all participants discussed how their ML2 teacher could incorporate music into their online lessons. For instance, one participant stated:

> *Besides enjoying myself more while learning the vocabulary of new words, I will concentrate more if the teacher makes us listen to a song and then gives us the task to fill in the blanks of the song lyrics. Due to the pandemic, this could also be achieved by downloading a song from YouTube to be shared during our online Maltese classes.* (Indian housewife, Interview: 25/02/2021)

Furthermore, the same 32 participants who claimed that they would be pleased to show their home country's art during ML2 class shared the same passion for their home country's music. For example, the following participant claimed:

> *How happy I will be if the teacher asks us to present a song or music from our home country and then to describe how it makes us feel. I will surely feel happy to speak in Maltese about the music of my home country.* (Serbian builder, Interview: 26/02/2021)

Similarly, 34 participants stated that music makes them feel relaxed, and they enjoy learning new vocabulary while it enhances their concentration. These findings are consistent with Shulsky and Kirkwood (2015) and Bokiev et al. (2018). For instance, the following participants stated:

> *I would feel more relaxed and concentrate more if the teacher plays some background music while we are working on a task in Maltese.* (Indian nurse, Interview: 23/02/2021)

> *I would feel more comfortable, relaxed, and happy if music is played in class while learning Maltese vocabulary and grammar.* (Albanian beautician, Interview: 22/02/2021)

A participant claimed that she can guess the meaning of Maltese words by using cognates due to a positive transfer (crosslinguistic influence) (Shatz, 2017) from her Modern Standard Arabic L1:

> *How much I enjoy guessing the meaning of words that our Maltese teacher would present to us through Maltese songs! I am sure that I can guess most meanings correctly as I can relate most Maltese words to Arabic* (Libyan housewife, Interview: 19/02/2021)

Additionally, all participants revealed that they wished that their teachers would use music in ML2 lessons because this would improve their ML2 acquisition. These results support Bokiev et al. (2018) in the argument that songs could be used to improve SLA, as reported by the following participants:

> *Most songs make me dance. They make me truly happy, and I know that if the teacher presents Maltese songs in class, the new words will stick in my mind forever.* (Italian salesgirl, Interview: 22/02/2021)

> *The repetition of songs would definitely make me remember the new Maltese words.* (Turkish chef, Interview: 18/02/2021)
> *Listening to Maltese songs is very important because it would make me learn Maltese better through the songs' melodies and rhythms.* (Danish iGaming manager, Interview: 25/02/2021)

> *It would be wonderful if the teacher played a song and we practise the Maltese language by sharing the feelings and memories that the song makes us feel.* (Italian hairdresser, Interview: 15/02/2021)

Since all participants revealed that ML2 is not taught through music, they recalled the importance of music when studying an L2 because it transported them back in time. This finding concurs with Chobert and Besson (2013), who asserted that an old song could evoke vivid memories that take individuals back in space and time due to the deep neural connection

that music generates with romance, heartbreak or other pleasant and painful memories. Consequently, one participant said:

> *When songs used to be played in our English-as-a-foreign-language class in Malta, we used to enjoy the lesson more, laugh more, talk about our experiences and nostalgic memories and make friends.* (Spanish child-minder, Interview: 23/02/2021)

All participants explained how music helps them to learn numerous words, and according to a teacher:

> *You can't imagine how many words my students learn when I play a German song and allow them to sing it. I am always impressed by the number of words from the song my students used that they magically must have learned them through songs.* (German teacher, Interview: 11/02/2021)

All participants agreed with Bokiev et al. (2018) by stating that songs played during ML2 lessons could improve their grammar. For example, the following participants asserted:

> *I would like the teacher to play some songs in our lesson because I tend to forget all grammar rules, but songs make me remember the new words and the new grammar rules more.* (Libyan manager, Interview: 18/02/2021)

> *As you know, as you grow older, you lose the ability to memorise new words and grammar concepts. Thanks to music, I can relate a particular lesson to a song. So, I would be very grateful if the teacher played a song while we are learning a grammatical concept or new words in Maltese. I will surely remember them more.* (Serbian surgeon, Interview: 23/02/2021)

> *In Sweden, I learned foreign languages through songs. Music creates such a relaxing and positive environment in class that will make me feel more confident, relaxed and very interested in learning the vocabulary, grammar, proverbs, idioms and whatever the song provides.* (Swedish iGaming consultant, Interview: 17/02/2021)

> *Who knows how many new words, sentence patterns, pronunciation, adverbs, prepositions, and adjectives I learned when I was learning Spanish through songs!* (Filipino carer, Interview: 24/02/2021)

According to Džanić and Pejić (2016), songs are vital language learning materials that could be utilised to develop every language aspect, besides enhancing motivation and helping learners develop a love for language learning. Correspondingly, all respondents stated that music could improve their ML2 memory, vocabulary, sentence structure, and pronunciation skills. A Chinese participant claimed:

> *When I was learning English, I used to listen to music to help me remember the words, idioms, sentence structure, word pronunciation, and grammar.* (Chinese masseur, Interview: 16/02/2021)

Similar to Rose's (2016) findings, 35 participants mentioned that music's melody and rhythm could contribute significantly in their memorization of verb conjugation patterns. The following participants stated:

> *I could link the melody and rhythm of music to the Maltese verb conjugation patterns.* (Thai chef, Interview: 19/02/2021)

> *Music could definitely help me to memorise verb lists while it is being played in the background.* (German iGaming consultant, Interview: 26/02/2021)

Whilst Lastra (2017) found that visuals help L2 learners in comprehension skills, 31 participants argued that music could also improve their comprehension skills, such as the following participant:

> *I used to love the background music in a listening comprehension task when I was learning French. It used to help me understand the text and its meaning more, and also concentrate more.* (Palestinian plumber, Interview: 15/02/2021)

Disadvantages of Using Music in ML2 Classes

Twenty-four participants reported some disadvantages of using music in ML2 classes. This supports Chobert and Besson's (2013) observation that music can evoke unpleasant and painful memories, potentially undermining the SLA process. A Polish receptionist asserted:

> *If a song reminds me of a sad or nostalgic experience, I tend to switch off, remember the memory, and certainly follow the music without understanding or learning any new words or anything else related to language learning.* (Polish receptionist, Interview: 19/02/2021)

Contrary to the findings of Shulsky and Kirkwood (2015) and Bokiev et al. (2018), 24 participants stated that music could reduce their concentration levels during ML2 lessons, as the following respondents expressed:

> *Music in class can definitely distract me. To concentrate and focus, I need total silence.* (Italian chef, Interview: 25/02/2021)

> *Sometimes the singer is singing too fast and uses so many words that I don't know. This makes it difficult for me to follow.* (Turkish chef, Interview: 18/02/2021)

According to 17 participants, music can make the ML2 lesson boring if the teacher plays a song without considering the adult learners' preferences. A Czech student explained:

> *Just imagine if our old-fashioned Maltese teacher plays a song that we do not like, then the lesson will be so boring. It is important that the teacher*

> *plays the songs we like, but then again, it is very difficult and perhaps impossible to please everyone's subjective taste.* (Czech student, Interview: 17/02/2021)

Contrary to Bokiev et al. (2018), who related music to good L2 pronunciation, 22 participants reported that wrong pronunciation or particular words from songs could mislead learners and thus could negatively affect the ML2 learning process, as identified by the following participant:

> *Sometimes I get the wrong pronunciation or words from songs. Then it is difficult for me to erase the word I learned from songs because it really sticks in my mind.* (Syrian builder, Interview: 26/02/2021)

Consequently, twenty-six participants reported on their L2 performance improvements concerning vocabulary and grammar acquisition, and noted that they performed better on L2 tests because of the use of art and music in class. Although the participants commented on the gains in student achievement in L2 concerning vocabulary and grammar acquisition, they did not mention any scores. Nonetheless, this supports Piri's (2018) finding that participants who were subjected to music obtained higher scores in L2 than the no-music group. Therefore, from the results of this study and others, the use of art and music in L2 classrooms appears to motivate students and leads to higher grades.

Limitations

There were some limitations to this study. First, owing to the COVID-19 pandemic, the researcher was unable to use a larger sample because some ML2 students did not have access to the internet or computers. Secondly, the COVID-19 pandemic also posed significant limitations in terms of conducting the research, especially during data collection. Sometimes the participants and the researcher had technical problems and a lack of internet connection, making an interview over Zoom impossible. It was time-consuming to find another time slot to meet online to continue the interview. Acknowledging these limitations, the research was nonetheless completed successfully.

Recommendations

According to the participants in this study, art and music were not used in adult ML2 classes, despite the fact that they were used when learning another L2, such as English, in the United States, the United Kingdom, Malta, or some other country. Therefore, suitable research should be conducted to determine why teachers are not using art and music in adult ML2 classes. It is also recommended a new study to investigate the impact of using music and art when teaching an L2.

Other research could focus on how art and music are used in children's ML2 classes, and how art and music help learners improve their academic performance in ML2. Another study could establish a strategy to help in the process of incorporating art and music into ML2 lessons and in the training of ML2 teachers. Another recommendation could be that teachers collaborate with students to choose appropriate songs or pictures that would not interfere with their learning.

Conclusion

The purpose of this study was to examine the impact of using music and art to enhance adults' academic achievement in ML2. According to 37 adult learners, using art and music in teaching ML2 could make ML2 learning enjoyable and enhance participation and memory while improving grammar, vocabulary, comprehension skills and sentence structure, contributing to adults' success in ML2. The art and music that could be used in ML2 could be depicted from the Maltese culture and thus, the songs would be in Maltese to help in the learner's ML2 acquisition. Moreover, the participants mentioned some disadvantages to using art and music during ML2 classes, such as being distracted, incorrect pronunciation of L2, thinking of sad memories and a reduction in concentration levels. Nevertheless, the additional insights in this research suggest that since the benefits of using art and music in L2 courses seem to outweigh the drawbacks of using them, it is evident that incorporating the fine arts through art and music would contribute greatly to ML2 and any L2 academic achievement. Thus, the study's results can also help L2 teachers adjust their teaching practices to improve the performance and success of L2 students' learning. With the implementation of more art and music into L2 classes, L2 students, L2 teacher trainers, L2 course book authors, and curriculum designers could become more conscious of the importance of music and art in improving the quality of their work in classes, course materials, and curriculum decisions. Consequently, the study recommends the use of art and music to enhance adult learners' academic achievement in ML2 since the study participants indicated that neither art nor music were used previously in ML2 traditional and online classes.

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Exploring the Impact of Peer Assessment on EFL Students' Writing Performance

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Abstract

Lately, researchers have expressed their concern for EFL students' poor writing performance and exam failure. They have indicated that peer assessment (PA) can be successfully employed to support a better integration of teaching/instruction with assessment of progress in learning. Bearing this in mind, the current study employed a pre-test post-test quasi-experimental design and aimed to explore the effect of PA on 200 Greek Cypriot EFL students' writing performance. These adolescent learners attended two writing classes per week (90 minutes) for a full school year. Teachers received training in PA skills and then had to train their own students. Students were asked to use a PA rubric which was also devised by the researcher but negotiated between the students and their teachers during the training sessions. Paired T-tests were performed to investigate whether students in the control (n=100 students and 10 teachers) and the experimental groups (n=100 students and 10 teachers) enhanced their writing performance comparing their pre- to post-test scores. The study outcomes indicated that PA could have a moderately positive impact on students' writing performance. The use of PA improved students' writing performance in 5 aspects: mechanics, organisation, content, focus, and vocabulary and language use. In response to the need for more experimentation, this study provides recommendations for PA implementation in secondary school EFL writing classes which enable teachers to improve students' writing performance.

Keywords: peer assessment, writing performance, secondary education, EFL learning

Peer assessment (PA), as an alternative form of "assessment for learning" which promotes learner-centered assessment, has drawn considerable attention for more than four decades (Chang & Lin, 2019; Hoffman, 2019; Meletiadou & Tsagari, 2016; Topping, 2018). It is an educational arrangement where students judge a peer's performance quantitatively, for example, by providing a peer with scores or grades, and/or qualitatively, for example, by providing a peer with written or oral feedback (Topping, 2017). PA has significant pedagogical value because it enables learners to take part in assessment by evaluating their peers' learning process and products (Bryan & Clegg, 2019).

According to the literature, PA supports the learning process by providing an intermediate check of student performance against the criteria, accompanied by feedback on strengths, weaknesses, and/or tips for improvement (Panadero, 2016; Topping, 2017). There can also be learning benefits for peer assessors since they are exposed to other ideas and writing samples and are able to internalise the assessment criteria and standards (Smyth & Carless, 2020). However, not all types of peer feedback may lead to an improvement in performance. Researchers describe several conditions under which peer feedback may have a positive influence on learning (Schünemann et al., 2017). Involving learners in the assessment procedure is widely acknowledged as vital to effective self-regulation since it allows learners to identify mistakes and develop strategies to address them (Zamora et al., 2018). However, the development of PA skills is challenging. It requires continuous and repeated practice for learners to become competent peer assessors (Andrade, 2016). Engagement in PA presupposes that teachers can inspire learners and involve them in carefully designed tasks (Race, 2019). Therefore, participation in PA ultimately intends to have a positive influence on their cognitive development and motivation towards learning (Adachi et al., 2018).

This study aims to explore whether PA of writing can be used to improve adolescent students' writing performance and present a PA implementation study in the Greek-Cypriot context since action research in secondary education is scarce. Initially, research studies highlighting the use of PA of writing in EFL contexts will be presented to examine some of the findings in the literature. Then, the methodology of the study will be described, and its findings will be rigorously discussed. Finally, conclusions will be drawn, the limitations of the study will be highlighted and suggestions for further research as well as recommendations will be provided.

Literature Review

To date, literature that empirically links quality criteria for feedback to performance improvement in the case of PA is scarce and few studies adopt a quasi-experimental approach to explore the impact of instructional interventions on PA efficacy and student learning (Double et al., 2020). The present study intended to explore whether the effectiveness of PA as a learning tool could be raised through an innovative instructional intervention in secondary education. It also aimed at developing a deeper learning experience enabling learners to engage with new information in terms of the written assignment, assessment criteria, and the assessment procedure as opposed to repetitive and ultimately unsuccessful learning (Topping, 2017).

There are several principles for effective formative PA which is intended to enhance learning. First, formative PA should aim at self-regulation enabling learners to monitor their learning, set goals, develop suitable strategies, manage resources, and work consistently to achieve these goals. Students should be allowed to take responsibility for and take control of their learning (Lee & Hannafin, 2016). Research indicates that teachers should provide information about

expectations and aims. Further, assessment criteria should be explained clearly. Teachers should cooperate with learners to design assessment rubrics and offer opportunities for learners to provide feedback (marks and comments) to each other in relation to the defined assessment criteria. They should also use PA with their students because it encourages low-achieving learners to work hard and overcome obstacles when learning to write. Learners feel that their peers, who take part in PA, share their concerns and provide them with continuous support (Barrot, 2016). This study intends to offer recommendations for PA implementation which may help teachers use PA of writing effectively in their classes.

One of the goals of using PA in EFL classes is that it can guide learners to reflect more carefully on the same elements of their own written work (Hicks et al., 2016). As learners enhance their writing performance, while comparing their writings and receiving feedback from their friends and teachers, the possibility of engaging in fruitful conversations in terms of which they exchange ideas, clarify points, ask questions, and examine as well as reflect on their options increases (Zhu & Carless, 2018). Peer assessment may foster enhanced learning because students can provide additional feedback. This type of response is different and is possibly received and understood more effectively than teacher feedback (Rotsaert, Panadero & Schellens, 2018). Revisions initiated by teacher feedback were often found to be less successful than those related to peer comments although peer feedback sometimes induced uncertainty (Allen & Mills, 2016). This study indicates ways in which PA can be used by adolescent students who wish to improve their writing skills and become more autonomous learners.

Teacher feedback, although highly evaluated by learners is often associated with confusion, misinterpretation and miscommunication (Edwards & Liu, 2018). On the contrary, peer advice generates discussion and increases reflection as peers ask for clarification and negotiate meaning (Kuyyogsuy, 2019). Peer assessment enhances learners' understanding in terms of writing, allows for more self-corrections, checking books, and asking teachers for clarifications as students are encouraged to assume responsibility for their own assignments (Fan & Xu, 2020). It increases mindful reception as well as the frequency, extent and speed of marks and comments for learners while reducing teachers' workload (Ashenafi, 2017). The current study wishes to explore how involving learners in the assessment procedure may increase the amount and number of assessment opportunities and improve their writing performance. Therefore, the potential lower quality of student feedback may be an acceptable trade-off if PA enhances learner engagement and progress.

Conversely, some studies indicate that learners think that PA is aimless because peers are not regarded as experts, tend to provide positive feedback to friends, and teachers make the final decisions anyway (Wu & Schunn, 2020). It is crucial to remember, however, that formative assessment methods can enrich learners' subsequent performance in summative tests (Dixson & Worrell, 2016). Student engagement in assessment also aims to prepare learners for lifelong learning (Nguyen & Walker, 2016). Consequently, this study seeks to explore ways in which secondary school students can develop their professional skills (i.e., reflection) which are valued by employers.

Peer assessment may also be considered as a luxury or a practice which is, in a way, irrelevant when the aim is enhanced performance in external high-stakes tests (James, et al., 2017). Since peers are not experts, the accuracy of PA varies (Reinholz, 2016). Further, peer assessors' judgement and comments are often challenged by peer assessees as learners do not have the kind of authority and subject knowledge that teachers have (Topping, 2017). However, PA in

this study is used in combination with teacher assessment (TA) as the objective is to complement TA and gradually allow students to develop their writing skills.

To sum up, findings in the literature are quite confusing. Although PA may yield various benefits in relation to student writing performance (Chien et al., 2020), there still seems to be an emphasis on teacher-centred instruction and assessment despite students' poor performance in formal tests of writing in Cyprus and other countries (Tsagari & Meletiadou, 2015). The present study aimed at addressing various literature gaps using a semi-experimental design, rarely used by researchers in the field of PA. It also examined the use of PA in secondary education, a topic which has not been widely explored (Fu et al., 2019). There is still little research on how to adapt this approach to the school contexts of many countries (Topping, 2018).

Therefore, the current study investigated the use of PA as an innovative learning tool which may enhance EFL students' writing skills in secondary education. It also provided PA implementation guidelines for secondary school writing classes. The aim was to enable teachers to improve student performance, particularly in the field of writing. In the present study, the researcher investigated the following research question:

1. What kind of an impact does PA have on adolescent EFL students' writing performance?

Methodology

Participants

The participants in the study were 200, 13-15-year-old students of four public secondary schools in Cyprus. The participating learners faced considerable problems with their writing performance and scored relatively low at the end-of-year exams which gradually prepared them for the International General Certificate of Secondary Education (IGCSE) exams. The learners randomly formed 20 mixed ability EFL groups which attended two 90-minute writing classes per week. This was a convenient sample since the researcher had to work with volunteers, depending on the students and teachers who wished to take part in the study (Mertens & Caskey, 2018).

Participants were all native Greek Cypriots and shared the same cultural and a similar socio-economic background. These students also had a similar kind of exposure to EFL which classified them as intermediate stage (B1) according to the Common European Framework of Reference (CEFR) (Council of Europe, 2001). Participation in the present study was voluntary and conditional on participants and their guardians signing an informed consent form, which had been previously approved by the Cypriot Ministry of Education.

Instrument

This study employed a multiple-trait approach (Nodoushan, 2014) to assessing student essay quality prior to and after receiving training in PA. As for measuring the writing scores of the first drafts and final versions, two different scoring methods were employed: holistic and analytic scoring (Han & Huang, 2017). These two measurements were complementary and provided sufficient information about the participants' writing abilities. The PA rubric (Table 1) was adapted from two lists in White and McGovern (1994) and Jacobs ESL Composition Profile (Jacobs et al., 1981) to reflect learners' errors and their examiners' preoccupations.

Table 1
The PA Rubric

Criteria/Weighting	Excellent/ Very Good	Good	Average	Poor	Very Poor
A. Content (sample statements for all categories)					
1. The main ideas are clear.					
B. Organization					
1. The writer uses simple linking devices.					
C. Vocabulary and language use					
1. There are subject/verb agreement errors.					
D. Mechanics					
1. There are punctuation errors.					
E. Focus					
1. There is a clear sense of audience.					

Analytic score:
Content: __(out of 4)
Organization: __ (out of 4)
Vocabulary and language use: __ (out of 4)
Mechanics: __ (out of 4)
Focus: __ (out of 4)
Total score: __ (out of 20)

Holistic score:

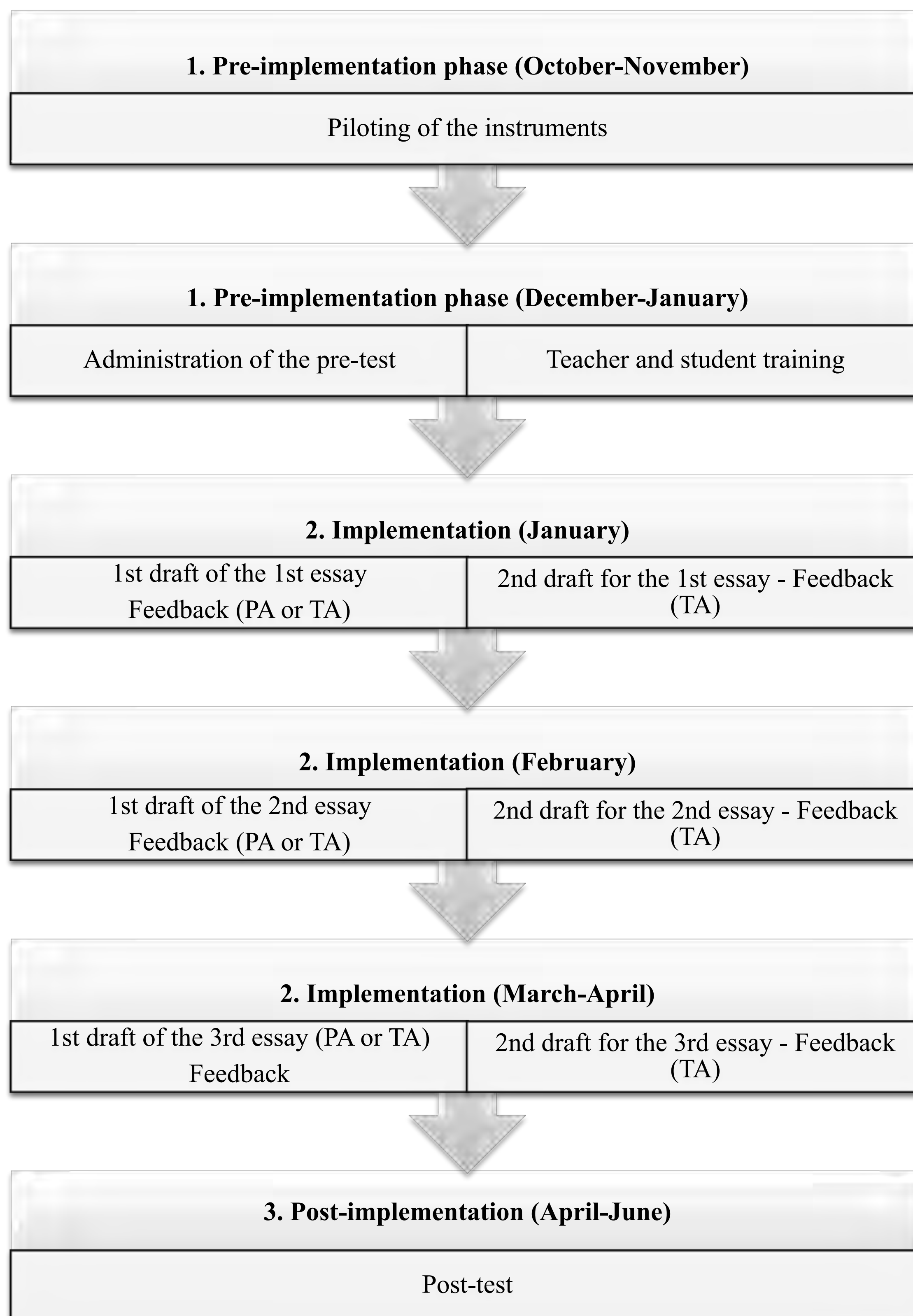
Excellent/Very Good	Good	Average	Poor	Very Poor

Students had to read their peers' essays and reflect on the statements for each category-content, organisation, focus, mechanics, vocabulary, and language use. They had to assign marks for each category (ranging from 0 to 4 marks) and then add them to get a final grade (0-20). Learners were instructed to read the essay under consideration and identify three strengths, three areas for improvement and provide three suggestions for revision. The aim was to introduce learners to PA and help them understand how they could reflect on their peers' and their own essays and offer suggestions to improve their work by carefully editing and proofreading it. The aim was to help students assume a more active role by providing meta-cognitive comments which would allow their peers to revise their work accordingly. The validity of the PA rubric was explored by consultation with experts, including 8 headteachers, one inspector, and 10 qualified EFL teachers who had taught at this level for at least 6 years.

Procedure

The study was divided into three phases (Figure 1). In the pre-implementation phase, all instruments were piloted, and a diagnostic pre-test was administered to ensure that all students who participated in the study were at the intermediate level. Students were provided with a mark but no comments or peer feedback. All essays were marked by their class teachers and an external assessor after a rater calibration session and appropriate training, and 20% of the essays were marked by the researcher.

Figure 1
The Procedure of the Study



The same test was administered at the end of the study. Students had to write the same type of essay on a different but very similar topic. The aim was to evaluate whether students made any progress after one school year and which groups made more progress, if any, the control or the experimental.

Students took part in writing workshops prior to engaging in PA of their writing assignments. During these workshops, they were instructed how to use the rubric, used it with three sample papers, and received feedback from the instructor on how their comments and marks aligned with the instructor grades and comments on the same essays. These hopefully contributed to a level of comfort and proficiency with the rubric and assignment criteria and possibly enhanced their ability to provide accurate and reliable PAs. Teachers also received extensive training and had to attend weekly sessions because the researcher wanted to check the progress of the implementation. Training and clarity hopefully promoted a trusting environment in the classroom, which had conferred positive outcomes with PA in the literature so far (Hoffman, 2019).

Learners wrote five essays, including a pre-test, 3 essays in two drafts and a post-test. Students in the experimental groups received peer feedback and teacher feedback once each while students in the control groups received teacher feedback twice (Figure 1). All student groups were engaged in the experiment once a week for two teaching sessions (45 minutes each) which added up to approximately 50 teaching sessions. Five compositions (two informal letters as pre- and post-tests, a narrative essay, a descriptive essay, and an argumentative essay) were written in class without disrupting the regular programme to exclude variables such as the amount of time spent on task at home and help from others.

Students wrote the three types of essays after being introduced to the specific genre. Experimental group students received peer feedback and a mark based on the PA rubric and had to assess one of their peers' essays. Students in the control groups received teacher feedback (comments and some corrections of major mistakes) and a grade. Students then received some remedial teaching depending on the challenges they faced in their first draft. Additionally, they were asked to write a second draft. Teachers were instructed to support their students during the whole procedure but not to intervene with their writing. They provided corrections, marks, and comments to students' second draft and after some more remedial teaching they taught the next genre. The researcher collected students' drafts immediately after learners completed each step of the procedure to ensure that teachers followed the researcher's instructions regarding the corrections and comments they provided to their students.

Essays were about 4-5 paragraphs (120-150 words each) long. Instructors monitored the students but were not involved in the actual editing of the essays. Teachers assumed the role of a facilitator by explaining any difficult terms or acting as a consultant by offering advice when needed. All teachers were asked to avoid overcorrecting students' work and provide only occasional basic corrections and comments.

During the feedback sessions, the teacher and student/assessors offered feedback to their students/peers which consisted of both marks and comments based on the PA rubric. In more detail, all experimental group learners devoted 20 minutes of their normal teaching sessions using the PA rubric to assess their peers, while the control groups received teacher feedback. Students were assigned with the correction of their peers randomly and changed every time they had to assess a new draft. The identity of the student/assessor and the student/assessee

were not disclosed to avoid conflicts and bitterness. Anonymity and change of student/assessors also ensured the reliability of the assessment process.

Next, students were asked to re-draft their work. Teacher and peer feedback were provided with a view to improving successive drafts and prompting more revision. Moreover, the feedback sessions were structured tightly regarding time to avoid considerable variation among groups and to increase student concentration. The time between drafts (usually two week) was regarded as sufficient for learners to redraft without feeling undue pressure ensuring the reliability of the assessment process. Additionally, students were asked to peer assess only one draft to avoid any resistance from students.

Learners received remedial teaching depending on their errors. Essentially, the teachers were instructed to use selected parts with significant errors from students' essays and encourage them to identify them and indicate solutions. Teachers also asked students to study their grammar book and the handouts they used to self-correct errors in class at home.

Findings and Discussion

The current study explored the way PA influences student writing performance. Paired T-tests were performed to explore whether students in the control (n=100 students) and the experimental groups (n=100 students) improved their writing performance comparing their pre- and post-test scores (George & Mallery, 2016). These revealed that experimental group students improved their writing performance by 3 marks (out of 20) while control group students improved their performance by only .2 marks. This difference was statistically significant (Table 2). It indicated that students who received PA together with TA showed considerable improvement. This finding was confirmed by previous research (Wanner & Palmer, 2018) which indicated that PA significantly improved the quality of learners' end product from draft to final version.

Table 2
Findings from the Paired T-tests of the Experimental versus Control Groups (overall score)

			M	SD	t	p	Cohen's d
Paired T-tests	Control groups	Post-test	11.73	3.01	.42	.674>.0005	
		Pre-test	11.59	3.5			
	Experimental groups	Post-test	11. 73	3.01	.42	674 >.0005	
		Pre-test	10.37	3.22			
Independent T-test (post-test score)	Control groups		11. 73	3.01	3.9	.000	.55
	Experimental groups		13.38	2.95			

This study also concluded that PA was not only suitable for adult learners (Baker, 2016). Its adolescent participants provided marks for their peers and improved the marks they received for their own essays through their involvement in the practice of PA and due to the insight they

gained into their peers' work. This allowed them to reflect on their own work and eventually improve it. Taking into consideration that learners can only process feedback for which they are developmentally ready, teacher feedback may often be ineffective. Therefore, teachers should tailor their feedback to student needs but since this is practically impossible especially in large classes, this study has demonstrated a way in which feedback can be individualised for each learner by combining PA, which is more student-friendly, and TA, which is regarded as more precise.

An independent t-test was also performed to explore differences between the post-test scores of both experimental and control groups. On average, in the post-test, experimental group students outperformed control group students (Table 2). Both the difference, which was statistically significant, and Cohen's d indicated that there was a moderately positive impact of PA on students' writing performance (George & Mallery, 2016; Cohen et al., 2013).

Paired t-tests were also performed to explore how improvement spread across the five categories included in the PA rubric (content, organisation, mechanics, focus, vocabulary, and language use) (George & Mallery, 2016). Students were assigned an analytic score per category (0-4 marks). The aim was to further explore which aspect(s) of their writing performance experimental group students improved (Table 3).

Table 3
Findings from the Paired T-tests of the Five Categories (Analytic Scores)

			t	**p**	**Cohen's d**
Paired T-tests	Control groups	Mechanics	.00	1.000>.0005	
		Organisation	.42	.675>.0005	
		Focus	2.41	.018>.0005	
		Content	(6.16	.000>.0005	
		Vocabulary and language use	-.420	.675>.0005	
	Experimental groups	Mechanics	7.16	.000 <.0005	.74
		Organisation	5.5	.000<.0005	.59
		Focus	6.16	.000<.0005	.86
		Content	7.08	.000<.0005	.6
		Vocabulary and language use	8.03	.000<.0005	.74

Paired t-tests of the pre- versus post-tests scores control group students received revealed that there was no improvement, which was statistically significant, for mechanics, organisation, focus, content, and vocabulary and language use (Table 3). The same paired t-tests were performed for the experimental groups (George & Mallery, 2016). These revealed that there was improvement which was statistically significant, for mechanics and organisation. However, there was no improvement which was statistically significant for focus, content and vocabulary and language use (Table 3).

Students in the experimental groups improved their vocabulary more than any other aspect of writing (Table 3). This indicates that PA may have a positive impact on different aspects of

students' writing performance. Students read their peers' essays and learnt new words which they then used in their own essays. Learners also improved the content of their essays (t=7.08). They possibly located new ideas in their peers' work and added new content to their own essays. Several studies have investigated the revisions made by learners after receiving PA or TA. These reported that PA leads to more meaning-level revisions while TA leads to more surface-level revisions (Rotsaert et al., 2018). However, none of these studies have indicated that students successfully improved almost all aspects of their writing performance.

In addition, other researchers (Choi, 2013) reported that students, when using peer feedback, mostly concentrated on surface level errors, involving grammatical and spelling mistakes, instead of deep or semantic level issues such as content. In the current study, the impact of peer feedback was detected more on deep and semantic level issues rather than surface level issues possibly because students received training prior to the implementation. This study confirmed some findings from previous research (Lee, 2015) suggesting that peer feedback might ultimately lead to more language improvement, because students are possibly more willing to participate in assessment and learn more easily from their peers since they understand peer feedback better than teacher feedback.

Students, who participated in this study, also managed to upgrade the mechanics of their writing (Table 3) supporting previous research (Yaghoubi & Mobin, 2015). Therefore, they confirmed that the use of PA can cognitively impact how students organise their thoughts as they write. Students had the opportunity to reflect on their work, edit and proofread their essays more carefully after providing feedback to their peers. The findings of this semi-experimental study about mechanics contradict previous research indicating that there are no significant gains for EFL students in terms of mechanics when students use PA (Wanner & Palmer, 2018). These clearly indicate that PA can have a positive impact on students' writing by helping them edit and proofread their work more carefully taking into consideration their peers' comments.

Additionally, students enhanced aspects of their essays related to focus (Table 3). PA allowed students to better understand the texts including the schematic structure and linguistic features of the genre. It successfully raised students' awareness of the context, the reader and facilitated the interpretation of the writer's intended meaning since experimental group students in this study conformed more to the conventions of the genre in hand. The deliberate focus on genres, which were included in the PA rubric, helped learners become more aware of the requirements of the different genres and take them into serious consideration when writing their essays. Consequently, they developed their meta-cognitive skills since they were asked to improve their work relying on two kinds of feedback.

However, students were able to refine their language use and organisational skills (Table 3) less than the other aspects of their writing. Although students looked at their work again, they did not manage to improve their use of grammar and their organisational skills as more time and effort is required to improve these aspects of writing. Previous researchers (Edwards & Liu, 2018) reported that a combined focus on both language form and content leads to greater gains than either focus on form or focus on content alone. This was also confirmed by the current study which showed that feedback on both form and content can result in improvement in all aspects of writing.

When comparing students' performance in the post-test, experimental group students seemed to have improved their performance more in terms of vocabulary, language use and focus (Table 3) rather than in other aspects of writing. This finding indicates that students who used

PA enriched their vocabulary and comprehended the requirements of the specific genre used in both the pre-test and post-test (informal letter) even better. Various measures of text improvement have been employed in different studies, that is, some researchers considered improved grammar as a characteristic of enhanced text quality (Liao, 2016). Other researchers also reported that trained students can provide specific and relevant feedback on global features of writing, such as genre, which in turn may result in better quality in their revised drafts (Subaşı, 2014).

Students also improved certain aspects of their writing, for example, mechanics, content, and organisation (Table 3) slightly less than other aspects. Experimental group students used PA for a few months with only three types of essays. Previous studies deemed organisation of information as an important factor in determining text quality as they have shown that PA can improve students' organisational skills in writing (Hwang, Hung & Chen, 2014). Previous research has also indicated that intermediate EFL students improved their texts significantly in organisation, cohesion and vocabulary when using PA of writing from pre-test to post-test (Ebadi & Rahimi, 2017). However, adolescent intermediate EFL students, who were inexperienced in PA, needed more time and exposure to this approach to improve these aspects of their writing performance.

To sum up, the findings of the present study indicated that students who used PA improved their overall writing performance by 3 marks out of 20, a statistically significant finding, while students who received only TA improved their performance by .14. Finally, students who employed PA improved their writing performance by at least half a mark out of 4 for each one of the categories included in the PA rubric, that is content, organisation, vocabulary and language use, mechanics, and focus. These findings revealed that students, who used PA in their writing classes received multiple benefits in all domains included in the EFL essay rubric. Consequently, since PA-related learning seems to provide multiple benefits to adolescent learners in terms of their final summative assessment, it might be a worthwhile exercise. Therefore, teachers should consider engaging their learners in PA during their classes to enhance their writing performance.

Conclusion and Recommendations

Few studies adopt a quasi-experimental approach to study the impact of instructional interventions on PA effectiveness and learning (Saito, 2012). Previous studies relied only on marks to make claims for the potential benefits of PA. Moreover, the absence of a control group has been the main weakness of longitudinal studies on feedback in writing (Bitchener et al., 2012). The current study relied not only on students' overall marks but also on their analytic scores on five important writing aspects, content, organisation, vocabulary and language use, mechanics, and focus to explore whether PA can have a positive impact on students' writing performance. It used both control and experimental groups in a semi-experimental design to explore in what aspects and to what extent PA could have an impact on intermediate adolescent EFL students' writing performance.

For many instructors, the most viable alternative to teacher feedback would be peer feedback. This has become almost as common as teacher feedback in writing classes (Lee et al., 2016). The current study suggests that the introduction of PA in EFL classes from an early age may improve students' writing performance even more as learners can receive extensive training and devote a considerable amount of time, that is several years, to learn how to use PA effectively. It also recommends the use of PA in combination with TA to maximise the benefits

of PA and allow students to be exposed to multiple types of feedback. These will allow learners to reflect on various aspects of their writing.

Peers and teachers tend to focus on different aspects of writing, when asked to provide feedback, leading to potential differences in improvement in students' writing. For example, it has been suggested that teachers may focus on surface-level issues while peers may focus more on meaning-level issues (Baker, 2016). The positive impact that PA can have on all aspects of students' writing should be taken into consideration by EFL teachers who face considerable challenges as they try to help their students improve their writing performance. Such an outcome conforms to what has been reported by previous studies, namely that PA can engage students in making reflections when they assume the role of tutor as well as tutee (Wang et. al., 2017).

However, while instructive, the findings of this study may not be representative enough to allow generalizations, a challenge to be undertaken in future studies. Although positive effects were found, it became apparent that the training could have been much more systematic and of longer duration than was feasible to organise in the available context and time span of the current study. This study focused only on short-term effects of PA training. Therefore, more structured PA training for both teachers and students and critical reflection on assessment might have had a more powerful effect on students' writing performance.

PA needs to be elaborate and frequent as well as focused on learners' performance, their learning needs, and the actions under learners' control rather than on the learners themselves. PA should also be timely so that learners can reflect on it and use it in their work or ask for help if they need any clarifications. Its goal should be to aid with the assignment at hand and allow learners to understand the assessment criteria even better. It also needs to be suitable to learners' conception of learning and previous knowledge as well as attended to and acted upon.

This study also supports research which suggests that students may ignore or misuse teacher commentary when revising drafts and thus profit when they receive more (peer) feedback (Yu, 2019). More importantly, PA is seen by many researchers as a way of giving more control and autonomy to students. It involves them actively in the feedback process as opposed to a passive reliance on teacher's feedback to 'fix' up their writing (Alzaid, 2017). The findings of this study confirmed that PA can improve EFL learners' writing skills by allowing them to assume responsibility for other students' and their own learning which is in line with previous research (Topping, 2017).

These findings contribute to linguistic theory by suggesting that PA is anticipated to make a significant contribution to the field of education if sufficient training and support is provided to all participants and carefully designed tools are used to familiarize learners with the PA process. Moreover, PA should be introduced gradually and used on a regular basis as early as possible, that is even in primary education, and the emphasis should be on the formative use of PA as an innovative learning-oriented tool employed by teachers to enhance students' skills.

The present study indicated that PA can be a promising alternative assessment method for EFL teachers in secondary education. PA may be used to raise a more open assessment culture and empower adolescent students by involving them in assessment. Finally, it assisted in generating an evidence-based argument regarding the quality of PA as a tool for enhancing EFL writing skills (Wanner & Palmer, 2018).

PA reflects the attempt of the education reform initiatives in many countries, i.e., England and Hong Kong, to move from a testing culture to an assessment culture and promote all round education and life-long learning. Within the sociocultural context of countries like Cyprus, where the stress on measurement and accountability has existed for a long time, the successful implementation of PA in the way it is intended needs promotion of conversations about assessment, teaching and learning among all stakeholders, parents, students, teachers, and senior educational management to promote change, advocate reform, advocate assessment literacy and define the new aims and associated roles.

Research continues to characterize teachers' assessment and evaluation practices as largely incongruent with recommended best practice (Tsagari, 2016). Teachers' assessment il-literacy has resulted in inaccurate assessment of students causing them to fail to reach their full potential. In an article published by Deluca et al. (2016), the lack of assessment literacy was presented as professional suicide. Assessment literacy (AL) is seen, therefore, as a sine qua non for today's competent educator (Levi & Inbar-Lourie, 2020). As such, AL must be a pivotal content area for current and future staff development endeavours. This will allow teachers to familiarise themselves and experiment with a variety of promising alternative assessment methods, such as peer assessment, in their effort to help their students improve their writing performance.

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Teachers' Misbehaviours in Class and Students' Reactions: A Case Study

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Abstract

This study aims to investigate English as a Foreign Language (EFL) teachers' misbehaviours in class and their students' reactions to these misbehaviours. Towards this end, 60 classroom observations of six English language teachers (N=10 each) were conducted at a public school in Jordan. Moreover, a survey was used to elicit 201 students' reactions to their teachers' misbehaviours by gauging their satisfaction with the teachers' communication styles. Finally, the teacher participants were interviewed in order to more deeply understand why such misbehaviours occurred. Analysis of the data is grounded in the Expectancy Violation Theory. The results revealed that when the mean value of teachers' communication style was more than 3 on a 5-point Likert Scale, the students often perceived their teachers as being positive, and the students compensated most of their teachers' misbehaviours. However, when the mean value was below 3, the teachers were perceived as being negative, and the students reciprocated for most of the misbehaviours. The results also showed that the students are more tolerant towards their teachers' misbehaviours as long as the teacher is perceived to be positive. The study provides insights into understanding the student-teacher relationship in EFL classes.

Keywords: compensate misbehaviours, reactions, reciprocate

Educationists in Jordan face many challenges that negatively affect the quality of education. For example, there is the challenge of over-crowded classes where teachers must spend much of class time to maintain discipline. This implies that teachers have to double their efforts so as to both manage classes and provide good teaching. Moreover, there is the problem of poor facilities and infrastructure which makes the task of teaching more demanding. Educators in Jordan also complain about parents' coordination with school personnel despite calls to strengthen connections between schools and homes. The source of this problem is like the classic chicken-or-egg question. These challenges are attributed to both the limited resources that schools have and to social and cultural beliefs of the Jordanian people (Alhabahba et al., 2016).

Professional educators also confess that teachers themselves – though valued as they play a key role in the educational process – may represent a challenge (Asassfeh, 2015). In addition to having the responsibility of delivering classes, teachers take on other roles in society: parents, supervisors, and social workers, among other things. Teachers are usually criticised for their students' achievement both academically and socially. Thus, teachers are expected to have pedagogical skills as well as management and communication skills so that they can deal with students and their parents. Teachers are also required to examine their students' needs and styles and work towards matching their own styles to those of their students. Furthermore, teachers are expected to come to class prepared to deliver knowledge and to manage large classes in the limited time available in each lesson. They have also to respond to parents' expectations of teaching students both content and imparting morality. These and other responsibilities have made the teaching profession unfavourable sometimes by those who lack the skill and ability to work under pressure. The many responsibilities have also led to creating a dysfunctional atmosphere that is unpleasant for both teacher and students. This situation has attracted the attention of researchers who try to understand the causes of these objectionable encounters and to provide solutions to remedy the flawed environment for a better quality of instruction (Alhabahba et al., 2016).

As for the status and teaching of English, it is unquestionable that English has become an international language that is necessary for almost all professionals in the world (Jenkins, 2017). Jordanian professionals are no exception. English is taught as a foreign language to students in Jordan and learning it has become a major concern of most Jordanians. Its spread over the world has expanded the need to learn it, particularly because it is the language of technology and innovation in today's globe. However in Jordan, learning English represents a challenge to many students who find it a difficult subject. This is the perception of teachers who also find it a challenge to teach, especially as most of them usually lack a high level of proficiency to deliver classes in English.

Teaching English demands a considerable amount of effort on the part of teachers who – in addition to lacking high levels of competency in English – usually lack training in teaching methodology. This is demanding because teachers must find a teaching method that meets their students' needs and their own teaching styles. Most English language teachers in Jordan hold a degree in English language and literature, rather than in teaching methodology (Al-Hazmi, 2003). However, effective teachers are expected to have – in addition to adequate knowledge of the subject matter – knowledge of pedagogy and psychology to teach effectively and deal with students and manage classes (Baderaddin, 2015). Borich (2015) argues that teachers should have expertise in their subject matter and an ability to manage classes and maintain discipline. Moreover, the teacher-student relationship should be based on productive

interactions which, as Abrantes et al., (2007) argue, make the learning of the second language easier.

This research concerns the study of the teacher-student relationship and explores the negative side of teachers' communication styles. The study explores – through observations of the performance of EFL teachers in class – misbehaviours of teachers and their students' perception of and response to these misbehaviours. In response to their teachers' misbehaviours, students may compensate or reciprocate. When a student compensates for a teacher's misbehaviour, the student is not responding in kind with a misbehaviour. Rather, the student may be nicer or kinder and overlook the bad treatment. However, when a student reciprocates, the student responds in kind with another misbehaviour. Employing Goodboy's and Myers' (2015) scale of teachers' misbehaviours, this investigation seeks answers to the following research questions:

1. What are the types of misbehaviours that English language teachers commit in their classrooms?
2. How do students react to such misbehaviours? Do they compensate and/or reciprocate with teachers' misbehaviours?

This study is expected to contribute to mainstream literature on teacher-student relationships, class management, and student achievement in EFL classes. It is hoped that the study gives a glimpse of how EFL teachers behave or misbehave in class and raise awareness among educationalists of how students respond to their teachers' actions and behaviours. Of significance to this study is the reporting of students' voices in relation to EFL teachers' misbehaviours, particularly, from those students whose voices have often remained unheard in the past. By doing so, the study implements the maxims of student-centred methodologies which see the student as the centre of the learning process (Nunan, 2013).

Literature Review

The literature on language pedagogy abounds with studies on students' misbehaviours and solutions to manage these misbehaviours by teachers. However, little is known about teachers' misbehaviours in language classes and how students perceive and respond to these actions. As a result of the little research on teachers' misbehaviours, three main typologies emerged. The first was put forward by Kearney, Plax, Hays and Ivey (1991) who examined whether or not teachers represent a cause of instructional and motivational problems in college classes. The results revealed many misbehaviours ranging from misspelling of words to verbal abuse and that most students reported that their teachers carried out more than one misbehaviour in a lesson. The findings also showed that teachers' misbehaviours are of three types: incompetence, offensiveness, and indolence.

In a study to identify other misbehaviours that were not found in Kearney, et al. (1991), Toal (2001) asked students to evaluate their classroom experiences and their teachers' misbehaviours. The results indicated that there are three types of misbehaviours: irresponsibility, derisiveness, and apathy which are similar to those found in Kearney, et al. (1991). In a third study that aimed at investigating misbehaviours that could result from teachers' use of technology, Goodboy and Myers (2015) developed Kearney, et al.'s work and resented new categories to judge teachers' misbehaviours. In their study, in which an open-ended survey was used, the researchers found 16 misbehaviours which were categorised under three labels: antagonism (i.e., lacking interpersonal communication skills), lectures (i.e.,

lacking both procedural and teaching skills), and articulation (i.e., lacking pronunciation skills). The researchers concluded that teachers should be aware of what they do appropriately and what they do wrongly in class.

Research has also examined effects of teachers' misbehaviours on students' achievement and perception of their teachers. Kearney, et al. (1991) showed that teachers' misbehaviours can have a detrimental effect on students and their achievement and motivation. Also, Zhang (2007) conducted a study on college students from different cultural backgrounds studying at an American university. The researcher hypothesised that culture may have an impact on students' perception of teachers' misbehaviours. The findings indicated that students' motivation towards learning decreases when they take classes with misbehaving teachers and that – regardless of the cultural background – students perceived their teachers' misbehaviours as demotivating. The study also found that incompetence was found to be the most prominent type of misbehaviour and that offensiveness was the least. In a similar study, Goodboy and Bolkan (2009) studied the correlation between teachers' misbehaviours and students' motivation and found that instructors' misbehaviours resulted in demotivation, dissatisfaction, and ineffectiveness on the part of students.

Kelsey et al., (2004) distributed a questionnaire to gauge students' perceptions of their teachers' misbehaviours including immediacy, consistency, and causality. The results revealed that students are aware of teachers' misbehaviours, are able to identify what counts as misbehaviour, and can evaluate the source of misbehaviours. They view the teacher as the main cause of these misbehaviours. The findings also indicated that students attributed teachers' misbehaviours to the personality of the teacher. In a similar exploration, Banfield et al., (2006) studied the effects of teachers' misbehaviours on students' perceptions of their teachers by asking students to complete an Affect Toward Teacher Scale and a Source Credibility Scale. The results showed that teachers' misbehaviours significantly influence their students' perception of teachers and this impact varies in degree. That is, offensiveness had the greatest impact on students, followed by incompetence and indolence, respectively. The researchers concluded that teachers' misbehaviours should be rethought by educationalists because they have a serious detrimental effect on students. This conclusion was based on the finding that students were unwilling to take classes with misbehaving teachers, particularly offensive teachers because the offensiveness of teachers was found to greatly affect students' trust of the teachers.

Upon reviewing existing studies on teachers' misbehaviours and students' reactions, it is obvious that most studies were conducted on college students and most often in Western institutions. Additionally, studies explored the effect of teachers' misbehaviours on, for example, students' perceptions, effective learning, and the credibility of teachers. Moreover, a large number of studies used questionnaires and surveys to collect their data. As a result, some perspectives remain unexplored. This study fills this gap by examining – through observations, interviews and surveys – teachers' misbehaviours at the school level, and it identifies students' reactions to such misbehaviours.

Methodology

This section describes the sample and setting of the study. It also shows the data collection tools and data analysis procedures. The study adopts a mixed-method approach to analyse the data which are collected by means of three different methods: non-participant classroom observation, a questionnaire and semi-structured interviews. This triangulation allowed the

researchers to provide an in-depth description of what exactly happens in Jordanian EFL school classrooms. The following sub-sections provide details of the methodology adopted in this study.

Participants

The participants were six EFL teachers and 201 students from a public school in Jordan. They were all females because the school is a girl-only school. Of the 201 students, 66 were in Grade 10, and 135 in Grade 9. Ninth and tenth grade classrooms were chosen for observations because of the students' ability to express thoughts and opinions without any interference from teachers or the researcher. Table 1 below shows the distribution of the sample to level and number.

Table 1
Distribution of the Sample to Level and Number

Class	Teacher Code	Number of Students
Ninth (h*)	Teacher h	33
Ninth (b)	Teacher b	34
Ninth (g)	Teacher g	34
Ninth (d)	Teacher d	34
Tenth (a)	Teacher a	33
Tenth (k)	Teacher k	33

*The letters represent the sections' names.

Data Collection

Three methods were used to collect data to provide a detailed glimpse into what exactly happened in class. The first was non-participant classroom observation. The first researcher attended 12 classes with each teacher; however, only 10 classes per teacher were used in the study. The other two classes were observed at the beginning of the study to allow both teachers and students to become accustomed to the presence of the researcher in order to minimise the observer paradox. The researcher adopted Goodboy' and Myers' (2015) Scale of Instructors Misbehaviours (IMS). The scale contains 15 items that are in three categories: "antagonism", which refers to how teachers behave in class (e.g., yell, speak politely, or listen to different ideas); "lecture", which refers to the way teachers manage class; and "articulation", which pertains to how the teachers articulate lessons (the observed classes are English classes). The researcher used the model as a checklist to assist in identifying the following: teachers' misbehaviours, the frequency of the misbehaviours, and students' reactions to their teachers' misbehaviours. After completing the observations, each teacher had 10 checklists of each class the researcher had observed. The researcher then summarised the observation checklists of all the teachers, collected the most frequent misbehaviours, and put them in one checklist. From this process, six checklists emerged. During the observation process, the researcher spotted students' reactions, both verbal and nonverbal. Verbal notes of teachers and students were transcribed and translated into English for analysis.

The second method was a questionnaire which was distributed to students. The questionnaire was also adopted from Goodboy' and Myers' (2015) Students' Communication Satisfaction Scale. The scale was in the form of a Likert scale, ranging from "strongly agree" to "strongly disagree". The scale contained eight items, each of which asked about students' perception of their teachers' communication style. The Statistical Package for Social Sciences (SPSS) was used to analyse the collected data (Huizingh, 2007). If the mean value was more than 3.00, that

meant that the teacher had a positive attitude. On the other hand, a mean value less than 3.00 indicated that the teacher had a negative attitude.

The third method was semi-structured interviews which were conducted to give the teachers a chance to explain the most common misbehaviour(s). The interview questions were in Arabic but were later translated into English for the purpose of this research. These interviews provided a chance for the researcher to explore whether teachers were aware of their misbehaviour, and whether teachers had a valid explanation as to why they committed the misbehaviour. Each teacher was asked three or four questions about the most common misbehaviour. Two themes emerged from the interviews which are analysed below.

Data Analysis

A mixed-method approach was followed to analyse the data. In the quantitative analysis, the researcher used SPSS to analyse students' answers after completing the questionnaire about their teachers' communication style in order to determine how students perceived their teachers, either positively or negatively. In the qualitative analysis, the researchers – based on class observations and fieldnotes – focused on discerning teachers' misbehaviours and students' reactions toward the misbehaviours. The analysis of students' reactions focused on how students perceived their teachers' misbehaviours and how they reacted, either by reciprocating the misbehaviour or compensating for the misbehaviour. All examples were written in Arabic, but for the purpose of this research they were translated into English; the translation is included between brackets in the analysis below. This was applied to both categories, antagonism and lecture, as both included reactions of students. As for the articulation category (items 14-15), the researchers used "yes/no" to confirm the use of the misbehaviour by the teacher. The researchers noticed that the students' low proficiency level led all students not to reply to their teachers' misbehaviours; thus, articulation was excluded from the analysis of the results. As for the interviews, they were thematically analysed according to the most and least frequently committed misbehaviours in the two investigated categories: antagonism and lecture. Three or four questions were asked to each teacher individually, and the first researcher wrote down the answers when teachers were not comfortable with an audio-recording. After conducting the interviews, the researchers analysed each one and grouped the answers into thematic categories.

Results

This section presents the findings obtained from the analysis of each of the three methods of data collection. As shall be shown below, the use of three methods of data collection allowed the researchers to draw a more detailed picture of the Jordanian EFL classroom in terms of the relationship between teacher and students. Indeed, the findings provide a glimpse of both teachers' and students' misbehaviours in class, a situation that is rarely explored in educational research.

Classroom Observations

It should be noted that the classroom observations resulted in a list of committed misbehaviours and a list of students' reactions. The analysis of observations was based on the researcher's field notes and checklists as consent to video-record classes was not possible. Table 2 below shows the number of occurrences of the teachers' committed misbehaviours and students' reactions to their teachers' misbehaviours. Table 3 shows some authentic examples from the researcher's notes on teachers' misbehaviours and students' reactions.

Table 2
Types and Number of Occurrences of Teachers' Misbehaviours and Students' Reactions

Misbehaviour criteria	Item of misbehaviour	Reciprocation	Compensation	Occurrences of the misbehaviour	No reaction	Repeated misbehaviour with reciprocated reaction
Antagonism	Discriminates against certain students	28	26	54	in one class	
	Yells at students when they ask for help	47	5	52		
	Screams or yells at students	44	4	48	in two classes	
	Belittle students	31	15	46		
	Criticizes students' responses to instructor comments or questions	28	16	44		
	Goes over the material so quickly so it is difficult to take notes	31	4	35		
	Lectures in a dry manner	16	15	31		
	Argues with students during class	28	1	29	in three classes	
Lecture	Gives boring lectures	16	11	27		in one class
	Teaches in a confusing manner	16	9	25	in one class	
	Lectures in a monotone voice	12	7	19		in one class
	Tells students their opinions are wrong because his/ her opinion is right	16	___	16		
	Tells students their opinions are wrong	___	15	15		in one class

Table 3
Authentic Examples of Teachers' Misbehaviours and Students' Reactions

	Teachers' misbehaviours / Students' Reactions	**Students' Reactions**		
		Class G	**Class H**	**Class A**
		Reciprocated all misbehaviours	Compensated all misbehaviours	Varied in their reactions
1	**Belittle students:** Is not it enough that your answers are wrong. *Mush bekafi e'no Ajabatkom ghalat:* you are the only class that I do not like to come in *E'nto el shoubeh el wahedeh e'lle bahebeh a'dkhulha.* A teacher to astudent:" you are going to stay the way you are; you will never step forward: *Hadalek zai ma Enti* "	**Verbal**: A- student to a teacher: "do not talk to me like that: *Thikeesh Maiee Zay Haiek* B- you are the stupid one (in a hush, but the surroundings of the student's mates usually hear the student. **Nonverbal:** A- students deviates from the class by moving their head away from the teacher in a manner of not accepting what happened nor wanting to hear the teacher anymore.	**Nonverbal:** A- looking out of the window B- drawing and flipping the book pages.	**Compensated** Verbal**:** *Bahsha majnoneh: mrat mneha o mrat belmara* sometimes, I feel that she is mad, sometimes a good person, but other times very bad. **Nonverbal:** Leaving the class

2	**Yells at students when they ask for help:** *1-Ma baaraf A'sa'li elli konti thkei maaha* Ask the one you were talking to A teacher to students: I have already explained it!! *Ana sharahto A'bl shoui* Aren't you listening!!? *E'nto btesmaoush* *A'na A'bel shoui haketo, ma rah A'rjaa Aeedou* I have just finished saying it, I will not repeat it.	**Verbal reactions:** A- students threatening the teacher saying they will tell their parents to come to the principal. B- A student to the teacher: "I already can't understand what you are saying." *Ana Aslan bafhamsh alieke* C- A student to the teacher: "do not yell at me". *Tsarkhesh 3lie* **Nonverbal:** A- Gazing, playing with personal things	**Verbal:** Students in the two times apologized for not paying attention	**Compensated** **Verbal:** *Miss, Wllaha kont bsa'lha la'nee ma smetek* I swear to God, I was asking because I could not hear you. **Nonverbal:** The same student, who was asking, dropped the pen.
10	Goes over the material so quickly so it is difficult to take notes	**Verbal**: we do not understand: *mesh fahmeen* slow down: *shwai shwaii!* I can't follow up, where are you? *Mush am Balahe'a* **Nonverbal:** pretend to write, stop writing, play, draw, chat	The Teacher usually gave students time to discuss the answers of the question together and then they go back to do it.	reciprocated **Verbal:** I am not following (while laughing) **Nonverbal:** Sleeping

Table 2 shows the types of misbehaviours the teachers committed in the two categories of antagonism and lecture. Antagonism was the highest committed misbehaviour category and figured in practices such as *screaming or yelling at students* which was committed 48 times. To this misbehaviour, students reacted by verbally matching what the teacher did by means of asking unrelated questions, making noise, and talking to disturb the teacher. For example, when a teacher yelled at one of the students who was asking for help, the student answered her by saying "*ana aslan bafhamish 3alayki* (I do not even understand you)". At another time, a student said to the teacher "*la ts?arkhi 3alay* (do not shout out at me)". Some students nonverbally responded to this misbehaviour by gazing at the teacher or by closing the book. The least often committed misbehaviour was *arguing with students during class.* The reactions to this misbehaviour were both verbal and non-verbal.

As for the other misbehaviour category, Lecture, the most frequently noted negative practice was *giving boring lectures* which was checked 27 times. Boredom and monotony characterized the overall atmosphere of classes: The teacher was observed sitting on the chair most of class time. To this misbehaviour, the students reacted by matching it. For example, some students flipped the pages while others slept in the class. The least regularly observed misbehaviour was *going over the material so quickly* that it was difficult to take notes. Students responded by saying "*mis, shwai shwai, mo mla7geen* (slow down, we cannot follow)". One student intentionally made disruptive during the class. In this category, students mostly non-verbally matched the misbehaviours because when they told the teacher, for instance, to slow down, she did not listen to them. Therefore, it was easier to react non-verbally.

Face-to-face interviews

After coding and analysing the teachers' face-to-face interviews, two major themes emerged. The themes of classroom management and teacher preparedness surfaced repeatedly.

Classroom management. Analysis of the teachers' answers to the interviewer's questions about classroom management revealed that there are two types of management styles: strict and lenient. Strict teachers showed preference for applying rules and restrictions only while lenient or soft teachers favoured both strictness and openness. For example, three of the teachers (G, D, A) said that they favour teaching in classes where rules have been previously set so that – in their opinions – students do not misbehave. Teacher G said that "if you go easy on students, you will lose them, and then you won't be able to re-impose order on students." The interviewer asked the teacher what behaving properly meant to her, and she replied that "it means that students should not argue with teachers and should pay attention during the whole class." Teacher A said, "if you spoil students then you cannot control their behaviour." This shows that some teachers considered strictness much more important than building relationships with students.

The other three teachers (K, B, H) said that they favour a soft style of classroom management, strongly believing that students need to be heard, respected, and valued. They were of the view that students in the teenage years are difficult to manage by means of rules, and that they may face many problems outside of school. Therefore, they believed that too much dissonance will certainly backfire in their way of dealing with students at this age. These teachers also believed that establishing relationships with students is important in causing students to comply with what the teachers expect. Teacher B, for example, said "I make them do what I want, but in the end, they made the choice." Teachers in this category believed in de-centralizing classes; Teacher H said, "I am no longer the centre of the class, and I let them have a role in preparing the lessons and explaining lessons to the class." Teacher K said, "I give them the freedom to do everything as long as it helps me achieve the end goal of the lesson; that can be by changing seats or playing a little game before starting the class."

There emerged aspects on which all teachers shared similar views. These aspects related to struggles the teachers face in classroom management. They were all of the view that the large responsibilities they have in terms of teaching loads and syllabus design decreases the chance of being close to their students and establishing good relationships with them. Some of the responsibilities the teachers shared included preparing, designing syllabi, teaching, conducting activities, assessing, marking, and providing feedback to students, in addition to their own personal and familial responsibilities. Moreover, the teachers said that these struggles are intensified by a lack of tools – including technology – that would ease their task of conducting classes while maintaining the quality of teaching. For these reasons, the interviewer asked the

teachers if they believe they have the capacity to be a role model. The teachers replied that they did, but that capacity is inhibited by the above-mentioned circumstances, which are out of their control.

Teachers' preparedness. The interviewer asked the teachers whether they feel prepared to give a class or even to enter the classroom. Most teachers agreed that when they started teaching, they felt lost because there were no training programs to train them on how to manage a class. For example, Teacher K said "I remember the first class I gave. I entered the class hesitantly, and I could tell that students sensed that I was hesitant. I was not ready so I asked for help, but the common cliché is you will get used to them." Teacher D said it is not only that there was no training on class management, but there was also no program for how to teach: "Most of us graduated from universities without any training or a course to prepare us to teach," Teacher H said, "we might have problems with teaching, but the main problem is that none of us was trained to be a teacher."

The interviewer asked the teachers whether there is any way for them to access new literature, research, and scholarly articles on managing classes and teaching methods that would keep them updated with the best techniques and strategies to employ in making their classes better. The teachers responded that they do not have access to such resources, and even if they did, such new methodologies would not suit their classes and their students. For example, Teacher G said, "I do not care about the new research; this research is not for our classes where 50 students are in one class." Teacher K said, "I would like to try new things in my class, but I do not have time as I have to finish the book within the allotted time." The interviewer then asked the teachers whether or not training about class management and new teaching methodologies would help them run classes more positively. In general, the teachers agreed, but noted that there were other factors that also cause difficulty in the classroom. For example, when students behave badly in class, and teachers call their parents to come to school to discuss their children's situation, the teachers find that the parents are often indifferent, and usually do not show up for such meetings. Fathers usually go to work, and mothers have to stay at home to take care of the house and the younger children.

Discussion

This study focused on teachers' misbehaviours in EFL classes and how students reacted to them. It should be recollected that the main purpose of the present investigation is to examine the relationship between teachers' communication styles and students' reactions towards their teachers' misbehaviours. The interpretation of the results draws on the Expectancy Violation Theory (EVT) (Burgoon & Jones, 1976) which provides an insight into understanding why students matched some of their teachers' misbehaviours in some classes and mismatched other misbehaviours in other classes. The EVT stipulates that when people misbehave, their misbehaviour is either compensated for or reciprocated depending on how positive or negative the communication style of the person is. The EVT assumes that when the communication style is positive, the reaction is most likely a compensation, and when the communication style is negative, the reaction is most likely a reciprocation.

Drawing upon the EVT premises, the researchers interpreted the reasons behind students' matching of some misbehaviours and mismatching of others. One thing that should be noted here is that the researchers used matching and mismatching (in place of the EVT's terms of compensating and reciprocating) because both imply the meaning of acting towards the misbehaviour in the same sense of the misbehaviour. For example, shouting out could be

matched by slamming the door. Both display negative attitudes and one of them was a reaction to the other. Hence, it was best proposed to use these two words to describe students' reactions towards their teachers' misbehaviours. The results presented in the previous section show that the students of Teachers D and G were seen to reciprocate all teachers' misbehaviours; some misbehaviours were reciprocated more than 10 times. According to the EVT, Teachers D and G's communication styles were perceived as negative. The results also show that the students of Teachers H and B were seen to compensate all teachers' misbehaviours and at other times students did not react. Teachers H and B communication styles were both perceived as positive. The results have also demonstrated that the students of Teachers K and A varied in their reactions toward their teachers' misbehaviours. Teachers K and A's communication styles were perceived as positive, but low positive, hence the students' variance in their reactions towards the teachers.

This interpretation clarifies why students reciprocate some misbehaviours and compensate for others, and why they sometimes compensate for and reciprocate the same misbehaviours. This can be attributed to more than one reason. For instance, the teachers with positive communication styles were seen to imply a good classroom management strategy (Lane et al., 2012). They raised discussions and respected their students' views and counterviews. They rarely yelled at students and only used rules of management if discussions failed and they felt the need to control the students' actions (Varga et al., 2011). For example, Teacher K yelled at one of the students when she asked for help saying that "*lama t7'als?i 7aki, ra7 ajawbik* (when you stop talking, I will answer you)." Here, although it was a misbehaviour, the students compensated for the misbehaviour explaining why she was talking to her friend. Moreover, positive teachers treat students equally; teachers have the authority to decide on who should participate and when and where they could do so (Briscoe et al., 2009). One teacher was accused by students to favour one student over others. Teacher H's students compensated for that by admitting that the favoured student is one of the best among all other students.

For students, when teachers misbehaved by being biased or not listening to their complaints, they felt undermined and disappointed which may have led them to cause problems in class (Boynton & Boynton, 2005). On the other hand, when the teacher was perceived to be positive, students compensated for the act of discrimination by giving the teacher the benefit of the doubt as occurred in Teacher H's class. It should be noted that teachers who were perceived as positive were teachers who may have still committed misbehaviours. However, the manner in which the teachers conducted their classes on a regular basis and the good relationships that they maintained with their students lead the students to compensate for their teachers' misbehaviours (Varga, 2017). Negative teachers, on the other hand, may have used strict strategies inside the class and might have been biased. When teachers called on the same students repetitively to participate, they did not pay attention to other students (Boynton & Boynton, 2005). As a consequence of teachers' lacking a positive communication style, students' behaviours were affected negatively.

From the analysis above, it is obvious that when teachers who were perceived to be positive committed a misbehaviour related to how the lecture was progressing, the students were usually more forgiving. For negative teachers, it was found that classes were dull and direct; it was also found that they taught in a dry manner and covered the material too quickly. Students reciprocated these misbehaviours as some began not to bring their books to the class. They stated that they did not understand or follow what the teacher was doing, so why should they bother with the book (Rimm-Kaufman & Sandilos, 2011). It is important for teachers to understand that students come to learn, and that if teachers do not do their job properly, the

students would not be interested in studying. It is easy to spot the reactions of teachers whom students have reciprocated all misbehaviours or compensated for them. However, it was difficult to analyse those whose reactions varied in the class between reciprocating and compensating, as was the situation with Teachers K and A. For Teacher K, the students have reciprocated two items of the scale in the lecturing category and compensated for the rest. For Teacher A, the students have reciprocated two items and compensated for the rest. From students' reactions, it was concluded that teachers should have both language competency and a positive attitude toward students (Varga, 2017).

The students' reactions toward their teachers' misbehaviours show that having both a positive communication style and competency in the subject matter has a great impact on the students regarding their attitudes towards learning in general. The students get motivated when their teachers create a safe and non-threatening environment (Luz, 2015). The methods and strategies that teachers use make students feel engaged and stimulated to participate in the learning process. Research on good language teachers reveals that effective teachers are attentive, open to change, and have the potential to face the challenging circumstances of teaching (Gibbs, 2002). They should be models for their students, providing them with quality teaching while at the same time maintaining good behaviours and practices.

Conclusion

This study has focused on EFL teachers' misbehaviours in class and students' reactions to these misbehaviours. In so doing, the study contributes to the field of English language and teaching by giving insights into the enhancement of teachers' styles and roles in EFL classes. It has shown that successful teaching is a joint task where teachers and students are affected by each other's actions and misbehaviours. The study provides teachers with ideas for providing the kind of quality teaching that every professional would want to implement. Two questions were raised in this study: What are the types of misbehaviours that English language teachers commit in their classes and how do students react to such misbehaviours? Do they compensate for and/or reciprocate teachers' misbehaviours? The results have revealed that teachers who were perceived to be positive were considered to be the best while teachers who were thought to be negative were disliked and even dishonoured by some students. The findings have also shown that the majority of students value a positive communication style on the part of their teachers. This communication style motivates students to become more interested in studying the language. As Collier (2005) argued "caring facilitates a sense of connection from which spring countless opportunities for learning" (p. 353). Students feel active and motivated in classes run by positive teachers who allow them to express their opinions.

Limitations and Recommendations

This study is limited in the number of observations conducted. With more observations, the researchers could have found more misbehaviours that would give a more nuanced picture of EFL teachers' (mis)behaviours and consequently their students' reactions. As the time of observations was only a month, the researchers did not manage to attend all classes the teachers gave. Moreover, if a second-hand observer were possible where both could combine the data collected and compare their findings, the study would have been more reliable. Also, the resistance for video-recording classes is also a limitation. Videoed instances of how teachers committed misbehaviours and how students reacted to them would have given a more authentic view of the matter under investigation. The other limitation is related to the interviews. This study requires an investigation into why teachers act or speak inappropriately in the EFL classroom. It would have been better if the students' points of view were taken into account.

However, that was restricted as the teachers and the school principal did not allow the researcher to interview students alone without the presence of the teachers. Importantly, future research may examine how unacceptable teacher practices affect second language learning. As Brown (2014) argues, individual learners possess a fragile language ego that, if faced with teachers' misbehaviours, will become a detriment to successful learning. Krashen (1982) argues that many factors, including teachers' misbehaviours, cause the affective filter to raise which ultimately affects success of the learning process. This is reminiscent of Schumann's (1986) Acculturation Model which shows how social distance negatively influences the outcomes of the learning process.

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