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Editorial

Dr. Carlo Granados-Beltrán
Academic Vice Chancellor ÚNICA

Welcome to the 27th issue of GiST Journal. This edition brings together a rich selection of research that offers valuable insights into various aspects of English language teaching (ELT), spanning autonomy in learning, willingness to communicate, and the complex interplay between cognitive and psychological factors in language acquisition.

One of the recurring themes in this issue is the importance of learner autonomy and motivation, particularly in the context of innovative teaching methods. The study by **Büşra Nur Çiftçi Aksoy** and **Aysegül Takkac Tulgar** introduces us to the **Flipped Classroom Model (FCM)** and its ability to foster both autonomy and motivation among EFL students. Their research highlights how flipped learning not only engages students more actively but also encourages them to take charge of their learning process. This focus on student empowerment resonates with other studies on this issue, where the need for engaging and interactive learning environments takes center stage.

Similarly, the **willingness to communicate (WTC)** explored by **Dereje Teshome Abebe**, **Getachew Syoum Weldemariam**, and **Guta Legese Birrasa** complements the conversation about student engagement. Their study in the Ethiopian context reveals how psychological factors such as self-confidence and motivation, alongside the classroom environment, play a crucial role in learners' participation in oral communicative tasks. This research underscores the importance of building supportive, confidence-boosting environments to promote active language use—a theme that aligns with the autonomy fostered through the flipped classroom model.

Expanding on the role of innovative methodologies, **Sibel Söğüt** brings **Data-Driven Learning (DDL)** into the discussion, focusing on how L2 learners use corpora to enhance their understanding of near-synonymous words. Through this exploration, we see how technology can serve as a powerful tool in vocabulary acquisition, providing learners with context-rich, experiential tasks that enhance lexical knowledge. The integration of corpus tools like YouGlish shows us how digital resources can support not only autonomy but also a deeper, more nuanced understanding of language use.

At the same time, this issue takes a step into the intricate world of syntax and pragmatics, with **Abhinan Wongkittiporn's** study on the syntax of determiner phrases

(DP) deletion and the pragmatics of DP movement in passive voice. By applying these principles to academic writing, **Wongkittiporn**'s research offers practical insights for language learners and educators alike, bridging theoretical linguistic concepts with real-world applications in research methodology

This connection between cognitive factors and language learning is further explored by **Duygu Ispinar Akcayoglu** and **Omer Ozer**, who examine the relationship between test anxiety and self-regulated learning. Their findings, which highlight significant gender differences in anxiety and learning strategies, suggest that a deeper understanding of students' emotional and cognitive processes is key to creating more effective learning environments. The emphasis on self-regulation, much like autonomy, reinforces the idea that fostering independent learning strategies can alleviate some of the psychological barriers to language acquisition

In addition to these insightful articles, we are pleased to feature a book review by **Saeed Moslemi Nezhad Arani** and **Arzu Atasoy** on Shahrzad Mahootian's *Bilingualism*, further contributing to the broader conversation around multilingualism and language education

This issue also celebrates the diversity within our academic community, featuring contributions from scholars across Turkey, Ethiopia, Thailand, Iran, and Colombia. We are particularly proud of the gender diversity represented in this issue, with female and male scholars collaborating to advance knowledge in ELT. This rich mix of perspectives—across both gender and nationality—enhances the depth and breadth of academic dialogue, contributing to a more inclusive and comprehensive understanding of the field

Moreover, this issue marks the first in which we implement our AI usage policy. Readers may encounter some articles containing a disclaimer about the use of AI tools during the research or writing process. Articles without this disclaimer reflect the authors' declaration of not using AI. For more information on this policy, we invite readers to visit our website or read the policy at the end of this issue

Our deepest gratitude goes to our peer reviewers, who play an essential role in maintaining the quality of the journal. Reviewers from Colombia, Mexico, Germany, Spain, Turkey, Iran, and the United States have contributed their expertise, helping to ensure the rigorous academic standards of this publication

We invite scholars from around the world to continue contributing to *GiST Journal*, whether by submitting articles, participating as reviewers, or offering book reviews. Your support is invaluable to us, and we hope you enjoy this issue as much as we enjoyed creating it

The Effects of Flipped Classroom on EFL Students' Autonomy and Motivation

Los efectos del aula invertida en la autonomía y motivación de los estudiantes de EFL

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Abstract

This study examined the effects of teaching English using the Flipped Classroom Model (FCM) on EFL (English as a Foreign Language) students' autonomy and motivation. The students' perceptions of flipped language instruction were explored to conduct a detailed analysis of the implementation. A mixed-method research design, an explanatory sequential design, was used with 50 EFL students at a Turkish state university during the spring term of the 2022-2023 academic year. A quasi-experimental design was used to create a control ($n = 25$) and an experimental ($n = 25$) group. To collect quantitative data, both groups were pre-tested with two scales at the start of the term (the Attitude/ Motivation Test Battery and the Autonomy Perception Scale). The FCM was used to teach main course lessons to the experimental group in a preparatory school while the control group was trained using a traditional learning approach. At the end of the term, both groups were post-tested after eight weeks of implementation in the experimental group. The qualitative data were collected via semi-structured interviews conducted at the end of the implementation to assess the participants' perceptions and perspectives on the impact of the flipped classroom. SPSS 25.00 was used to analyze quantitative data. To assess the effects of the intervention paired sample t-tests and independent sample t-tests were used. Descriptive content analysis was used to analyze qualitative data. The findings of this study indicate that the FCM, if properly implemented in L2 main course classes, has the potential to significantly increase autonomous learning and motivation. In comparison to the traditional model, flipped learning offers benefits such as making learning more enjoyable, increasing students' self-confidence, and decreasing their fear of making mistakes.

Key Words: flipped classroom model, autonomy, motivation, English language teaching.

Resumen

Este estudio examinó los efectos de la enseñanza del inglés utilizando el Modelo de Aula Invertida (FCM, por sus siglas en inglés) sobre la autonomía y la motivación de los estudiantes de inglés como lengua extranjera (EFL por sus siglas en inglés). Se exploraron las percepciones de los estudiantes sobre la enseñanza del idioma en un aula invertida para realizar un análisis detallado de la implementación. Se utilizó un diseño de investigación de métodos mixtos, un diseño secuencial explicativo, con 50 estudiantes de EFL en una universidad estatal turca durante el semestre de primavera del año académico 2022-2023. Se utilizó un diseño cuasi-experimental para crear un grupo de control ($n = 25$) y un grupo experimental ($n = 25$). Para recopilar datos cuantitativos, ambos grupos fueron evaluados al inicio del semestre con dos escalas (la batería de pruebas de actitud/motivación y la escala de percepción de autonomía). El FCM se utilizó para enseñar lecciones principales al grupo experimental en una escuela preparatoria, mientras que el grupo de control fue capacitado utilizando un enfoque de aprendizaje tradicional. Al final del semestre, ambos grupos fueron evaluados nuevamente después de ocho semanas de implementación en el grupo experimental. Los datos cualitativos se recopilaron a través de entrevistas semiestructuradas realizadas al final de la implementación para evaluar las percepciones y perspectivas de los participantes sobre el impacto del aula invertida. Se utilizó SPSS 25.00 para analizar los datos cuantitativos. Para evaluar los efectos de la intervención, se utilizaron pruebas t de muestras relacionadas y pruebas t de muestras independientes. El

análisis de contenido descriptivo se utilizó para analizar los datos cualitativos. Los hallazgos de este estudio indican que el FCM, si se implementa correctamente en clases principales de L2, tiene el potencial de aumentar significativamente el aprendizaje autónomo y la motivación. En comparación con el modelo tradicional, el aprendizaje invertido ofrece beneficios como hacer que el aprendizaje sea más placentero, aumentar la confianza en sí mismos de los estudiantes y disminuir su miedo a cometer errores.

Palabras clave: modelo de aula invertida, autonomía, motivación, enseñanza del inglés

Resumo

Este estudo examinou os efeitos do ensino de inglês utilizando o Modelo de Sala de Aula Invertida (FCM, pela sua sigla em inglês) sobre a autonomia e a motivação dos estudantes de inglês como língua estrangeira (EFL, pela sua sigla em inglês). Foram exploradas as percepções dos estudantes sobre o ensino do idioma em uma sala de aula invertida para realizar uma análise detalhada da implementação. Foi utilizado um desenho de pesquisa de métodos mistos, um desenho sequencial explicativo, com 50 estudantes de EFL em uma universidade pública turca durante o semestre da primavera do ano acadêmico 2022-2023. Utilizou-se um desenho quase-experimental para criar um grupo de controle ($n = 25$) e um grupo experimental ($n = 25$). Para coletar dados quantitativos, ambos os grupos foram avaliados no início do semestre com duas escalas (a bateria de testes de atitude/motivação e a escala de percepção de autonomia). O FCM foi utilizado para ministrar aulas principais ao grupo experimental em uma escola preparatória, enquanto o grupo de controle foi treinado utilizando uma abordagem de ensino tradicional. Ao final do semestre, ambos os grupos foram avaliados novamente após oito semanas de implementação no grupo experimental. Os dados qualitativos foram coletados por meio de entrevistas semiestruturadas realizadas ao final da implementação para avaliar as percepções e perspectivas dos participantes sobre o impacto da sala de aula invertida. Utilizou-se o SPSS 25.00 para analisar os dados quantitativos. Para avaliar os efeitos da intervenção, foram utilizados testes t de amostras relacionadas e testes t de amostras independentes. A análise de conteúdo descritiva foi utilizada para analisar os dados qualitativos. Os resultados deste estudo indicam que o FCM, se implementado corretamente em aulas principais de L2, tem o potencial de aumentar significativamente a aprendizagem autônoma e a motivação. Em comparação com o modelo tradicional, o aprendizado invertido oferece benefícios como tornar o aprendizado mais agradável, aumentar a autoconfiança dos alunos e diminuir o medo de cometer erros.

Palavras-chave: modelo de sala de aula invertida, autonomia, motivação, ensino de inglês.

Introduction

The importance of developing proficiency in the English language is increasing in the globalizing world (Nunan, 2015). Given the continuous increase in the number of individuals learning English as a foreign or second language, the significance of language instruction has become progressively more apparent. Turkey is recognized as one of the nations where individuals with diverse educational backgrounds attempt to acquire or learn English language skills for a variety of purposes. According to Dincer and Yesilyurt (2013), a considerable number of students who have completed years of English instruction have difficulty reaching proficiency in the language due to the limited opportunities they have to communicate in English beyond the classroom setting. Previous research conducted by Ismail et al. (2010) and Elmas & Geban (2012) suggests that teachers tend to prioritize the instruction of grammar, vocabulary, and reading over the development of speaking, listening, and writing abilities. In conclusion, learners develop knowledge of grammatical subjects and vocabulary without recognizing the significance of communication skills. The aforementioned situations observed in Turkey lead to the training of individuals who possess the ability to achieve high scores in English proficiency exams but struggle to effectively engage in communication within authentic, real-world situations (Isik, 2011).

To improve the language skills of EFL students, in countries including Turkey, authorities and educators have been searching for innovative teaching strategies and techniques. Ismail et al. (2010) and Nomass (2013) note that technological advancements have significantly altered the learning habits of students, the responsibilities of educators, and instructional materials. Therefore, it has become more critical to acknowledge the growing recognition of the need for an instructional approach that promotes more rewarding and innovative learning methods, in contrast to traditional teaching methods. FCM is one of the new technology-based teaching methods. Upon reviewing the relevant literature, it becomes evident that while there is a growing body of research investigating the influence of FCM on various factors such as performance, self-efficacy, and engagement, there exists a limited number of studies exploring the impacts of FCM on students' autonomy and motivation. Hence, the primary objective of this study is to investigate the impact of FCM on the autonomy and motivation of EFL learners during the language learning process. Thus, the current study seeks to answer the research questions below:

- To what extent does the Flipped Classroom Model affect the motivation of EFL students to learn English?
- To what extent does the Flipped Classroom Model affect the autonomy of EFL students in learning English?
- How do EFL students evaluate English courses conducted using the Flipped Classroom Model?

Flipped Classroom Model (FCM)

Baepler and Driessen (2014) assert that most learning difficulties encountered by learners can be attributed to the passive engagement of students in conventional classroom settings. Active learning is regarded as a potential treatment for this issue. The FCM can be described as an instructional technique that replaces traditional teaching methods with interactive and communicative strategies both within and outside the classroom (Abeysekera & Dawson, 2014). The implementation of the flipped classroom model is primarily facilitated through the utilization of video lectures and supplementary materials as homework while face-to-face interactive instruction is incorporated in the classroom setting to enhance learning. According to Gilboy et al. (2015), the conventional approach to classroom and homework activities is reversed and modified.

The utilization of FCM enables students to actively engage in the creation of their own learning experiences by accessing and engaging with subject materials that have been prearranged by the teacher while considering learners' individualized needs. Students actively participate in various activities within the classroom setting to apply the knowledge they have acquired (Kiang & Yunus, 2021). Because of their contacts and collaborative efforts with both the teacher and their peers, they engage in a more profound level of information processing. In the role of a mentor, the instructor provides guidance and support to students as they navigate this process, offering constructive feedback and evaluation of their comprehension of the subject matter (Lee & Martin, 2020). Students who prioritize active learning in the classroom have embraced a student-centered approach in contrast to the traditional teacher-centered approach.

While the flipped classroom approach offers numerous benefits, it is important to acknowledge that it also presents certain restrictions and challenges. The three aspects of the challenges are classified as student-related, faculty-related, and operation-related in a study conducted by Moran & Milsom (2015). The primary faculty-related challenge that has been documented in research is the absence of appropriate instructional materials (Choi, 2016). It is unlikely for language instructors to develop their own teaching materials as they are not proficient in technical skills and the production of materials necessitate a sophisticated language laboratory (Ansori & Nafi, 2018). Teachers also encounter challenges in effectively integrating the face-to-face and outside-the-class components of FCM, which may be referred to as a design challenge (Moran & Milsom, 2015). The success of FCM is significantly influenced by learner motivation as it is a learner-centered pedagogy. Recent research indicates that a significant number of university students exhibit minimal engagement in both pre-class and in-class activities. According to certain researchers, students frequently neglect to view videos before class, which leads to their disinterest in and difficulty with in-class activities (Weiqiang et al., 2018). As a result, students exhibit minimal in-

class participation, and their homework assignments become exceedingly challenging. Research studies also indicate that language instructors frequently instruct large courses in higher education. In a large class, it is nearly impossible to engage in face-to-face interaction with each student, which results in a lack of personalization, a prerequisite for FCM (Zheng et al., 2020). Notwithstanding these challenges, flipped learning remains a remarkably powerful approach for fostering learner achievement and engaging learners in their education process.

The flipped classroom concept has gained significant popularity in English language teaching since Bergmann and Sams' (2012) pioneering use of the model, which involved the provision of video recordings for language students. They noted that the use of this approach led to a notable improvement in the academic achievements of their students. Subsequently, interest in the incorporation of FCM into language teaching has increased, along with the exploration of many aspects within this field. Numerous empirical investigations have been conducted to explore the impacts of FCM on learners, as evidenced by studies conducted by Kvashnina & Martynko (2016) and Lee & Wallace (2018). The researchers concluded that the implementation resulted in significant improvement in the students' overall academic achievement.

Research conducted at both national and international levels also encompasses investigations into the efficacy of applying FCM for teaching specific language skills. To this matter, several experimental studies researched the impact of flipped instruction on the development of writing abilities among students in preparatory classes (Ahmed, 2016; Ekmekci, 2017; Gurluyer, 2019). The studies conducted by Bulut (2018) and Secilmisoglu (2019) examined the potential impact of flipped teaching on grammar education within the EFL setting. The primary emphasis of research conducted on flipped classrooms has been on the development of listening and speaking abilities (El Sakka, 2016; Roth & Suppasetseree, 2016; Tazijan et al., 2016; Tran & Nguyen, 2018). The findings of the above-mentioned studies suggest that the incorporation of this approach has had positive outcomes in various aspects of EFL students' language learning. Specifically, it has been found to contribute to the overall growth of their language proficiency and four basic language skills. Additionally, this approach had a positive effect on the motivation levels of EFL students (Turan & Goktas, 2018; Zheng et al., 2020).

Learner Autonomy and Flipped Classroom Model

In recent years, learner autonomy has become an increasingly popular concept in foreign language education. Autonomy is regarded as the most fundamental one among the three basic requirements in psychology, together with competency, relationship, and autonomy (Deci & Ryan, 2010). The most prevalent definition of autonomous learning is "the process by which individuals teach themselves to assume responsibility" (Holec, 1995, p. 89). Learner autonomy, particularly in the domain of

foreign language education, exerts substantial influence due to its potential to empower students to comprehend and engage in the entirety of the foreign language education process, encompassing learning planning and assessment (Fenner & Newby, 2000).

The implementation of the FCM gives students a sense of accountability and control over their learning outside the classroom environment, too. The FCM helps regulate students' learning patterns following their learning style, speed, and routine. Fundamentally, FCM ensures that students can participate in purposeful language education, thereby fulfilling their requirements and fostering an enhanced drive to learn. Subsequently, the individual develops the necessary proficiency and self-directed learning ability to pursue further improvement beyond the confines of formal education (Schmenk, 2005).

Research into autonomous learning in language skill development has gained significant attention in recent years (Nematipour, 2012; Razeq, 2014; Scheb-Buennen, 2019). However, upon reviewing the relevant literature, it becomes apparent that research is scarce concerning the effects of the FCM on student autonomy. The particular impact of the FCM on the autonomous learning abilities of individuals learning a foreign language was examined by Weiqiang et al. (2018). Because of the investigation, it was reported that the approach positively impacted the autonomous learning abilities of the students. Additionally, the approach enabled the learners to acquire English language skills and enhance their levels of proficiency. The relationship between FCM and the autonomous learning ability of college students was also examined by Du (2020), who asserted that the FCM fostered the development of self-directed and independent learning among students. A review of the research conducted in Turkey regarding the effects of FCM on student autonomy in the EFL context revealed that the number of such studies is quite limited. Dariyemez (2020) studied the impact of FCM-based speaking skill instruction on the autonomy, communication willingness, and anxiety levels of students. According to the findings of this mixed-methods study, the implementation of the FCM markedly enhanced learner autonomy and communication motivation.

Motivation and Flipped Classroom Model

Gardner (1985) defined motivation in language learning as the degree to which an individual strives or exerts effort to acquire a language owing to their intrinsic desire to do so and the pleasure derived from the process. Motivation is a critical success factor in the development of a second or foreign language, and it is particularly significant for EFL learners who are geographically, socially, culturally, and linguistically isolated from the target society (Anjomshoa & Sadighi, 2015).

FCM has the potential to substantially enhance students' motivation in language education in contrast to traditional courses, where students passively receive knowledge. Research conducted over the past two decades has demonstrated that learners are more proficient and motivated when using FCM (Gauci et al., 2007; Prince, 2004; Stefanou et al., 2013). By creating an environment that fosters active student engagement, the FCM positions students as the focal point of the educational process. Aktas (2017) asserts that the implementation of a diverse range of instructional strategies and a learner-centered approach increases the motivation of students. Additionally, it has been remarked that the recent integration of technology into educational environments is a significant factor in boosting students' motivation and academic performance (Gecer & Topalo, 2013).

According to Farrell & Jacobs (2010), supporting collaborative learning (e.g., by utilizing small groups and pairs), developing a lifelong reading habit (e.g., by implementing extensive reading or student-selected reading), and employing self-assessment to identify a language learner's strengths and weaknesses are additional aspects of the FCM that increase student motivation in language education. Students have been reported to be engaged, motivated, and satisfied with their education when instructors implement a flipped classroom model through the organization of collaborative activities and discussions (Davies et al., 2013; Earley, 2016; Herreid & Schiller, 2013; Li & Suwanthep, 2017; McLaughlin & Rhoney, 2015; Strayer, 2012). Consequently, students' learning behaviours are influenced via integrated regulation as a result of the FCM's potential to actively involve learners while satisfying their autonomy needs.

Recent years have seen an increase in studies examining the effects of FCM on the motivation of language learners to develop language skills. Chuang (2018) investigated the influence of individual differences in learner motivation and epistemological perspectives on learning outcomes in the FCM through a study involving 85 university students. The findings indicated that the students were highly motivated, and they attained advantages from the FCM. Evseeva and Solozhenko (2015) investigated the effects of the FCM on EFL learners' self-efficacy and reported that using this method increased students' self-efficacy and academic achievement.

The analysis of existing studies indicates that although relevant literature suggests that there is an increasing number of studies on FCM in English language instruction, studies investigating the effects of the flipped model on students' motivation and autonomy are still limited. These limited studies have focused primarily on motivation (Xin-Yue, 2016; Yilmaz, 2017) or autonomy (Aprianto & Purwati, 2020; Du, 2020). The review of these studies indicates the need for further research on the effects of FCM on students' motivation and autonomy in the EFL context. Furthermore, the analysis suggests that relevant studies have mostly focused on the impacts of FCM in teaching communicative skills such as listening (El Sakka, 2016; Roth & Suppasetsee, 2016).

and speaking (Tazijan et al., 2016; Tran & Nguyen, 2018). In this sense, this study is expected to expand knowledge on the FCM concerning motivation and autonomy in main course classes. In this context, the perspectives, and attitudes of EFL learners toward flipped learning in the development of language skills were also investigated. Thus, the conclusions reached from the students' judgments about and attitudes toward the flipped method can enlighten future research. This study also has the potential to serve as an example of the use of FCM in the EFL context, with the goal of increasing learner motivation and autonomy in language development.

Methodology

Research Context and Participants

This study investigated the effects of flipped learning on the autonomy and motivation of EFL students using a quasi-experimental design. The specific methodology implemented in this research was an explanatory sequential design. Given that the primary objective of an experimental design is to examine the impact of implementation on research outcomes, the explanatory sequential design integrates qualitative and quantitative research methods (Er & Farhady, 2023; Wong & Cooper, 2016). As suggested by Creswell et al. (2011), the qualitative explanatory sequential design enables researchers to reach more comprehensive results and increases the reliability of the data.

The research was conducted with a sample size of 50 participants who were enrolled in the preparatory class at the English Language and Literature Department of a state university in Turkey. Before students started their education in the English preparatory class, a foreign language proficiency test was administered by the School of Foreign Languages. The students were determined to have language proficiency at the pre-intermediate (A2) level according to the test. Based on their level of proficiency, the participants were thought to possess the ability to comprehend commonly employed terms and sentences, as well as engage in basic and repetitive communicative tasks (Council of Europe, 2020). Both groups included 25 students. Because we had easy access to this group of students, convenience sampling was utilized as the sampling method for this study. When there is no other way to “choose a random or a systematic non-random sample,” convenience sampling can be used (Chen, 2011, p. 103).

Data Collection Tools

The Autonomy Perception Scale and the Attitude/Motivation Test Battery (AMTB) Survey were used in the quantitative phase of the study. A modification of Gardner's (1985) AMTB survey was implemented by Gordu (2016). Cronbach Alpha coefficient

of the survey is 0,929. The Autonomy Perception Scale, which was developed by Figura and Jarvis (2007), was designed to assess the degree of perceived autonomy among learners. For this survey, the reliability coefficient was calculated to be 0.89. These two tests were employed on the participants as pre- and post-tests.

A semi-structured interview was administered to gather qualitative data. In line with the research purpose and relevant literature, the researchers prepared six open-ended questions. The questions focused on the students' perspectives on flipped learning, the difficulties they encountered, and suggestions for improving such training. To enhance the validity of the questions, another field expert also checked the items for accuracy and relevance. The interview questions were as follows:

1. How would you evaluate the flipped classroom model in general?
2. What are the advantages and strengths of the flipped classroom model?
3. What are the disadvantages and weaknesses of the flipped classroom model?
4. What difficulties did you encounter during the implementation?
5. Has there been a change (positive or negative) in your attitude toward the flipped classroom model during the implementation?
6. Is there anything you would like to add or recommend about the flipped classroom model?

Data Collection Process and Analysis

The main investigation was divided into three phases including pre-testing, implementation, and post-testing. During the initial phase, after the establishment of the control and experimental groups, the Autonomy Perception Scale and the Attitude/Motivation Test Battery (AMTB) Survey were administered to the participants in both groups. When the research proposal was approved by Ataturk University, Institute of Educational Sciences, the major phase of the implementation was intended to be conducted face-to-face. However, a sudden earthquake occurred, affecting a large portion of the country and changing the attitude towards education at the tertiary level. As a result, the classes with both groups had to be conducted online. The implementation was carried out in the spring semester after the completion of the fall semester of the preparatory education. The classes with the control group were designed and conducted using a conventional model of teaching and learning, in which the content was covered during the online sessions and homework was completed after the classes. In the implementation phase, the students in both groups received similar courses for eight weeks. The experimental group was provided instruction using the FCM while the control group received training through traditional methods.

To evaluate if the manner of instruction made a difference, the same teacher presented and covered the same course content. Although identical course contents were used, the delivery and application of materials differed substantially because of the instruction mode. The course materials were distributed to participants in the control group in the form of a booklet rather than through the Blackboard Learning Management System (LMS). The teacher taught content in the class and then assigned homework. The target subjects were explained to the students by the teacher. The students then discussed the course materials' questions and answered the follow-up questions. Grammar, vocabulary, speaking, and listening activities were carried out in the classroom.

The courses in the experimental group were delivered via the online LMS. The course materials utilized by the experimental group consisted of sections incorporating audio and video recordings. The content included several communicative activities, such as group discussions, role-playing exercises, and dubbing activities in each course. Furthermore, the experimental group utilized web 2.0 techniques and online language training programs including Vo screen. The course materials were distributed to the students at least one week before the scheduled lesson. Before the deadline, the students were required to electronically submit their assignments. They then engaged in in-class activities to further practice themselves.

During the third phase, a post-test was administered to both groups. The pre-test that was given at the beginning of the term was identical to the post-test. After the intervention was completed, nine participants (high-achievers, middle-achievers, and low-achievers) from the experimental group were interviewed. The interviews were conducted online using the LMS. The interviews were carried out in Turkish and lasted between 10 and 15 minutes to allow the participants to express themselves clearly. The researcher audio-recorded, transcribed, and translated the interviews into English.

For the data analysis, a comparison was made between EFL learners' autonomy and motivation to ascertain the level to which flipped learning affected the autonomy and motivation levels of the participants. The effects of the implementation were assessed, using SPSS program, through paired sample t-test and independent sample t-test analyses. Adjustments for Bonferroni correction were applied to the differences between pre-test and post-test scores to reduce the increased Type I error rate caused by the study's extensive comparisons. The alpha coefficient was utilized to ascertain the reliability of the factors. The survey has a Cronbach Alpha coefficient of 0.927.

To evaluate the qualitative data, descriptive content analysis was implemented. Content analysis is an analysis technique, described by Krippendorff (2004), that aims at obtaining valid and replicable conclusions about the contexts in which texts are utilized are analyzed. The transcriptions of the interviews were classified regarding the research questions under the recommendations of Dörnyei (2007). The common codes identified in the transcripts were combined into common categories, which formed the themes of the analysis.

Findings

Quantitative Results

To analyze the data, normality distribution was checked for both the experimental and control groups. The skewness and kurtosis values within the range of +1.50 and -1.50 are considered normal distributions (Tabachnick & Fidell, 2013). Since for the Motivation scale, the skewness was .551 and kurtosis -.844, and for the Autonomy scale the skewness was .771 and kurtosis -.770, it can be concluded that the data in each group were normally distributed. Thus, in the analysis, independent sample t-tests and paired sample t-tests were conducted using parametric statistics.

Pre-test and Post-test Independent Sample T-test Results

Pre-test results of the study. To determine the differences between both groups, the pre-test results of the students were compared. The findings are displayed as follows in table 1.

Table 1. Comparison of the Pre-test Scores of Control and Experimental Groups

Variables	Groups	<i>M</i>	<i>SD</i>	<i>Md</i>	<i>T</i>	<i>P</i>
Motivation	Control	2.78	.12	.01	.239	.812
	Experiment	2.77	.14			
Autonomy	Control	2.17	.24	.02	.321	.749
	Experiment	2.15	.20			

Note. *Md* = Mean difference, $p > .05$

The table indicates that at the beginning of the implementation, the pre-test scores of both groups did not differ. The levels of motivation and learner autonomy of the participants in both groups showed statistical similarity and had low mean differences. For the motivation variable, the pretest means of the experimental (2.77) and control (2.78) groups were not significantly different before the implementation ($t=.239$; $p = .812 > .05$). Similarly, for the autonomy variable, the pretest means of the experimental (2.15) and control (2.17) groups were not significantly different before the implementation ($t=.321$; $p = .749 > .05$).

Post-test results of the study. To determine the effects of the implementation and examine differences between the groups, the post-test scores of the students were compared. The findings are shown as follows in Table 2.

Table 2. Comparison of the Post-test Scores of the Control and Experimental Groups

Variables	Groups	<i>M</i>	<i>SD</i>	<i>Md</i>	<i>T</i>	<i>P</i>
Motivation	Control	3.13	.19	-.47	-9.510	.001
	Experiment	3.60	.16			
Autonomy	Control	2.50	.14	-1.06	-27.657	.000
	Experiment	3.59	.13			

Note. *Md* = Mean difference, $p < .05$

The table indicates that the participants' post-test scores differed from each other after the implementation. Mean scores in autonomy and motivation increased in favor of the treatment group ($p < .05$). It is possible to say that the autonomy and motivation levels of the students in the experimental group improved significantly.

Pre-test and Post-test Paired Sample T-test Results

Pre-test Post-Test Comparison of the Control Group. Multiple paired sample t-tests were conducted to examine the changes in the two primary study variables to see if there were differences between the scores of the students in the control group after traditional training. Table 3 shows the analysis results:

Table 3. Comparison of the Pre and Post-test Scores of the Control Group

Variables	Groups	<i>M</i>	<i>SD</i>	<i>Md</i>	<i>T</i>	<i>P</i>
Motivation	Pre	2.78	.13	-.35	-7.640	.000
	Post	3.13	.19			
Autonomy	Pre	2.17	.24	-.33	-5.652	.000
	Post	2.50	.15			

Note. *Md* = Mean difference, $p < .05$

The table shows that after one term of instruction, the control group participants' mean scores on learner autonomy and motivation increased. This outcome was anticipated due to the nature of the educational content. According to the table, for the motivation variable, the pre-test and post-test means of the control group differ significantly in favor of the post-test ($t = -7.640$; $p = .000$). Similarly, for the autonomy variable the pretest and post-test means of the control group differ significantly in favor of the post-test ($t = -5.652$; $p = .000$).

Pre-test Post-Test Comparison of the Experimental Group. To compare the characteristics of the two primary study variables for the experimental group, multiple paired sample t-tests were performed, assessing the efficiency of flipped learning. Table 4 displays the findings as follows:

Table 4. Comparison of the Pre and Post-test Scores of the Experimental Group

Variables	Groups	<i>M</i>	<i>SD</i>	<i>Md</i>	<i>T</i>	<i>P</i>
Motivation	Pre	2.77	.14	-.83	-21.045	.000
	Post	3.60	.16			
Autonomy	Pre	2.15	.20	-1.44	-29.717	.000
	Post	3.59	.13			

Note. Md= Mean difference, $p < .05$

The table shows how significantly the means for the two main variables changed after one term of FCM instruction in the experimental group. The comparison of pre-test and post-test scores indicates that learner autonomy and motivation among the experimental group students showed a statistically significant increase after flipped learning ($p < .05$). While the difference in the means observed in autonomy levels was high ($Md=1.44$), the motivation aspect had a lower difference ($Md=-.83$). The findings can imply that flipped learning was effective in increasing student motivation and autonomy in learning English.

Qualitative Results

The responses of the EFL students to the open-ended questions were reviewed many times. Sub-themes were identified from the student responses, and they were categorized under the main themes based on their similarities. Subsequently, the themes were employed to present the findings, which were interpreted following the data analysis. The descriptive content analysis of the participants' responses revealed four main themes: students' overall evaluations of the Flipped Classroom Model, the advantages and strengths of the Flipped Classroom Model, the disadvantages and weaknesses of the Flipped Classroom Model, and recommendations for effective flipped learning. The results are presented with participant comments to increase trustworthiness in the analysis and data presentation phases.

Students' Overall Evaluations of the Flipped Classroom Model

According to the interview results, the students in the experimental group had positive and negative considerations of the FCM in the language learning process. The results of such evaluations are shown in Table 5.

Table 5. Theme 1: Overall Evaluations of the FCM

Theme 1: Overall evaluations of the FCM	
Category 1: Positive evaluations	Enjoyable environment
	Useful content
	Limited intervention
	Positive feedback
Category 2: Negative evaluations	Workload
	Tiring process

The flipped classroom model was highly favored by the participants; 6 out of 9 students stated that they appreciated and found the FCM enjoyable. Participant 1 said: "Flipped Classroom was a different application that I encountered for the first time; I generally liked it." Four students mentioned that playing games and doing enjoyable activities in the lessons motivated them. Regarding this issue, Participant 3 argued: "I found the flipped classroom enjoyable in general because we had enjoyable activities and competitions. The activities we did in the classroom as a group or in pairs were very enjoyable, I looked forward to following lessons."

Furthermore, as opposed to traditional lectures and mechanical exercises, the employment of varied communicative activities facilitated the students' learning. Four participants stated that engaging in fun and diverse activities helped them learn more successfully and rapidly. They also claimed that the useful content increased their motivation. In line with this code, Participant 4 noted: "I think I learn effectively by playing different games in which the teacher does not explain grammar and rules." Participant 6 supported this perspective referring to a specific FCM practice they had: "Thanks to the dubbing assignment, I learned many different sentence structures and word pronunciations."

The teacher's conduct in the classroom with limited intervention was regarded as an advantage in the FCM because it assisted students in becoming autonomous learners. Positive feedback was also mentioned as having a constructive impact on the students'

motivation. About this issue, Participant 3 expressed: “Since our teacher usually followed the activities without intervening, I was not afraid of making mistakes while doing activities alone.” Sharing a similar view, Participant 2 expressed: “I developed a positive attitude towards the lesson as our teacher gave positive and sincere answers and did not criticize when I had questions or made mistakes while doing the activities.”

Not everyone was positive about flipped learning. Only one student in the experimental group who took the main course using the FCM did not like this learning method. Participant 8 stated: “We have to work hard, and it can be a bit boring when what we do at home is the same as what we do at school.” In addition, several students expressed concerns about the implementation. Three students stated that the application was effective for learning, but their workload and homework were excessive. Considering the workload, Participant 2 noted: “I think it was useful and joyful, but it was tiring because we had to watch videos all the time and work at home.”

In conclusion, the participants usually preferred the experience of acquiring foreign language abilities in main course classes using the FC model. They were pleased with many parts of the FCM. The lectures were enjoyable, the topics were beneficial, and the teacher guided the classes with little intervention. However, certain aspects were not appreciated by the participants, primarily the work required and course preparation.

The Advantages and Strengths of the Flipped Classroom Model

The participants’ comments revealed that the flipped learning method brought a variety of advantages and strengths to the language learning process. The results for those aspects are shown in Table 6.

Table 6. Theme 2: Advantages and Strengths of the FCM

Theme 2: Advantages and Strengths of the FCM	
Category 1: Language development	Pronunciation development
	Listening development
	Speaking development
	Grammar development
Category 2: Affective & cognitive development	Motivation
	Confidence
	Autonomy

The first category in the second theme, as shown in Table 6, addresses the participants' language development. When the language development of the learners and the contribution of the flipped classroom to their learning were considered, several students stated that basic language skills, particularly listening and speaking skills, improved as a result of the activities and practice in and out of class. The students also stated that improving their basic language skills enhanced their motivation. Regarding this matter, Participant 1 said: "I think it contributed to my English learning because we did a lot of English listening and speaking activities."

The second advantage was related to improving pronunciation. The participants reported that the videos and recordings helped them identify and correct pronunciation mistakes. Those who realized they could correctly pronounce words and structures reported an increase in motivation to participate in the activities. Participant 2 supported this perspective by saying: "I was able to notice my pronunciation mistakes when I recorded my voice and listened to it later. Also, it was fun to listen to our teacher's voice recordings at home." Participant 6 supported this view by stating: "I think it contributed to learning the subjects well. It is also very useful for the correct pronunciation of words."

Considering their affective and cognitive development as displayed in the second category, most of the students expressed that the FCM increased their confidence, autonomy, and motivation. The participants stated that their self-confidence and participation increased as a result of the tasks in which they recorded their voices and uploaded them to the system, which reduced the possibility of making mistakes in class. Participant 5 argued: "When I recorded my voice at home and listened to it over and over again, I noticed and corrected my mistakes, so I was not afraid of making pronunciation mistakes in class." supporting this finding. Furthermore, being prepared for the subject to be covered in the lesson and preparing for classroom activities at home were reported to provide regular study habits and increase their active participation and autonomy in the classroom. Participant 5 said: "I generally liked FCM because it allowed me to study regularly and come prepared for classes. Knowing in advance what will be covered in each lesson was reassuring." Similarly, Participant 7 added: "Since I knew what we were going to cover in the lessons, I was ready to participate, and I was not nervous at all."

Another benefit of the flipped classroom model was that it encouraged the students to study continuously, providing them with regular study habits and thus improving their autonomy. In this regard, Participant 8 stated:

"Because I knew the assignments I had to do before lessons, I developed a work schedule and discipline over time. Later on, I realized that even if I did not have homework, I started to prepare before the lesson and do research on the subjects I did not know." Similarly, Participant 8 added, I did not know how to study English until today. I learned to study English on my own."

To summarize, there were several things that the students thought were advantageous about the implementation of the FCM. Thanks to the communicative activities, language learning became easier and more fun, particularly for listening, speaking, and pronunciation skills. The students' self-confidence improved as they were no longer hesitant to make mistakes. Their autonomy also increased as a result of learning how to study. Finally, their motivation to attend English classes increased because they could use modern applications and conveniently reach course materials.

The Disadvantages and Weaknesses of the Flipped Classroom Model

Although the FCM improved the language learning process, the participants' comments revealed that the flipped learning method had several disadvantages and weaknesses. The results for those aspects are shown in Table 7.

Table 7. Theme 3: Disadvantages and Weaknesses of the FCM

Theme 3: Disadvantages and Weaknesses of the FCM	
Category 1: Workload	Time commitment Excessive homework
Category 2: Technological Problems	Internet connection Technological tools
Category 3: Work Style	Pair/ group activities Study environment

The workload is the first category in relation to the disadvantages and weaknesses of the FCM, as shown in Table 7. The amount of work and time required to complete the tasks were referred to be the two most significant drawbacks in the model. It was reported that watching videos, responding to questions, recording them, and completing assignments that required critical thinking took a lot of time. The participants agreed that they were tired of studying, and as a result, their motivation towards courses decreased. Regarding this issue, Participant 1 noted: "I think this implementation is tiring because I watch videos and have recordings all the time." Similarly, Participant 9 added: "Assignments take too much time." Participant 8 also held a similar perspective and explained: "We work at home and also in the classes. This is so tiring and ridiculous."

The second category was about the internet connection, mobile phone, and computer problems, which were technological issues that reduced the participants' motivation to attend courses. Because the courses were delivered online and the flipped classroom method required the submission of homework and access to course content via the online LMS, the students encountered some difficulties when their phones were insufficient or when they did not have access to a computer or the internet. In line with this finding, Participant 4 argued: "I had to miss classes because of slow internet and connection problems. It was also very difficult to watch a lot of videos and recordings afterward." Referring to the internet problem, Participant 8 expressed: "When my internet connection was lost, I missed the classes and could not upload the assignments."

The third category of disadvantages was difficulty with pair and group activities. Some students stated that when they were unable to communicate with their friends in group or pair activities, the activity became inefficient, lowering their motivation. In this regard, Participant 7 argued: "It is very difficult to participate and be successful in group activities and pair works when your group members do not get along or they do not work." Participant 2 supported this by saying: "Since my English level is not good, I had difficulty doing activities with my friends, and I fell behind them."

The participant comments revealed that they were not pleased with some parts of the model. Some students felt that the time commitment was excessive. The difficulty connecting to the internet and creating suitable learning environments were also considered challenging. Finally, some students stated that the FCM is similar to doing homework.

Recommendations for Effective Flipped Learning

Based on their FCM-supported learning experiences, the participants made recommendations to stimulate the effectiveness of English language instruction through flipped learning both inside and outside the classroom. The results concerning these aspects are shown in Table 8.

Table 8. Theme 4: Recommendations for the FCM

Theme 4: Recommendations for the FCM	
Category 1: In-Class Recommendation	Lesson conduct
	Class size
Category 2: Out-Class Recommendation	Workload

The first category of recommendations was related to the mood of the lesson. Some participants preferred face-to-face education when evaluating their distance education experiences. The participants stated that face-to-face activities requiring active participation, such as games and competitions, would be more motivating and provide more permanent learning. About this, Participant 5 shared: “I was challenged communicating with our friends and our teacher, the activities became boring. It would be much more efficient if the lessons were done face to face.” Participant 8 supported that view by saying: “English lessons should not be online. I don’t think we can learn a language just by watching the screen and listening to the teacher. I don’t want to attend classes in online education.”

Another suggestion was to reduce the number of students in class. According to the participants, lessons should be taught with fewer students. Some students stated that when there were fewer students in class, the topics were covered more quickly, the teacher had more time to deal with the students individually, and the students could learn English better. In line with this finding, Participant 3 stated: “There should be fewer people in the class because it may be difficult for the teacher to deal with crowded classes.”

As shown in Table 8, the most common out-of-class recommendation forming the second category concerned the amount of homework. Three students stated that having too much homework and tasks to do in and out of the classroom was exhausting and difficult and that, if less homework was assigned, their motivation for the course would increase. Emphasizing this issue Participant 1 stated: “Difficult and time-consuming assignments that require good computer use should not be given.” Similarly, Participant 6 and Participant 9 added: “Too much homework should not be given.”

Both the qualitative and quantitative data show that when the FCM was properly integrated into English lessons, the participants’ motivation and autonomy levels increased. Furthermore, according to the qualitative data, several components of the flipped classroom approach were appreciated by the students, such as technology-integrated materials, communicative tasks, and positive feedback. Some students, however, remarked that there were features of this model that they did not like. The model was criticized for requiring excessive time commitment, having some course materials that were too difficult to understand, and having too much homework. The students also suggested some changes to FCM to increase the effectiveness of the model, such as more individual activities, smaller class sizes, and less homework.

Discussion and Conclusions

According to the findings of this study, FCM could substantially increase the autonomy and motivation of the students. Additionally, the students were encouraged to develop self-study habits, take responsibility for their education, and gain knowledge on technological tools that could be utilized to improve their L2, and could monitor their progress. They were more motivated to practice English out of class and felt more confident as they developed proficiency in the target language and a deeper understanding of particular subjects. Within the scope of the first research question, this study examined the impact of FCM on the autonomy of students. The findings indicate that the students' autonomy was enhanced at the end of the FCM application due to online teaching as well as the evaluation, and communication processes that enabled them to control and manage their learning. This result is consistent with the findings of Al Wahaibi and Hashim (2018), who concluded that the use of technology contributed to the growth of learner autonomy and offered students greater control over their education. Likewise, Santikarn and Wichadee (2018) hypothesized that due to participation in class activities and peer interaction, the majority of their students were satisfied with the FCM-based language instruction. Concerning this matter, it can be asserted that the present study, which was conducted based on the FCM implementation, presented an example of increased learner autonomy, stimulated by the facilitating role of the teacher who does not interfere excessively with the lessons.

As for the analysis of the second research question, the experimental group's motivation increased after receiving English language instruction via the FCM. The findings of the present investigation are consistent with most of the prior research in the relevant literature. A comparative analysis of the present study and prior research in the field suggests that the increase in student motivation among those in the experimental group may be attributable to several factors. Firstly, it can be concluded that instruction enriched with technology increased learning engagement and activity. In their study examining the effects of FCM on student motivation, Elmas & Geban (2012) emphasized that the experimental group participants actively learned the language and transformed into engaged participants, which contributed to effective and meaningful learning. The increase in the motivation of the students can also be seen as a natural outcome of the increase in their participation in the lesson thanks to the student-centered activities, which is a point of reference in the related literature as well. Chuang et al. (2018) reported that flipped classroom instruction enhanced the motivation, satisfaction, and participation of students. Thus, it can be inferred, from the results of the current study and those of the related research, that FCM serves as a tool to stimulate learner motivation while increasing their active participation in the educational process. Based on the data obtained from the participants in the experimental group, it is possible to conclude that thanks to game-based education in FCM, the students learned by having fun, which may have had a positive effect on their

motivation for the lesson. This finding is in parallel with those by Caliskan (2016), Obari and Lambacher (2015), and Yavuz and Ozdemir (2019), in which the students found FCM more enjoyable than conventional models.

Within the scope of the third research question, the current research investigated the perceptions and perspectives of the experimental group participants regarding the FCM. The qualitative analysis revealed that the participants' positive evaluations and experiences using the FCM were more frequent than the negative ones. Almost all the learners who participated in the interviews stated that they enjoyed the FCM explaining that the model improved their speaking, listening, and pronunciation skills as well as their autonomy and motivation. These results corroborate studies demonstrating the positive contributions of the FCM to the oral performance of L2 learners (Amiryousefi, 2019; Chen Hsieh et al., 2017). According to the data from the interview, it can be concluded that regarding affective/cognitive development, the FCM increases students' autonomy, motivation, and confidence. The qualitative data show that the participants gained regular study habits and became more autonomous learners thanks to the FCM. These results were compatible with previous research (Hung, 2018; Weiqiang et al., 2018) revealing the positive effects of the model on the autonomous learning skills of foreign language learners.

There were certain aspects that not every student appreciated. For some students, the model was similar to doing assignments, and extracurricular activities demanded an excessive amount of time. Some participants also found the pre-recorded video lessons and homework to be boring and time-consuming. This point of criticism is in line with what has been reported in Mull's (2012) study, which argued that students who find videos boring or overly long may not enjoy watching them.

The participants made some in-class and out-of-class suggestions for implementing the FCM into language classes, too. Since the lessons had to be conducted online due to the earthquake disaster in Turkey, integrating the model into online lessons is among the aspects seen as a disadvantage by the students. In conclusion, the students recommended that courses should be conducted face-to-face instead of online. The students also suggested that courses should be crowded so that their motivation and confidence increase. In this regard, when the relevant literature was examined, no results supporting these data were encountered; thus, these results can be related to an outcome of the specific case experienced in this research context.

Limitations and Pedagogical Implications

Several variables presented limitations. First, the study was limited to data from 50 students. This study only included a group of preparatory students, and the participants were adult learners with an A2 level of English proficiency; thus, it was beyond the

scope of this study to investigate the development of language learning at other grades and levels. Another limitation of this study is the duration of the intervention (8 weeks). If the flipped instruction had lasted longer than 8 weeks, the results may have differed. Additionally, the FCM was integrated into online lessons because of the mandatory distance education; different results might have been obtained if this model had been used in face-to-face courses.

The findings and analysis of this quasi-experimental study revealed that the FCM primarily improved the participants' language skills and increased their motivation as well as autonomy. As a result, the analysis of these findings revealed the following pedagogical implications for the effective integration and implementation of the model in language education:

- Because the FCM is a new model, educators must ensure that students are familiar with its principles prior to its implementation to prevent students from losing their motivation.
- To implement the model, teachers must have a certain set of technological skills. In-service training covering theoretical and practical aspects of the model is to be available for instructors who want to implement the FCM.
- Students may encounter problems while following course content. As a result, it is critical to provide opportunities for ongoing and beneficial contact. Instructors can keep track of the process via course management systems, emails, forums, or social media.
- While preparing course materials, attention should be paid to facilitating the teaching of target subjects, attracting students' attention, and increasing their motivation towards language learning.
- While preparing the course content, the model should be integrated into all areas of language development.

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Ethiopian EFL Students' Willingness to Communicate (WTC) and the Factors Associated with it in Oral Communicative English Classes

Disposición a comunicarse (WTC) de los estudiantes etíopes de inglés como lengua extranjera y factores asociados a ella en las clases de inglés comunicativo oral

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Abstract

Communication, particularly verbal communication, is central to the development of a desired competence in a second or foreign language. Approaches such as communicative language teaching (CLT) in second language acquisition emphasize practical use of the target language for effective learning/acquisition. However, despite the necessity of using a target language to learn it, it has been a common phenomenon to observe most learners exhibiting passiveness, reticence, and unwillingness to participate in oral communicative opportunities in English as a foreign language (EFL) classes. This study therefore explored EFL students' willingness to communicate (WTC) in oral communicative English classes together with the factors underlying it in the Ethiopian higher education context. To this end, primary quantitative data were collected from a randomly selected sample of 450 EFL students taking oral communicative English courses followed by qualitative data from a sample of fifteen students selected again randomly to triangulate the results from the quantitative data. The results revealed that the target students had in general a low level of WTC in oral communicative English classes, and their WTC was affected by both psychological and contextual factors such as self-confidence, motivation, personality, language learning orientation and classroom environments. The findings indicate that EFL students' WTC is a crucial component to increase students' participation in oral communicative English classes by raising their self-confidence, motivation and awareness of language learning orientations, coupled with facilitating the language learning environment. It is therefore suggested that WTC needs to be given special consideration while designing and preparing ELT materials, and during instructions as well.

Keywords: Classroom Environment; Ethiopian EFL Students' Willingness to communicate (WTC), Motivation; Personality; Self-confidence

Resumen

La comunicación, particularmente la comunicación verbal, es fundamental para el desarrollo de una competencia deseada en una segunda lengua o lengua extranjera. Enfoques como la enseñanza comunicativa de lenguas (CLT por sus siglas en inglés) en la adquisición de segundas lenguas enfatizan el uso práctico de la lengua meta para un aprendizaje/adquisición efectivos. Sin embargo, a pesar de la necesidad de utilizar la lengua meta para aprenderla, es un fenómeno común observar que la mayoría de los estudiantes muestran pasividad, reticencia y falta de disposición para participar en oportunidades de comunicación oral en clases de inglés como lengua extranjera (EFL por sus siglas en inglés). Por lo tanto, este estudio exploró la disposición de los estudiantes de EFL para comunicarse (WTC, por sus siglas en inglés) en clases de comunicación oral en inglés, junto con los factores subyacentes a esta disposición en el contexto de la educación superior en Etiopía. Para ello, se recolectaron datos cuantitativos primarios de una muestra aleatoria de 450 estudiantes de EFL que tomaban cursos de comunicación oral en inglés, seguidos de datos cualitativos de una muestra de quince estudiantes seleccionados nuevamente al azar para triangular los resultados de los datos cuantitativos. Los resultados revelaron que los estudiantes objetivo, en general, tenían un bajo nivel de WTC en las clases de comunicación oral en inglés, y su WTC se veía afectada tanto por factores psicológicos como contextuales, tales como la autoconfianza, la motivación, la personalidad, la orientación hacia

el aprendizaje de idiomas y los entornos de clase. Los hallazgos indican que la WTC de los estudiantes de EFL es un componente crucial para aumentar la participación de los estudiantes en clases de comunicación oral en inglés, al incrementar su autoconfianza, motivación y conciencia sobre las orientaciones de aprendizaje de idiomas, junto con la facilitación del entorno de aprendizaje. Por lo tanto, se sugiere que la WTC reciba una consideración especial al diseñar y preparar materiales de enseñanza de inglés como lengua extranjera, así como durante las instrucciones.

Palabras clave: Entorno de clase; Disposición de los estudiantes etíopes de EFL para comunicarse (WTC); Motivación; Personalidad; Autoconfianza

Resumo

A comunicação, particularmente a comunicação verbal, é fundamental para o desenvolvimento de uma competência desejada em uma segunda língua ou língua estrangeira. Abordagens como o ensino comunicativo de línguas (CLT, sigla em inglês) na aquisição de segundas línguas enfatizam o uso prático da língua-alvo para uma aprendizagem/aquisição eficaz. No entanto, apesar da necessidade de utilizar a língua-alvo para aprendê-la, é comum observar que a maioria dos alunos demonstra passividade, reticência e falta de disposição para participar de oportunidades de comunicação oral em aulas de inglês como língua estrangeira (EFL, sigla em inglês). Portanto, este estudo explorou a disposição dos estudantes de EFL em se comunicar (WTC, sigla em inglês) em aulas de comunicação oral em inglês, juntamente com os fatores subjacentes a essa disposição no contexto da educação superior na Etiópia. Para isso, foram coletados dados quantitativos primários de uma amostra aleatória de 450 estudantes de EFL que cursavam aulas de comunicação oral em inglês, seguidos de dados qualitativos de uma amostra de quinze estudantes selecionados novamente ao acaso para triangular os resultados dos dados quantitativos. Os resultados revelaram que os estudantes-alvo, em geral, apresentavam um baixo nível de WTC nas aulas de comunicação oral em inglês, e sua WTC era afetada por fatores psicológicos e contextuais, como autoconfiança, motivação, personalidade, orientação para a aprendizagem de idiomas e ambientes de sala de aula. As descobertas indicam que a WTC dos estudantes de EFL é um componente crucial para aumentar a participação dos alunos nas aulas de comunicação oral em inglês, ao aumentar sua autoconfiança, motivação e conscientização sobre as orientações de aprendizagem de idiomas, juntamente com a facilitação do ambiente de aprendizagem. Portanto, sugere-se que a WTC receba uma consideração especial ao projetar e preparar materiais de ensino de inglês como língua estrangeira, bem como durante as instruções.

Palavras-chave: Ambiente de sala de aula; Disposição dos estudantes etíopes de EFL para se comunicar (WTC); Motivação; Personalidade; Autoconfiança

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Introduction

Language is the naturally endowed and uniquely distinguishing trait that sets human beings apart from other primates (Dawson & Phelan, 2016; Sapir, 1921). It is the most essential and significant natural tool that links and holds people together, serves as a vehicle of socio-cultural integration, facilitates cognitive and interpersonal developments, and so on. Above all, it serves as the most effective and efficient means of intra- and intercultural communications between and among individuals, groups and societies/communities.

Humans acquire language as a native or mother tongue naturally in the early or formative years of development as a result of interaction with their environment such as the family; or as a second/foreign language during late childhood, adolescence or adulthood through different ways such as instruction, immersion, and the like. The need for learning especially a second/foreign language stands out prominent due to the various driving forces such as social, economic, cultural and political reasons (Aronin, 2015; de Zarobe & de Zarobe, 2015).

The current second language acquisition (SLA) research and pedagogy in general, and English language teaching (ELT) in particular, attach a great deal of importance to oral communications or interactions in the classrooms to help EFL learners develop communicative competence in the target language. Larsen-Freeman (2007) stresses that language learning occurs in using the target language (TL), not in learning it first and using it later or vice versa. The two processes, using and learning the language, are inseparable. Swain (2000) also points out that “language use and language learning can co-occur” and “it is language use [that] mediate[s] language learning” (p. 97). But for the ‘using’ to occur, there should certainly be the willingness, the willingness to communicate orally or use the language to learn it. Willingness is thus a necessary precondition for EFL learners to participate in authentic oral communications.

However, despite the pressing need for a well-developed communicative competence in the English language in the current globalized world, and the necessity of interactions (trying to talk) to develop the needed competence in it, most EFL students rather exhibit passiveness, reluctance, reticence and unwillingness to actively engage in oral communicative opportunities inside the classroom. On the other hand, scholars such as Skehan (1989, p. 48) stress that “learners have to talk in order to learn”, which is indisputably a prerequisite for the successful development of the needed competence in the target (English) language. Most of the students, however, seem to lack the basic energy that motivates them to initiate talks and keep it going on to help them improve their oral communicative skills. Literature in the area, in general, indicate that students’ dearth of desire to actively participate in EFL oral communicative situations is associated with their Willingness to Communicate (WTC) (Cortazzi & Jin, 1996; Dornyei & Ryan, 2015; MacIntyre et al., 1998; Nazari & Allahyar, 2012; Shumin, 2002; Tsui, 1996).

L2 learners' WTC is a contextually triggered psychological state of an individual's communicative readiness and is an immediate antecedent to the actual communication behavior (Henry et al., 2024). Driven therefore by such L2 learners' communication behavior (where some are willing and others are unwilling to participate in oral communicative activities when the opportunities arise), numerous studies were carried out to explore L2 learners' WTC and the factors associated with it. However, most of the studies were limited to and carried out in the Western and Asian contexts, such as the USA, Canada, Japan, Korea, Turkey, and China (Cameron, 2013; Ma et al., 2023). The prominent figures in the area (MacIntyre et al., 1998), for instance, developed a comprehensive heuristic model based on Canadian French as second language learners to describe and explain L2 learners' WTC. However, little is known about L2 learners' WTC in other areas such as Africa (Ma et al., 2023) though there are significant cultural/contextual variations. Among these areas is found the Ethiopian higher education context. Hitherto, little is known specifically about Ethiopian higher education EFL students' WTC and the factors that contribute to the students' overall WTC. In addition, it is not also clear to what extent the heuristic model describes and explains Ethiopian higher education EFL students' WTC in general.

Wen and Clément (2003) argue that the heuristic model is developed based on the research studies mainly conducted in the Western (Canadian Anglophone students learning French as a second language) context, which is quite different from the non-western EFL contexts such as Ethiopia. The model thus needs to be tested in other contexts such as learning English as a foreign language (EFL), where there is usually no immediate linguistic need for everyday usage of the language. Hence, this situation also suggests the need for further studies to verify the model in the non-western EFL contexts.

In addition, as discussed below in the literature review section, there are inconsistencies among the findings of previous studies with regard to the factors underlying L2 learners' WTC in a specific context. The incongruities among the findings of the previous studies might be due to the environmental or contextual variations in which each study was undertaken. These inconsistencies unarguably lead to the need to carry out further investigation in the areas where little/none has been explored so far.

A review of the literature on the topic (Ethiopian EFL students' WTC) found only a single study that was carried out by Welesilassie and Nikolov (2024). The researchers studied the connection among EFL learners' motivational self-system, willingness to communicate, and self-assessed proficiency at a preparatory high school in Ethiopia. In their study, the researchers identified self-assessed English proficiency as having "statistically significant positive predictive effects on L2WTC within and outside the classroom" (p. 1). They also reported the ideal L2 self as having no significant effect on the target students' WTC outside the classroom. No other study is however found that attempted to explore EFL students' WTC.

The current study is thus triggered by the inconsistencies among the findings of previous studies that might be due to contextual variations, and the limitations with the heuristic model as it was developed in the Western (Canadian Anglophone students learning French as a second language) context where little is known about its effectiveness in the other non-western contexts such as Ethiopian EFL context. In addition, the scarcity of studies about EFL students' WTC in the Ethiopian educational context, despite the crucial importance of L2 learners' WTC, has also urged the need for the conception of the current study. The current study, therefore, aimed to explore EFL students' WTC and the factors underlying it in the Ethiopian higher education context based on MacIntyre et al.'s (1998) heuristic model.

Objectives of the Study

As already mentioned, the current study aimed to explore first-year undergraduate EFL students' willingness to communicate (WTC) orally and the factors associated with it in oral communicative English classes in three selected public universities in Ethiopia. To this end, it focused on answering the following specific research questions.

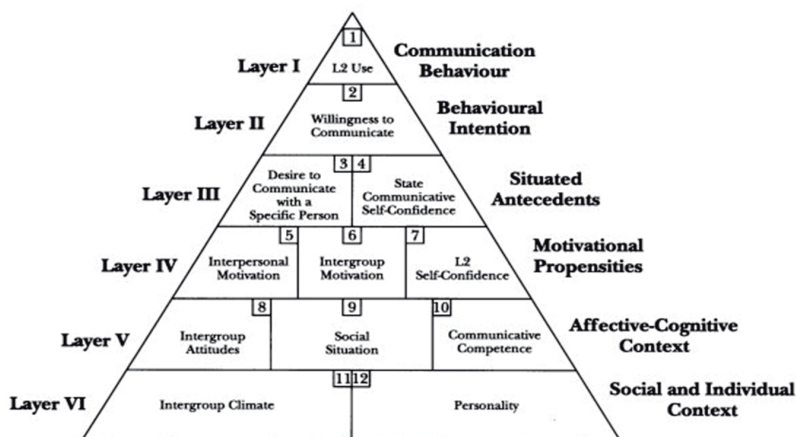
1. What is the current state (tendency) of first-year EFL students' willingness to communicate orally in oral communicative English classes in the three public universities?
2. What factors contribute to the target students' current state of willingness to communicate orally in oral communicative English classes in the three public universities?

Literature Review

Willingness to communicate (WTC) is a relatively new construct in the field of second language acquisition (SLA) (MacIntyre et al., 1998). It is an ID (individual difference) variable that attempts to account for the reason why some students avoid communication, especially oral communications, in a second/foreign language learning while they have the opportunity to practice it (MacIntyre et al., 1998). The pioneering figures in the area MacIntyre et al. (1998, p. 547), define it as "a readiness to enter into discourse at a particular time with a specific person or persons using a L2". Building on (MacIntyre et al., 1998) definition Kang (2005) elaborates L2 WTC as an "individual's volitional inclination toward actively engaging in the act of communication in a specific situation, which can vary according to interlocutor(s), topic, and conversational context, among other potential situational variables" (p. 291). Currently, a second/foreign language learners' WTC is in general viewed as "the degree to which an individual is disposed toward talking, given the choice to speak or not to speak (Ayers-Glassey & MacIntyre, 2019).

MacIntyre et al. (1998) developed a general and comprehensive heuristic model to describe, explain and predict L2 learners' WTC. The model incorporates a range of linguistic, social, communicative, psychological and other potential variables that might influence L2 learners' WTC. It, in general, consists of six layers divided into two groups: the immediate state-level situational variables and the distal trait-level enduring variables as depicted in Figure 1.

Figure 1: Macintyre et al.'s (1998) Situational Heuristic Model



The first three layers of the model (I – III) refer to the immediate situation-specific or transient variables. They include such variables as desire to speak to a specific person, knowledge of the topic, etc., and depend on the specific context in which a person functions at a given time. The next three layers (IV-VI) discuss those distal variables with enduring influence on learners' L2 WTC and include interpersonal relations, learners' personalities, etc. They represent relatively stable, long-term properties of the environment or persons that apply to almost any situation.

Following the introduction of Macintyre et al.'s (1998) appealing and comprehensive heuristic model, several studies were conducted by different researchers in different areas mostly in the Western and Asian contexts with the intention of examining the comprehensiveness of the model in addressing the issue of L2 learners' WTC in different cultural settings, and at the same time to identify additional culture-specific variables, if any. The studies identified several factors associated with the respective study area L2 learners' WTC. The findings are not, however, consistent. For instance, some of the studies conducted by Cetinkaya (2005), Kim (2004), MacIntyre and Baker (2003), MacIntyre et al. (2001), Yashima (2002) and Yashima et al. (2004) identified communication anxiety and self-perceived communicative competence as the prominent predictors of ESL/EFL students' WTC.

Likewise, studies by Dörnyei and Kormos (2000), Hashimoto (2002), Lahuerta (2014) and MacIntyre et al. (2001) identified motivation and attitudes as the most influencing factors of the students' WTC. Among the focus of motivation are found such variables as the effect of integrative motivation (Hashimoto, 2002; Peng, 2007), attitude (Yashima, 2002; Yashima et al., 2004), motivational intensity (MacIntyre & Legatto, 2011; Pattapong, 2010; Peng, 2014; Peng & Woodrow, 2010) and language learning orientations (Zarrinabadi & Abdi, 2011). Moreover, the studies by Cameron (2013), Cetinkaya (2005), Elwood (2011), Fallah (2014), Peng (2007) and Fu et al. (2012) identified that personality is the most influencing factor of L2 learners' WTC.

On the other hand, the studies conducted by Baghaei et al. (2012), Barjesteh et al. (2012), Cao and Philp (2006), Mystkowska-Wiertelak and Pawlak (2014), Riasati (2012) and Riazi and Riasati (2008) concluded that the contextual/environmental factors such as group size, student cohesion, topic familiarity, task type and teacher support are the most influencing factors of students' WTC. Kang (2005) and Zarrinabadi (2014) specifically emphasized teachers' crucial role to create a supportive environment for students to be willing to participate in class and negotiate meaning. Familiar topics and manageable task types are also mentioned among the most influential contextual factors that may facilitate or debilitate the learners' WTC (Kang, 2005; MacIntyre & Legatto, 2011; Wen & Clément, 2003; Zarrinabadi, 2014).

The analysis of the results of the previous studies and the review of related literature, in general, indicates that there are divergences among the studies concerning the factors influencing EFL students' WTC in oral communication. While some of the studies (Cao, 2009; Cetinkaya, 2005; Hashimoto, 2002; Kim, 2004; Lahuerta, 2014; Liu, 2005; Liu & Jackson, 2009; Peng, 2014; Yashima et al., 2004) indicate that the trait-level individual factors such as self-confidence, motivation, personality, attitude, and the like are the most influencing factors of students' WTC, other studies such as Bernales (2016), Cao and Philp (2006), Kang (2005), Léger and Storch (2009) and Suksawas (2011) underscore the contextual/situational variables such as classroom environment, social and cultural orientation, L1 reliance and the like as the most influencing factors of L2 learners' WTC. These inconsistencies together with other factors urge the need to carry out further studies in little/none explored areas such as Ethiopia.

Materials and Methods

Research Design

The current study primarily followed the quantitative research approach and combined the descriptive and correlational research designs. The descriptive design was used to describe the current state (tendency) of EFL students' WTC while the correlational design was used to explore the relationships between the factors (self-

confidence, motivation, personality, language learning orientation, and classroom environment) and the students' WTC. In addition, the qualitative (interviews) data were also used to triangulate the results obtained through the quantitative data.

Participants and Study Setting

A sample of 450 first-year undergraduate EFL students from three public universities in Ethiopia (Werabe, Wachemo and Welkite Universities) taking oral communicative English courses were selected proportionally using a random sampling technique. Of the 450 students, 243 (54%) students were male while the remaining 207 (46%) were female. The participants' age ranges from 18 to 22. In addition, a sample of fifteen students was again selected randomly from the same sample for the qualitative data collected through interviews. Table 1 presents a summary of the participants' demographic data, the setting and context of the study.

Table 1. Participants' Demographic data, Setting and Context of the study

ParticipantsFirst-year EFL students of three public universities in Ethiopia			
Gender	Male	243	54%
	Female	207	46%
	Total	450	100%
Setting	Werabe University, Wachemo University and Welkite University		
Context	Oral Communicative English Classes		

Instruments

Two types of questionnaires, WTC questionnaire and Factor questionnaires, were adapted from different noted researchers in the area. Seliger and Shohamy (1989) underscore the advantage of adapting/adopting well-established (ready-made) instruments over developing a new one, indicating that their validity and reliability are already tested and confirmed through different studies and by different researchers. Similarly, Krosnick and Presser (2010) also strongly advise researchers to review questionnaire items from earlier surveys before writing their own. According to these scholars, consulting previous surveys instead of starting from scratch is essentially helpful to increase the effectiveness and efficiency of the new survey scale to be developed.

Accordingly, in the current study, the WTC questionnaire was thus adapted from MacIntyre et al. (2001) and Pattapong (2010) while the factor questionnaires were adapted from different distinguished researchers such as McCroskey and McCroskey (2013) and Khatib and Nourzadeh (2015) –Self-Perceived Communicative Competence–, Ryan (2009) –Communication Anxiety, Language Learning orientation and Desire to Learn English–, Yashima (2002) –Attitude toward Learning English and Motivational Intensity–, Goldberg (1992) –Personality: Introversion/Extroversion– and Mystkowska-Wiertelak and Pawlak (2016) –Classroom Environment: student cohesion, teacher support, topic familiarity and task orientation–. The WTC questionnaire was a five-point (never willing to always willing) Likert-type scale. Similarly, the factors questionnaires were also five-point (strongly disagree to strongly agree) Likert-type scales. The questionnaires consisted of the student-participants' background information and the items of each scale. Table 2 presents details of each research instrument together with the pilot-tested internal consistency (Cronbach's Alpha) of each scale.

Table 2 . Details of Research Instruments

	Variables	Scales	No. of Items	Internal Consistency	Adapted from
1	Students' WTC	Willingness to Communicate (WTC)	19	0.82	McCroskey and Richmond (1991) and Pattapong (2010)
2	Factors Associated with the students' WTC	Self-Confidence (Self-Perceived Communicative Competence: SPCC, Communication Anxiety: CA)	10	0.89	McCroskey and McCroskey and Khatib and Nourzadeh (2015)
			7	0.87	Ryan (2009)
		Motivation (Desire to Learn English, Attitude toward Learning English, Motivational Intensity)	15	0.81	Ryan (2009)
		Personality (Introversion/Extroversion)	9	0,86	Goldberg (1992)
		Language Learning Orientations (Job/Career, Travel, Knowledge)	9	0,78	Ryan (2009)
		Classroom Environment (Task orientation, Topic Familiarity, Student Cohesion, Teacher Support)	11	0.83	Mystkowska-Wiertelak and Pawlak (2016)
		Total Items	80		

In addition to the questionnaires, semi-structured interviews were also used to collect qualitative data to triangulate the results from the questionnaire's data. A sample of 15 students was thus randomly selected from the respondents of the questionnaire and used for the qualitative data. The semi-structured interview questions were prepared based on and in line with the concepts that each item of the questionnaires refers to.

Data Analysis

Both descriptive and inferential statistical techniques were used to analyze the quantitative data from the questionnaires. The descriptive analysis (mean, standard deviation, minimum, maximum) was used to explore and describe the variables of the study while the inferential statistics (t-test and multiple regression analysis) were used to test differences, measure and predict the relationships between the dependent and independent variables of the study. In addition, the qualitative data from the interviews were analyzed qualitatively using thematic analysis.

Results and Findings

Students' Level of WTC

The first research question explored the extent to which EFL students were willing to communicate orally in communicative English classes. The data for the WTC questionnaire were analyzed based on Jackson and Liu (2008) full-score strategy as there is no universally agreed upon or well-established norm in the literature (published research) about the computation and interpretation of the level of L2 learners' WTC scale data (Peng, 2014). According to Jackson and Liu (2008), comparing the mean of the observed scores with that of the full score is a good strategy for computing and interpreting the summated score of univariate data such as the WTC scale. Accordingly, the researchers suggest, as a rule of thumb, interpreting the scores more than 80% of the full score as high WTC, within the range of 60% to 80% as moderate, and below 60% as low WTC.

Thus, following Jackson and Liu (2008) full score practice, the minimum and maximum full scores of the WTC scale of the current study were 19 and 95 respectively with an average of 57. Table 3 below shows the descriptive statistics of the summated score.

Table 3. Descriptive Statistics of the Summated score (N=450)

Scale	Type	Minimum	Maximum	Mean	Std. Dev.
WTC Scale	Observed Score	27.00	81.00	48.13	11.21
	Full Score	19.00	95.00	57.00	

The observed scores, however, ranged between 27 and 81 including the two extremes with a mean of 48.13. As can be seen clearly, the observed mean (48.13) was below 60% (57) of the full score. According to Jackson and Liu (2008), the mean of the summated score with more than 80% of the full score was regarded as high, between the range of 60% and 80% as moderate, and below 60% as low. Results of analysis of the data however revealed that the average of the observed score (48.13, 50.6%) is far below the lowest level of moderate WTC (57, 60% of the full score). It can therefore be concluded that EFL students had in general a low level of willingness to communicate orally in oral communicative English classes.

The difference between the observed mean and the mean of the full score was also further examined to see whether the difference was statistically significant or not. Table 4 below shows the output of a one-sample t-test analysis.

Before running the t-test analysis, however, Shapiro-Wilk's normality test (Ho, 2014) was applied to see the distribution of the summated-score data as the t-test requires an assumption of a relatively normal distribution of the data. The Shapiro-Wilk test assumes normality when the significance level is greater than 0.05. Thus, as it can be seen from the table below, the distribution of the summated score of the WTC scale data is relatively normal as the Shapiro-Wilk test sig. is greater than 0.05 (sig. 0.635 > 0.05).

Table 4. Normality Test of the Summated score (N=450)

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Summated score of WTC scale	0.053	450	0.240*	0.990	450	0.635

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Following the normality test, the analysis of the one-sample t-test result of the WTC summated score indicates that the difference was statistically significant at $t(df = 449) = -11.446, p = 0.000$ as it can be seen from Table 5 below. The mean value of

the observed summated score thus reveals that the respondents can in general be described by having a low level of WTC in oral communicative English classes.

Table 5. One-sample t-test Results of the WTC scale (N=450)

Test Value = 57						
					95% Confidence Interval of the Difference	
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Summated Scores of WTC Scale	-11.446	449	.000	-7.24667	-8.4909	-6.0025

The findings from the qualitative (interview) data were also found to support the results of the quantitative (questionnaire) data analysis. Among the fifteen students interviewed, for instance, thirteen of them revealed that they rarely or never make speeches in English, ask their classmate or teacher different questions in English, respond to questions raised by the teacher in English, make discussions with groups in English, and give presentations in English during communicative English classes. Only two students responded saying “sometimes” to the above communicative situations. A student codenamed S13F, for instance, said the following when asked whether she makes speeches in front of the classes with or without notes.

No, I don't. First of all, there is no inviting situation for this. So, we don't most of the time participate voluntarily. We do that if there is a push. But sometimes I do it as it is also mandatory. It is a written text, not from my own oral words. I write it on a note and then deliver it.

Similarly, a student codenamed S3F said the following when asked whether she is willing to ask questions in English in communicative English classes.

Yes, sometimes when it becomes necessary. The point is that there is no tradition of asking and answering in English most of the time. Most of the time, we only hear what the teacher says in class. Then, we go to reading. Otherwise, there is no culture of asking most of the time.

The results and findings from both the quantitative and qualitative data sources in general revealed that the target students had a low level of willingness to communicate orally in oral communicative English classes.

Factors Affecting EFL Students' WTC

The second research question was concerned with identifying the major factors associated with and affecting the students' WTC. Two types of factors affecting the students' WTC were examined: the trait-level, psychological and the state-level, situational factors. The psychological factors embrace such factors as self-confidence as described by self-perceived communicative competence (SPCC) and Communication apprehension (CA); Motivation as described by Desire to learn English (DTE), Attitude toward learning English (ATLE) and Motivational Intensity (MI); Personality as described by introversion and extroversion (IE) and Language learning orientation as described by career/job, knowledge and travel. The situational factors comprise the Classroom Environment (CRE) described by teacher support, student cohesion, topic familiarity and task orientation.

To see the impacts of the psychological and situational factors on the students' WTC, multiple regression analysis (MRA) was employed. Before running the analysis, however, the data were first checked for the assumptions of Multiple Regression Analysis (MRA). MRA requires the assumptions that the data need to be relatively normally distributed; there should be a linear relationship between the dependent and independent variables; there should also be no multicollinearity (instability of regression coefficients); and no heteroscedasticity (the variance of the residuals must be constant across the predicted values) (Tabachnick & Fidell, 2013). Table 6 below presents a summary of the MRA assumptions.

Table 6. Summary of the MRA Assumptions

Assumptions	Measuring Unit	Self-confidence Motivation					PER	LLO	CRE
		SPCC	CA	DTE	ALTE	MI			
Normality	¹ Skewness and Kurtosis between -2 and +2	0.125	0.437	-0.436	-0.58	0.106	-0.07	-0.428	-0.039
		-0.467	-0.61	-0.286	0.107	-0.509	-0.079	-0.695	-0.146
Multicollinearity	² Tolerance > 0.1 or VIF <10	.622	.897	.590	.554	.930	.838	.629	.737
		1.607	1.115	1.694	1.805	1.075	1.193	1.591	1.357
Heteroscedasticity	Q-Q plots	The Q-Q plots for each independent variable are attached in the appendix							
Linearity	(Ho, 2014)								

1= Kunnan (1998); 2= Field (2014)

As can be seen from the above table, none of the assumptions was violated so the MRA analysis was carried out. The result of the MRA analysis was presented in Table 7 below.

Table 7. Factors Associated with and Affecting EFL Students' WTC (N=450)

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.883a	.781	.768	3.77014

a. Predictors: (Constant), CRE, CA, MI, PER, LLO, DTE, SPCC, ATLE

b. Dependent Variable: WTC

As it can be seen from the model summary table, there is a strong association ($R^2 = 0.781$) between the predictors or independent variables (SPCC, CA, ATLE, DTE, MI, LLO, PER, CRE) and the dependent variable, EFL students' WTC in communicative English classes. The R^2 value gives the proportion of variance in the dependent variable accounted for by the set of independent variables that are included in the model. The model thus indicated that 78.1% of the changes in the EFL students' WTC are associated with the changes in the students' Self-confidence as described by self-perceived communicative confidence (SPCC) and communication or language anxiety (CA); Motivation as described by attitude towards learning English (ATLE), desire to learn English (DTE) and motivational intensity (MI); Personality as described by introversion and extroversion; Language learning orientation as described by career/job, knowledge and travel and Classroom environment (CRE) as described by teachers' feedback, student cohesion, task orientation and topic familiarity.

Both the psychological and situational factors were therefore found to be directly associated with and affecting EFL students' WTC in the communicative English classes. The personality-based psychological factors include self-confidence, motivation, personality, and language learning orientation while the situational factors are composed of the classroom environments such as student cohesion, teacher's feedback, topic familiarity, and task orientation.

The result of the MRA analysis was also further subjected to the statistical significance test to see whether the association between the dependent and independent variables was statistically significant or not. The ANOVA table below shows the statistical significance of the impacts of the independent variables (SPCC, CA, DTE, ATLE, MI, PER, LLO, and CRE) on the dependent variable, WTC.

Table 8. Statistical Significance of the Impacts

ANOVA ^a						
Model	Sum of Squares		df	Mean Square	F	Sig.
1	Regression	1983.632	7	283.376	2.969	.001 ^b
	Residual	863.743	56	95.456		
	Total	2847.375	64			

a. Dependent Variable: WTC

b. Predictors: (Constant), SPCC, CA, ATLE, DTE, MI, PER, LLO, CRE

The ANOVA table displayed above shows the statistical significance of the model in general. Accordingly, the model is found to be statistically significant at $F(2.969) = 283.376$, $p = 0.001$. This indicates that the independent variables (SPCC, CA, ATLE, DTE, MI, PER, LLO, CRE) play a significant role in predicting or explaining the dependent variable, EFL students WTC in communicative English classes.

The findings obtained from the analysis of the qualitative (interview) data were also found to be supporting the results obtained from the analysis of the quantitative (questionnaire) data. When interviewed about their self-confidence, thirteen of the fifteen students indicated that they rarely participate in pair or group discussions, ask their peers or teachers different questions, comment on peers' and teachers' ideas, and make oral presentations due to mainly fear, vocabulary shortage and lack of confidence. This may indicate that students had problems with self-confidence when they had the opportunities to participate in oral communicative situations. This ultimately leads to the students' low level of WTC, revealing the impact of their self-confidence as described by low self-perceived communicative confidence and high communication anxiety.

For instance, when asked if he comments on peers' or teachers' ideas in English, a student-respondent codenamed S10M said the following.

No, I don't remember this kind of things. I have never commented. There was no opportunity to do that even. There was no inviting situation as well. Why? First, because I do not have the ability, I cannot do that. I do not comment before the class. But we comment outside the class in Amharic.

Similar to the self-perceived communicative confidence, the students' responses to the communication anxiety questions such as feeling fear/relaxed, uneasiness/discomfort or comfort while speaking and feeling nervous or at ease when thinking of speaking were mostly feeling fear, uneasiness or discomfort while speaking and being nervous when thinking of speaking.

A student-respondent codenamed S7F, for instance, said the following when asked about feeling nervousness when speaking or trying to speak.

Yes, there is a feeling of nervousness. Even, I lose the words I already knew when there is tension. I couldn't remember the word I knew. I rather prefer to write than to speak. There has never been attention to English starting from elementary school. I have been educated in Amharic. So, I feel nervousness. As much as I can, I try to memorize.

In addition to self-confidence, the students were also asked about their motivations to communicate orally in communicative English classes. They were asked such questions as their feelings towards the English language, whether they give special attention to their speaking skills, their wishes about being a good speaker, what to do if English were not given at schools, whether they keep on studying English after graduation and the like.

Despite wishing to be a good speaker of the language, the responses of almost all (fourteen of the fifteen) students, however, indicate that they do not like to pay attention to their speaking skills. Similarly, when asked what to do if English was not given at schools, the responses were 'nothing'. Their feelings toward the English language also appear to be not good as some are not interested in it; others perceive it as a difficult subject to study; and yet, a significant number of other respondents dislike the oral practices that the language requires.

A student-respondent codenamed S9M, for instance, said the following when asked if he gives special attention to speaking skills.

Most of the time we give attention to the writing skill. We spend much time on reading and writing. Not that much for the speaking skill. But I never thought of giving special attention to the speaking skill. So, I don't give special attention to it. I know that speaking is important.

Similar responses were also obtained from the analysis of the students' interviews for the other factors. The responses indicate that personality (being introverted or extroverted), language learning orientations (the purpose for which the students need to learn English) and the classroom environment (such as teacher support, student cohesion, task orientation and topic familiarity) had also strong impacts on the students' willingness to communicate orally in communicative English classes.

The analyses of both the quantitative (questionnaire) and qualitative (interview) data obtained from the student-respondents, in general, revealed that several factors affect the students' willingness to communicate orally in communicative English classes. According to their responses, the lack of self-confidence to stand in front of the class and to speak in English in the presence of the teacher was one of the major factors affecting their WTC in communicative English classes. In addition, the fear of making mistakes and being nervous while trying to speak in English had also a strong

impact on their willingness to participate orally in communicative English classes. Their personality (being introverted or extroverted), the motivation they had to learn English, and the attitude they had toward the English language were also among the influencing factors of their WTC. The type of oral activities designed to be practiced in the class coupled with their level of familiarity was also mentioned by the students as the other factor impacting their WTC in communicative English classes.

Discussions

The current study was undertaken with the prime objectives of exploring first-year EFL students' willingness to communicate orally in communicative English classes in Ethiopian higher education context and the factors underlying it. Accordingly, the results and findings of the analysis of the quantitative and qualitative data revealed that the target students had generally a low level of WTC in oral communicative English classes and their WTC was affected by several factors such as self-confidence, motivation, personality, language learning orientation and classroom environments. The results and the findings are further discussed in detail as follows.

Students' Level of WTC

As already mentioned, the target students' level of WTC in oral communicative English classes was found to be low in the current study. This indicates that the target students are less interested and less willing to participate in oral communicative English classes. It also indicates that they have little or no intention (desire) to initiate and make use of oral communication opportunities to improve their speaking skills in their communicative English classes.

The current finding is consistent with the findings of Kim (2004), Bergil (2016) and Peng Peng (2007). Kim (2004), who carried out a study to examine Korean students' WTC, came up with a finding and concluded that the Korean students had a low level of WTC in English language practices. In addition, Bergil (2016), in his study carried out on preparatory class students studying at Amasya University, Turkey, concluded that the university students had a low WTC in English despite its diverse effects on their overall speaking performances. Similar findings were also reported by Peng (2007) in her study of the Chinese students' L2 WTC.

Despite the similarities, the current result is also different from the findings of the studies by Bukhari et al. (2015), Karnchanachari (2019) and Liu and Jackson (2009). Bukhari et al. (2015), for instance, found a relatively high level of students' WTC in a quantitative study conducted on Pakistani undergraduate students' perception of their

willingness to initiate communication in English. Similarly, Karnchanachari (2019) also reported a relatively high level of students WTC among the Thai students in the international program, similar to the finding by Liu and Jackson (2009) where more than half of the students were reported to have positive attitudes toward speaking with others and more willing to communicate in English classes. The study by Karnchanachari (2019) on the would-be teachers of international students at Yuga University, Russia, has also shown that many learners were willing to speak English because they feel that it is beneficial for them.

The discrepancies observed in the above studies might be reasonably associated with the different contexts in which English is used. In some contexts, such as Thai and Pakistani, for instance, English is used as a second language parallel to their mother tongue so that people tend to use the language more often than in areas it is used as a foreign language (Rao, 1996). On the other hand, where English is used as a foreign language in, for instance, the Chinese and Korean contexts (Liu, 2002) including Ethiopia, and limited to only academic settings, the language is used much less frequently and as a result people tend to exhibit less interest or desire to communicate in the language.

In addition, the Ethiopian culture of classroom teaching-learning situations favors more of teacher-centeredness and emphasizes high attention to mental activity rather than verbal participation or activities of the students. The Western classroom contexts however tend to be student-centered and communication-oriented (Rao, 1996) and accentuates not only the academic achievement but also the social communicative competence as well (Liu, 2002). This may, therefore, be one of the potential reasons for the inconsistency of the finding of the current study with some of the previous studies.

Factors Affecting Students' Level of WTC

Concerning the factors affecting the target students' WTC, the findings of the study revealed that the students' WTC was affected by several individual (personality-based) and classroom (situational) factors. The factors were Self-confidence, Motivation, Personality, Language Learning Orientation and Classroom Environments.

Self-confidence constitutes self-perceived communicative confidence (SPCC) and communication anxiety (CA) (MacIntyre et al., 1998). This finding is generally consistent with previous findings such as those of Hashimoto (2002), Bektas-Cetinkaya (2009) and Yu (2008). The findings indicate that students who have low self-perception of their abilities to communicate in English experience a high degree of anxiety and hence they become less self-confident, leading them to exhibit a low level of willingness to communicate orally in communicative English classes. This idea was also reported by Nagy and Nikolov (2007) who indicated that the most common

reason for learners' unwillingness to speak in class was their low self-confidence to speak before other students in the class and having more anxiety when thinking to do so. As a result, the students prefer to remain silent than trying to get involved in oral communicative opportunities.

The other factor identified as affecting the students' WTC was motivation. Motivation was described by three sub-factors: the desire to learn English, attitude towards learning English and motivational intensity. This finding corresponds to the findings of the studies by Cameron (2020); Ghonsooly et al. (2012), Lahuerta (2014) and Tuyen and Loan (2019). Cameron (2020), for instance, claims that L2 learners' WTC is significantly affected by the attitude the learners have toward the target language. Ghonsooly et al. (2012), Lahuerta (2014) and Tuyen and Loan (2019) also claim that a higher level of motivational intensity and desire to learn English facilitate more willingness among the learners to interact.

Personality (Introversion/Extroversion) was the other factor identified as affecting the students' WTC in the present study. The finding indicates that while extroverted or outgoing students are more willing to participate in speaking activities, introverted or shy students are, however, affected by their shyness. As a result, they exhibit a low willingness to participate in oral communicative activities in the classroom. This finding is consistent with the findings of Cetinkaya (2005), Elwood (2011), McCroskey and Richmond (1990) and MacIntyre et al. (1998) who claim that EFL students with high personality traits of sociability, flexibility, extroversion and confidence exhibit a higher willingness to communicate than the students with a lower level of these traits in communicating orally in the target language.

Language learning orientation (LLO) is again the other variable identified as affecting the students' WTC in this study. According to the finding, the students' LLO, the purpose for which they are learning the language (job/career, travel, knowledge), significantly affects their WTC. This finding is in accordance with the findings of the studies by MacIntyre et al. (2001) and Waluyo (2020) that identified a positive correlation between the students' five orientations of language learning (travel, job-related, friendship with Francophones, personal knowledge, and school achievement) and their WTC in learning French as a second language in an immersion program.

The last factor identified as affecting the students' WTC was the contextual factor, the Classroom Environment. In addition to the psychological factors, as discussed above, the students' WTC was also affected by contextual/situational factors such as the classroom environments (CRE). In the present study, the CRE includes teachers' support, student cohesion, topic familiarity and task orientation. The study identified that teachers support, "the extent to which the teacher helps, supports, trusts, befriends, and is interested in the students" (Fatemi et al., 2016, p. 7) significantly affects the students' WTC. This is consistent with the finding of MacIntyre and Legatto (2011)

which indicates that teachers' support has the potential of affecting (increasing or decreasing) the students' WTC at any time.

Similarly, student cohesion, the intimacy or relationship that exists between and among peers or groups of students and the extent to which the students know, help, and support each other (Dorman et al., 2006) is also found affecting the students' WTC in this study. This means that while positive cohesion among the students fosters the students' WTC in the target language, lack of cohesion results in negative consequences lowering their WTC. This finding is consistent with the finding of Doe (2014) who states that "Language students may be less inclined to communicate when they lack a sense of affiliation with their peers" (p. 277). It was also similar to the findings of Wen and Clément (2003) who claim that students avoid communication in L2 when they feel that participation in L2 involves a potential threat of negative evaluation by their peers, groups, the whole classroom as well as their teachers.

The third contextual variable identified as affecting the students' WTC was topic familiarity: the specific point on which the L2 learners are interested or not interested to talk (Aubrey, 2011). Aubrey (2011) argues that topics that are interesting and personally relevant to EFL students enhance their WTC in oral communication significantly while topics that are not interesting may not encourage the students to participate. Studies conducted by several researchers (Cao, 2011; Riasati, 2012; Yashima et al., 2016) indicated that an interesting, familiar, useful and comprehensible topic increases L2 learners' WTC and hence keeps on their participation in conversations.

The last contextual variable identified as affecting the students' WTC was task orientation: the degree of emphasis or attention the L2 learners give to complete language-based activities and solve problems (Dorman et al., 2006). Aubrey (2011) states that while relevant and engaging speaking tasks encourage students to speak (WTC), irrelevant and non-engaging tasks discourage students to participate in speaking tasks resulting in poor WTC. Similarly, the findings of the studies by Cao (2009), MacIntyre and Legatto (2011) and Suksawas (2011) indicate that interesting, meaningful and communication-oriented tasks with a reasonable level of difficulty facilitate L2 learners WTC in EFL contexts.

Generally, as discussed in detail in the background section, the current study was framed within the framework of Macintyre et al.'s (1998) heuristic model. Accordingly, the results and findings of the current study confirm that some of the factors (both the trait and state-level factors) that were proposed by the heuristic model are able to describe and explain EFL students' WTC in the Ethiopian higher education context.

Implications

The findings of the present study indicate that EFL students' WTC is a crucial concept that has a paramount contribution to the successful development of oral communicative skills in ESL/EFL. As Swain (2000) points out that "It is language use [that] mediate[s] language learning" (p. 97), students need to have the willingness to use that language and participate in oral communicative opportunities to improve their speaking skills. The findings thus imply that both students and particularly teachers need to pay special attention to the concept of WTC as it is an essential ingredient in the teaching-acquisition of oral communicative skills. The prominent figures in the area, MacIntyre et al. (1998, p. 547), even argue that "The ultimate goal of the learning process should be to engender in language students the willingness to seek out communication opportunities and the willingness actually to communicate in them". EFL teachers need to, therefore, be more sensitive about the crucial roles they play in creating a more and attractive communicative atmosphere for the students in EFL classes and make them more interested and willing to initiate and maintain oral communicative opportunities by getting them actively engaged in the oral communicative activities.

To do this, as the findings indicate, teachers need to be aware of both the psychological and contextual (situational) factors that affect the students' WTC. As indicated by the findings, the students' WTC is the function of both the personality-based and contextual (situational) factors such as the students' self-confidence, motivation, personality, classroom environments and the like. It is therefore necessary for EFL teachers to pay special attention to the students' WTC and foster the enabling factors while circumventing the impeding ones in EFL oral communicative classes. In general, as students' WTC is identified as a predictor of speaking performance, EFL teachers need to identify all the possible ways through which the students' degree of WTC can be enhanced.

Conclusion

The findings of the current study revealed that EFL students had generally a low level of WTC - the desire or intention to initiate and make use of oral communication (speaking) opportunities. The students' WTC was found to be low as a result of the function of both the psychological and contextual/situational factors operating in combination. The psychological factors include self-confidence, motivation, personality and language learning orientations. The contextual or situational factors include those factors that exist in the classroom environment and influence the learners' degree of willingness to communicate orally. These include teacher support, students' cohesion, topic familiarity and task orientation. As understood from the students' interviews, self-confidence, personality, language learning orientations and teachers' support were found to be the most influencing factors of the target students' WTC.

The current study is an initial attempt of examining Ethiopian higher education EFL students' WTC in oral communicative English classes. It, therefore, contributes to the conceptualization of the WTC construct in the Ethiopian EFL setting and inform language educators about the diverse causes of the Ethiopian EFL students' WTC. Finally, it is important to note that, despite its contributions, the current study was delimited to selected public university settings in Ethiopia. Hence, as the concept is so crucial in EFL, it needs to be studied from other contexts such as primary and secondary schools and private institutions to have a broader understanding of Ethiopian EFL students' WTC.

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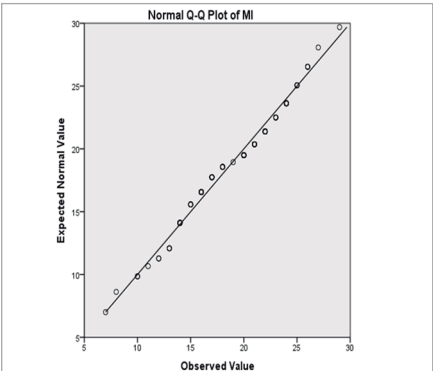
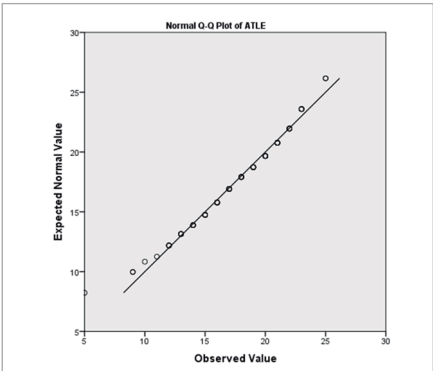
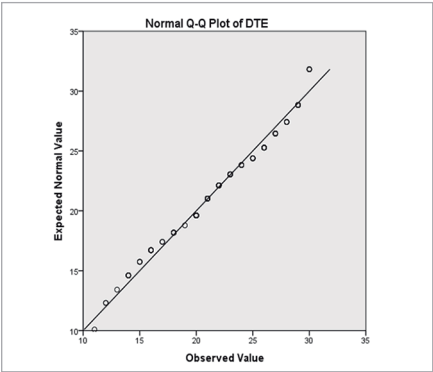
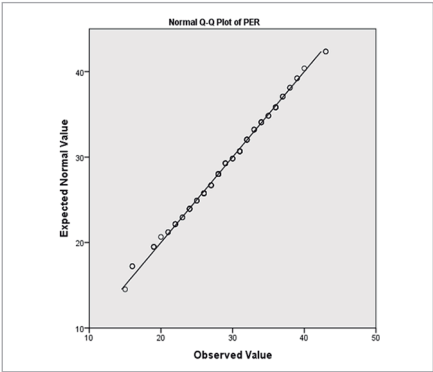
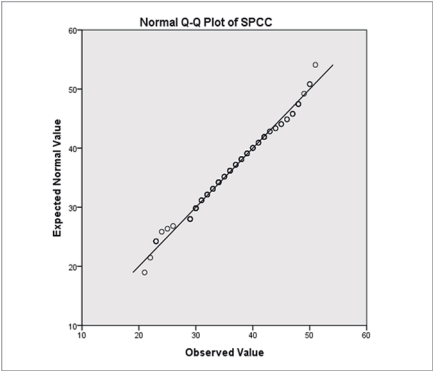
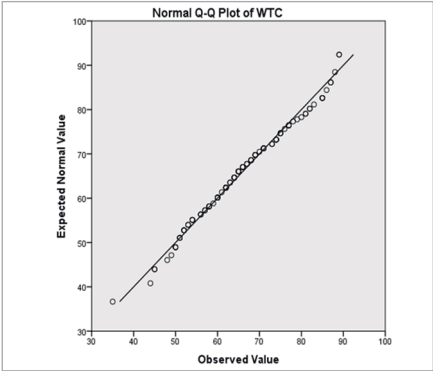
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Appendix

Heteroscedasticity Assumptions



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L2 Learners' Perspectives on Data-Driven Learning for Identifying Properties of Near-Synonymous Words: A Convergent Mixed- Methods Study

Perspectivas de los estudiantes de L2
sobre el aprendizaje basado en datos
para identificar propiedades de palabras
casi sinónimas: un estudio convergente
de métodos mixtos

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Abstract

This study examines second language (L2) learners' perspectives regarding the affordances and challenges of using the Data-Driven Learning (DDL) to identify the properties of near-synonymous words. Employing a convergent mixed-method design, this study deciphers the perceptions of 40 undergraduate L2 learners majoring in English language teaching. After an initial identification of the learners' vocabulary levels, the experienced benefits and barriers associated with carrying out experiential tasks were elicited via questionnaire data and open-ended survey questions. Descriptive statistics, including means and standard deviations, were revealed and thematic analyses of the responses to the survey questions were documented. The results indicate that completing tasks through the corpus was found to enhance their knowledge of collocations. Integrating corpus tasks into YouGlish (an online practice tool for authentic spoken English in context) was found to increase their awareness of the contextual properties of words. The identification of condensed language exposure, lexical inference, and elicitation of flexible and context-specific patterns were reported to be beneficial. Acknowledging these benefits, gaining familiarity with the corpus interface, encountering limited access to search queries, and analyzing large amounts of concordance lines posed challenges for learners. This research presents the implementation of the DDL supported by experiential learning, contextually rich input, and inductive reasoning tasks in vocabulary learning by further offering instructional implications in L2 contexts.

Keywords: data-driven learning, vocabulary learning, near-synonymous words, L2 learners, learner perspectives.

Resumen

Este estudio examina las perspectivas de los estudiantes de L2 con respecto a las posibilidades y desafíos del uso del aprendizaje basado en datos (DDL) para identificar las propiedades de palabras casi sinónimas. Empleando un diseño de método mixto convergente, este estudio descifra las percepciones de 40 estudiantes universitarios de L2 con especialización en enseñanza del idioma inglés. Después de una identificación inicial de los niveles de vocabulario de los estudiantes, los beneficios experimentados y las barreras asociadas con la realización de tareas experienciales se obtuvieron a través de datos de cuestionarios y preguntas de encuesta abiertas. Se revelaron estadísticas descriptivas, incluidas medias y desviaciones estándar, y se documentaron análisis temáticos de las respuestas a las preguntas de la encuesta. Los resultados indican que completar tareas a través del corpus mejora su conocimiento de las colocaciones y aumenta su conciencia de las propiedades contextuales de las palabras con la intersección del corpus y el YouGlish. Se informó que la identificación de la exposición al lenguaje condensado, la inferencia léxica y la obtención de patrones flexibles y específicos del contexto eran beneficiosas. Reconocer estos beneficios, familiarizarse con la interfaz del corpus, encontrar acceso limitado a consultas de búsqueda y analizar grandes cantidades de líneas de concordancia planteó desafíos para los estudiantes. Esta investigación avanza en la implementación de DDL respaldada por

el aprendizaje por descubrimiento, aportes contextualmente ricos y tareas de razonamiento inductivo en el aprendizaje de vocabulario al ofrecer implicaciones instructivas en contextos de L2.

Palabras clave: aprendizaje basado en datos, aprendizaje de vocabulario, palabras casi sinónimas, estudiantes de L2, perspectivas del estudiante.

Resumo

Este estudo examina as perspectivas dos alunos de L2 em relação às possibilidades e desafios do uso da aprendizagem baseada em dados (DDL) para identificar as propriedades de palavras quase sinônimas. Utilizando um desenho de método misto convergente, este estudo analisa as percepções de 40 estudantes universitários de L2, com especialização em ensino de língua inglesa. Após uma identificação inicial dos níveis de vocabulário dos alunos, os benefícios e as barreiras experimentadas associados à realização de tarefas experienciais foram obtidos por meio de dados de questionários e perguntas abertas de pesquisa. Foram reveladas estatísticas descritivas, incluindo médias e desvios-padrão, e documentadas análises temáticas das respostas às perguntas da pesquisa. Os resultados indicam que a realização de tarefas por meio do corpus melhora o conhecimento das colocações e aumenta a conscientização sobre as propriedades contextuais das palavras com a interseção do corpus e do YouGlish. Foi relatado que a identificação da exposição à linguagem condensada, a inferência lexical e a obtenção de padrões flexíveis e específicos de contexto foram benefícios observados. Reconhecer esses benefícios, familiarizar-se com a interface do corpus, encontrar acesso limitado a consultas de pesquisa e analisar grandes quantidades de linhas de concordância apresentaram desafios para os alunos. Esta pesquisa avança na implementação de DDL apoiada pela aprendizagem por descoberta, com entradas contextualmente ricas e tarefas de raciocínio indutivo no aprendizado de vocabulário, oferecendo implicações instrutivas em contextos de L2.

Palavras-chave: aprendizagem baseada em dados, aprendizado de vocabulário, palavras quase sinônimas, estudantes de L2, perspectivas dos estudantes

Recent developments in second language (L2) acquisition research have yielded growing interest in vocabulary teaching. Near-synonyms have meaning differences in terms of their denotational variations (i.e., propositional, fuzzy, and other peripheral aspects), stylistic variations (i.e., dialect and register), expressive variations (i.e., emotive and attitudinal aspects), and structural variations (i.e., collocational, selectional, and syntactic variations) (Cruse, 1986). To date, several studies have shown that existing bilingual dictionaries are not always helpful in conveying subtle differences among near-synonyms, as they highlight denotation rather than usage (Xiao & McEnery, 2006).

Such features of near-synonyms pose a stumbling block to L2 learners' lexical choices. The demanding nature of the learning properties of near-synonyms has a significant influence on learners' affective factors and their overall performance in L2 acquisition. It can be difficult even for native speakers to identify the differences between near-synonyms well enough to use them and "Choosing the wrong word can convey an unwanted implication" (Edmonds & Hirst, 2002, p. 108). Near-synonymy inherently affects the structure of lexical knowledge (Edmonds & Hirst, 2002, p. 106), and learners need to observe repeated patterns and meanings to identify differences originating from collocational behavior and semantic prosody (Xiao & McEnery, 2006). Considering these features, figuring out the differences between near-synonyms and making appropriate lexical choices when learning new vocabulary can be a particularly challenging endeavor (Lin & Chung, 2021). L2 learners' mastery of near-synonymous words may be enhanced by providing authentic contexts and integrating corpus tools in L2 learning processes.

To address these challenging aspects, DDL has emerged as a promising pedagogical endeavor that enables access to exploratory activities for the acquisition of vocabulary knowledge. This technique provides space for learners to learn by exploring and analyzing language data from a corpus (Johns, 1986). It also offers pedagogical benefits by introducing new phraseology to young learners (Szudarski, 2019). It also enables learners to engage in authentic concordance lines by promoting their autonomy and awareness to successfully discover pattern regularities (Szudarski, 2022). These tasks serve to help learners overcome different types of vocabulary errors and improve their academic writing quality (Alsehibany & Abdelhalim, 2023).

This learner-centered technique provides space for hands-on practices, along with the discovery of learning experiences. It also provides a platform for the application of critical thinking skills, noticing, gaining awareness about language samples, creating and testing hypotheses, acquaintance with linguistic variation, and data analysis skills (Pérez-Paredes et al., 2019). Previous empirical studies have established the basis and connections between corpus-driven tasks and L2 skill acquisition. Much research has documented learners' corpus use behaviour and their perceptions of the strengths and weaknesses of corpora as a second language writing tool (Yoon & Hirvela, 2004;

Flowerdew, 2010). Examining the effects of integrating corpus and contextualized lexico-grammar in L2 teaching, Liu and Jiang (2009) documented that analyzing concordance data to identify lexico-grammatical usage rules and patterns is the greatest challenge for learner. A meta-analysis revealed that the level of proficiency in L2 and various features of the corpus use (i.e., types of interaction, types of corpora, training, and duration) affect the extent to which corpus use enhances L2 vocabulary acquisition (Lee et al., 2019).

The existing literature on the pedagogical applications of DDL is extensive. An overview of the prevailing discourse regarding the use of corpus tools in enhancing L2 learners' vocabulary acquisition focuses on pedagogical benefits. Previous research has documented a meta-analysis of DDL in English as a Foreign Language (EFL) classroom in the Japanese context and revealed that learners exhibited substantial learning gains for acquiring the properties of lexical items, expanding their repertoires of grammar and formulaic sequences (Mizumoto & Chujo, 2015). Previous seminal research has established that the use of corpora enhances language learning and teaching through authentic language input (Gilquin, 2022; Lei & Liu, 2018). Corpora also expose learners to contextualized language samples and quantitative information (Gilquin, 2022). Learners take on the role of language detectives or researchers, exploring authentic examples of the target language through corpus-based tasks (Geluso & Yamaguchi, 2011). It provides access to contextual analysis of numerous samples of authentic language use (Sevilan, 2023).

Considering these features, previous research has established that students believe DDL is a useful and effective tool in the classroom (Geluso & Yamaguchi, 2014) as it enhances their critical understanding of grammar and discovery learning skills (Liu & Jiang, 2009). DDL tasks serve the potential for learners to establish connections between these patterns and their respective meanings even at lower levels if they are provided with carefully selected patterns presented in a contextually rich format (O'Keeffe, 2023). Such practices enable learners to carry out hands-on concordancing and foster critical reading skills (Yang & Mei, 2024). Accordingly, Leńko-Szymańska (2022) argues that corpus-related pedagogical skills, which entail technical and corpus-analytical skills, should be integrated into language teacher training.

Along with the previously reported pedagogical gains, Boulton (2010) lists the limitations of corpus use in language learning, including a) new material (e.g., keywords in context format), b) technology (e.g., concordancer), and c) learning approaches (e.g., inductive learning). The time-consuming nature of DDL and the difficulty in interpreting the results of corpus investigations have also been highlighted in the literature (Yoon & Hirvela, 2004). The potential of drawing wrong inferences and 'fake discovery' (O'Keeffe, 2023), loaded or insufficient output of the search queries, teachers' lack of knowledge, and awareness of corpus applications in language classes (Gilquin & Granger, 2022) are additional reported limitations of the DDL.

The nature of near-synonymous words poses challenges to L2 learners. Several corpus-based analyses have documented the properties of near-synonymous words in English (Lin & Chung, 2021; Song, 2021). These studies demonstrate that near-synonymous words are not used interchangeably (Edmonds & Hirst, 2002), are not fully intersubstitutable (Song, 2021) and operate in different contexts (Xiao & McEnery, 2006) because of their semantic, syntactic, and pragmatic properties. Although near-synonyms have distinct semantic profiles, dictionaries present them as interchangeable in different contexts, and this presentation may guide L2 learners to assume contextual interchangeability (Alanazi, 2022).

Particular challenges have also been reported in the acquisition of near-synonymous words. Previous research has revealed that L2 learners' inappropriate use of near-synonymous words may stem from several factors including interference of L1, inadequate descriptions of these words in dictionaries, and insufficient instructional focus on the subtle semantic differences among synonyms (Liu, 2018). To date, several studies have shown that existing bilingual dictionaries are not always helpful in conveying subtle differences among near-synonyms as they highlight denotation rather than usage (Xiao & McEnery, 2006). A significant argument proposes that native speaker introspection is no longer considered the sole, reliable source of insight into language structure and is used to document these properties and differences (Gabrielatos, 2005).

Overall, the existing arguments uncover gaps and notably scarce literature regarding the use of data-driven learning to practice the properties of near-synonymous words in a teacher training context. By exploring the attitudes of pre-service teachers and eliciting their perceptions of and practices regarding the DDL, practical implementations derived from experienced barriers and benefits can offer insights into integration of the DDL into teacher training. Further, exploration of learning several properties of near-synonymous words can serve to better understand potential ways of integrating the DDL into vocabulary acquisition in L2 contexts. Drawing upon this highlighted need and previously documented pedagogical benefits, this study frames the investigation of L2 learners' experiences in a teacher-training context as an underexplored area. This study aims to contribute to this growing area of interest by exploring L2 learners' experiences of conducting DDL experiential learning tasks to decipher pedagogical benefits and potential drawbacks. This study was motivated by the pedagogical affordances of the DDL approach, and the complexity and challenging nature of the properties of near-synonymous words in English. Studies on the topic focus more on the benefits and limitations originating from the tool and instructional design. In contrast to previous research, this study offers a fresh perspective and addresses L2 learners' experiences in an EFL teacher education context, where they have limited technological tools and digital sources due to the existing digital divide in their setting.

A critical view of the aforementioned studies shows that there is a tendency to document positive results on the substantial learning gains of corpora use and the widespread implementation of corpus-based tasks. This study examines the emerging role of the DDL in deciphering a composite picture of lived experiences concerning experiential reflections and potential barriers. This study revisits the need to document a cluster of evolving learning gains and examines L2 learners' perspectives on the opportunities and challenges of using a corpus-based data-driven learning approach to practice the properties of near-synonymous words in a vocabulary course. This study places the DDL at the center of the course syllabus to enhance pre-service teachers' corpus literacy skills. A novel contribution of the current study is the documentation of affordances of an array of functions with the intersection between the COCA and Youglish, and revisiting this landscape from the perspective of prospective English language teachers. This study outlines a corpus-based vocabulary teaching course with the aim of providing authentic language input; disrupting heavy reliance on textbooks; actively engaging learners in their discovery learning processes; and conducting an in-depth analysis of the properties of near-synonymous words. This study aims to uncover learner perspectives and is driven by the following questions:

1. What are the pedagogical benefits and potential drawbacks of incorporating a DDL approach for teaching near-synonyms in a teacher education context with limited technological tools and digital sources?
2. How do L2 learners experience and perceive the opportunities and challenges of conducting DDL experiential learning tasks and how does this approach enhance their corpus literacy skills and engagement in their discovery learning processes?

Method

Research Setting and Participants

This study was conducted within the scope of a vocabulary course delivered at a Turkish state university. The participants were 40 undergraduate pre-service teachers majoring in the English Language Teaching (ELT) department. The learners were administered an institutional English proficiency test at the beginning of the semester, and were also involved in a two-semester preparatory program to gain mastery over skill-based courses before enrolling in an undergraduate degree in the ELT department. They took writing, speaking, listening, vocabulary, and reading skills courses, and English was the medium of instruction in these courses. Their English proficiency level was B1 as described in the Common European Framework of Reference for Languages.

Procedures

This study was conducted as part of the Vocabulary Course. As part of the ethical guidelines, informed consent was received from each participant. The participants were informed about the purpose of the study, and the anonymity of their responses was ensured by eliminating any identifying information in the data-gathering tools. Initially, the Vocabulary Levels Test (VLT) by Schmitt et al. (2001) was conducted at the beginning of the term to gain an understanding of learners' lexicons and identify their needs. This test provides an estimate of vocabulary size for L2 learners of general and academic English (Schmitt et al., 2001), with a focus on the most frequently used words in English. The test consists of words required in basic everyday oral communication (2000-word level), reading authentic texts (3000-word level), inferring the meanings of novel words from context and understanding the communicative content (5000-word level), and having knowledge of the sub-technical vocabulary occurring across a range of academic disciplines (10000) (Schmitt et al., 2001). Academic Word Level (AWL) provides an estimate of the size of learners' academic vocabulary (Schmitt et al., 2001). The AWL was placed between 3000 and 5000 sections, as the placement of this section is flexible based on the demands of each testing situation (Schmitt et al., 2001). Considering the need to obtain an estimate of vocabulary size, the pedagogical needs of the learners in terms of the properties of words, and their tendency to cope with authentic language input, this benchmark was utilized. Learners' levels are presented in Table 1.

Table 1. Vocabulary Levels (VL) of the Learners

VL	2000	3000	AWL	5000	Total
N	11	15	10	4	40
%	27,5	37,5	25	10	100

The results of the VLT show that the word levels of most learners were at the 3000-word level, followed by 2000 and AWL.

The Corpus of Contemporary American English (COCA) (Davies, 2008) was used as a tool to integrate DDL into the vocabulary course. COCA is a genre-balanced corpus containing more than one billion words of text from various genres, such as spoken, fiction, popular magazines, newspapers, academic texts, TV and movie subtitles, blogs, and other web pages. The design of the tasks included in the course content was derived from an array of suggestions and descriptions of corpus-driven pedagogical materials provided by Gabrielatos (2005). Two sessions of 45 minutes of corpus training and subsequent administration of hands-on practices were carried out with the employment of corpus-based tasks over the course of 14 weeks throughout the spring semester.

Prior to the course, learners were introduced to the course content, syllabus, requirements, and objectives. From an emic perspective, the learners' prior corpus use was initially elucidated. It was figured out that the learners had no prior experience or familiarity with the use of a corpus in their language learning processes. As the comprehension of concordancing would be difficult without teacher instruction (Boulton & Cobb, 2017), the learners were trained to conduct search queries with different functions (i.e. distribution across years, registers, collocational patterns, etc.) and were familiarized with the interface and an array of functions of the corpus throughout the course. The course content was designed to decipher the multifaceted properties of target words. DDL tasks were employed in the course, and learners were assigned to both in-class and out-of-class tasks to figure out properties of near-synonymous words by administering hands-on practices in the corpus.

A blended learning approach was used throughout the course, with the integration of researcher-prepared tutorials, and discussion platforms set on Canvas to enable learners to discuss their findings outside the classroom. The in-class practice sessions included teacher-directed corpus-driven tasks, guided corpus queries, and learner-centered discovery-learning tasks. Figure 1 illustrates a sample guided corpus query provided to the learners.

Figure 1. A Sample Guided Corpus Query Using the COCA

Corpus of Contemporary American English

SEARCH FREQUENCY

List Chart Word Browse Collocates **Compare** KWIC -

contain Word1 [POS]?

include Word2 [POS]?

* Collocates Insert PoS

+ 4 3 2 1 0 0 1 2 3 4 +

Compare words Reset

☐ Sections Texts/Virtual Sort/Limit Options

1 IGNORE 2 IGNORE

TV/MOVIES TV/MOVIES

BLOG BLOG

WEB-GENL WEB-GENL

SPOKEN SPOKEN

FICTION FICTION

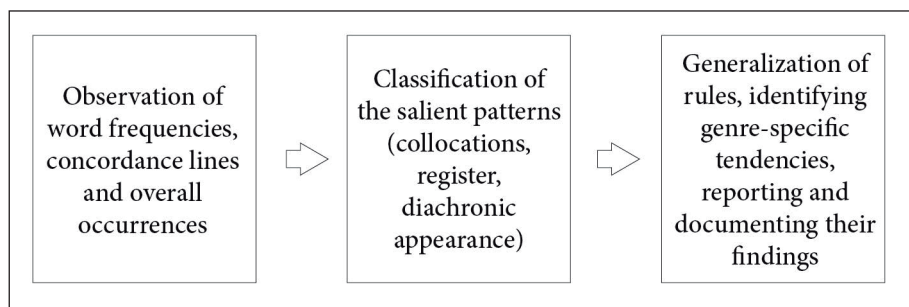
MAGAZINE MAGAZINE

NEWSPAPER NEWSPAPER

ACADEMIC ACADEMIC

Based on this pedagogical position of DDL, learners prepared reports presenting findings generated by the corpus and discussed them in classroom sessions. The three stages of inductive reasoning proposed by Carter and McCarthy (2004) were implemented in the classroom, as shown in Figure 2.

Figure 2. The Stages of Inductive Reasoning Proposed by Carter & McCarthy (2004)



Following these stages, in-class discussions and feedback sessions were conducted based on the learners' findings, and extended concordance displays for the target words were examined in the classroom. The main parts of a word examined by the learners were parts of speech, synonyms and antonyms, collocational patterns, register information, genre-specific tendencies, formality level, diachronic changes, grammatical behavior of the words, and example sentences. In addition to the corpus, YouGlish was used to provide complementary support as a YouTube-based pronunciation dictionary. This tool was developed to meet the need for authentic pronunciation input, which allows quick and easy access to "YouTube-sourced pronunciation samples" (Barhen, 2019, p. 2). This tool was used to guide learners in examining dictionary definitions, phonemic descriptions, and the pronunciation of the target words. Sample tasks assigned to the learners are exemplified in Appendix A.

Research Design and Instruments

Drawing on the mixed-methods research paradigm, the current study employed a convergent mixed-methods design in which qualitative and quantitative data were collected in parallel, analyzed separately, and then merged (Creswell, 2014). This research design provided a complementary perspective on the benefits and barriers of using corpus tools in vocabulary learning. The quantitative data of this study came from learner responses to a 6-point Likert scale questionnaire from Geluso and Yamaguchi's (2014) study, which combined the items from two published studies on using corpora in L2 writing (Yoon & Hirvela, 2004; Liu & Jiang, 2009). After obtaining consent from the learners, the data were collected at the end of the term, and the learners were asked to indicate their degree of agreement with the items. The instrument consisted of statements about the difficulty in using corpora, the positive impact of using corpora, the effectiveness of presentation and delivery of coursework, attitudes, and beliefs about data-driven learning and its potential. After the administration of the questionnaire, the learners were asked to answer the open-ended questions provided in Appendix

B. Follow-up open-ended questions were semi-structured, with lead questions based on the survey results. The first set of questions elicited learners' experiences of the challenges in using the corpus. The second question sought the learners' perceptions of the most useful and valuable things they learned. The last examined the changes in their perspectives and future orientation about the integration of corpus-driven tasks in their future language classes as pre-service English teachers.

Data Collection and Analysis

A total of 40 L2 learners responded to the questionnaires, while 16 learners responded to follow-up open-ended questions on a voluntary basis. The data collection procedure was conducted once the terms ended and instructor assessments, evaluations, and reflections were finalized. The qualitative and quantitative data collection process was carried out in parallel stages. Initially, the participants were assured of confidentiality through anonymous responses to the study. In the first phase, the participants responded to the questionnaire items and shared their perspectives on the corpus integration. Then, they were asked follow-up open-ended questions to delve into their experiences and perceptions. The findings from both quantitative and qualitative data were compared and combined to provide a comprehensive picture of learner experiences.

The responses revealed from the questionnaire and open-ended questions were analyzed separately. For the quantitative data analysis, means and standard deviations were calculated based on the responses of the participants. This analysis revealed the distribution of learner responses to each item for the identification of common patterns. As for the qualitative data analysis, a thematic analysis was used to identify, analyze, and interpret themes emerging from the learner responses to open-ended questions. At this stage, the whole data was coded, and repetitive segments were assigned codes. Then, codes were grouped into broader themes representing the prominent perspectives shared by the learners. The elicited codes and themes identified based on the responses to the open-ended questions are provided in Appendix C. The key patterns identified in the qualitative data served to support quantitative findings. The results revealed from both qualitative and quantitative data analyses were merged. The results revealed from both sources enabled the documentation of a composite picture of L2 learners' perspectives on experiential learning tasks.

Findings

L2 Learners' Perceptions about the Benefits of Using Corpus

First, the learners reflected on the benefits of the DDL; the overall findings are presented in Table 2. The table shows that learners believed the corpus to be helpful for language learning. Most learners reported that corpus use was most helpful for learning the usage of vocabulary and phrases, meaning of vocabulary, enhancing English reading and writing skills, and increasing their confidence in English vocabulary. A slight decrease was observed in the perceived usefulness of corpus use over a dictionary. A particularly counterintuitive finding was that the scores for learning grammar and improving academic writing ability were relatively low, which should be further elaborated in future investigations.

Table 2. Benefits of Corpus Use (N=40)

Category	Agree (%)	Disagree (%)	M	SD
More helpful than a dictionary for my English vocabulary.	75	25	4.03	1.07
Learning the meaning of vocabulary	90	10	5.00	1.24
Learning the usage of vocabulary	100	0	5.53	0.59
Learning the usage of phrases	100	0	5.50	0.67
Learning grammar	60	40	3.65	1.47
Improved English reading skills	95	5	4.10	1.15
Improved English writing skills	95	5	4.45	1.21
Improved English academic writing ability	45	55	5.00	0.84
Increased my confidence about English vocabulary	85	15	4.90	1.05

1: strongly disagree, 2: disagree, 3: somewhat disagree, 4: somewhat agree, 5: agree, 6: strongly agree

With the overall picture of the learners' perceptions about the benefits of using the corpus in their vocabulary learning practices, this study revealed findings related to three associative aspects in the qualitative data analysis: (a) benefits of vocabulary learning, (b) benefits about other language skills, and (c) affective benefits. Considering

the usefulness of corpus-driven activities in vocabulary learning, the learners drew attention to two significant and connected themes: their increased awareness of word properties and their overall reporting of enhanced language competencies. They elaborated their enhanced understanding of word properties in relation to a better understanding of the multiple meanings of words, word associations, parts of speech, frequency counts, collocational patterns, contextual features of words, diachronic changes, genre-specific information, subtle differences between near-synonymous words, and guessing the meaning of unknown words in context. In relation to their overall reports of enhanced language competencies, they reported expanded vocabulary knowledge, awareness of the harmony among words, significance of vocabulary items in English, and contextual features of the words in English. The participants demonstrated that corpus-driven tasks provided benefits in the mastery of other language skills by facilitating writing skills (form sentences, using collocations, and formality level), improving communication and self-expression skills, improving speaking skills, using language strategies, enhancing language analysis skills, and exposure to different usages and sources of language. The benefits of corpus-based vocabulary learning activities were further evidenced by the fact that the learners highlighted affective aspects with a focus on increased elements of curiosity, enhanced excitement to play with words, happiness in becoming familiar with a huge database, and enhanced motivation and enjoyment in searching for learning. Overall, these findings suggest that corpus-based deductive learning activities enhance and enrich learners' vocabulary learning experiences by boosting their interests.

L2 Learners' Challenges in the Use of Corpus

After an in-depth understanding of the benefits, the first set of questions also unpacked the L2 learners' challenges in the use of the corpus. An intriguing look at the concerns and difficulties with respect to corpus use revealed that the learners' reactions to the challenges in corpus use were clustered in a 2.40-3.98 score range, indicating difficulties and obstacles. Table 3 shows that the amount of time and effort necessary to analyze language expressions, limited access to computers or the Internet, unfamiliar vocabulary in concordance lines, and performing search techniques were the main difficulties highlighted by the learners.

Table 3. L2 Learners' Difficulties in Corpus Use (N=40)

Category	Agree (%)	Disagree (%)	M	SD
Limited access to computer/Internet	45	55	3.38	1.75
The speed of Internet connection	25	75	2.20	1.22
Time and effort spent on analyzing the data	67,5	32,5	3.98	1.54
Unfamiliar vocabulary on concordance/collocate output	47,5	52,5	3.35	1.09
Cut-off sentences in concordance output	30	70	2.90	1.27
Too many sentences in concordance output	30	70	2.95	1.26
The limited number of sentences in concordance output	45	55	2.95	1.30
Analyzing concordance output	20	80	2.50	0.98
Analyzing the collocate output	25	75	2.45	1.13
Performing the search technique	50	50	3.25	1.59
Too difficult real texts	15	85	2.40	0.98

1: strongly disagree, 2: disagree, 3: somewhat disagree, 4: somewhat agree, 5: agree, 6: strongly agree

An inspection of the findings of the qualitative data analysis revealed that the challenges were framed around two emerging themes: challenges originating from the corpus interface and language content. The prominent challenges were limited usage, a need for a premium account, upgraded options, confusion about the interface, analyzing huge amounts of concordance lines, complicated functions, searching techniques, showing unrelated results, and the need to make manual checks. Understanding the genre-specific language content of registers (e.g., news, academic), understanding concordance lines, a limited number of search queries, unfamiliar corpus interface in the initial stages, complex sentences in the corpus, and searching techniques were the main challenges regarding the language content of the corpus.

L2 Learners' Overall Evaluations of the Use of Corpus

The second set of questions uncovered learners' overall evaluations of the use of the corpus in learning the properties of near-synonymous words. As shown in Table 4, the learners shared positive attitudes and feelings toward these activities in the classroom.

Table 4. L2 Learners' Overall Evaluations of the Use of Corpus (N=40)

Category	Agree (%)	Disagree (%)	M	SD
The search technique was easy to learn	70	30	4.20	1.20
Hands-on practice was useful	95	5	4.83	0.84
Use the corpus by own choice	45	55	3.40	1.44
Understand the purpose of using the corpus	95	5	5.30	0.85
Get the information that I need in the corpus	100	0	5.05	0.81
Learn more, like more	80	20	4.45	1.17
Use corpus in the future	95	5	5.35	0.92
Earlier familiarity would be better	85	15	4.45	1.30
A useful resource for English vocabulary	95	5	5.25	1.00
Should be introduced in all vocabulary courses	90	10	5.35	1.07
Should be taught in English classes	90	10	5.10	1.27

1: strongly disagree, 2: disagree, 3: somewhat disagree, 4: somewhat agree, 5: agree, 6: strongly agree

Except for the items regarding their use of the corpus by their own choice, which may be due to a course requirement, all the items revealed strong agreement among the learners. The learners considered the corpus a useful tool for learning and practicing English vocabulary. The prominent positive evaluations revealed from the descriptive analysis were the availability of the information they needed to learn words, the usefulness of hands-on practices, the relevance of the purpose, the usefulness for other courses, and the willingness for further and future uses. Building on this descriptive analysis, an in-depth exploration of learner evaluations through the qualitative data revealed that they would use future corpus studies to better understand the language, to use the corpus in enhancing all language skills, to make better progress in language, to figure out generalizations about language, to check for confusing words, and to discover the difference between near-synonymous words. The learners also highlighted the need to receive more training for using the corpus in academic and daily studies and to analyze the language and links between words. Regarding their overall opinions, most learners reported that the corpus was a reliable source and a fun activity for learning the language. The learners also shared their potential goals for future corpus-based activities in their prospective classes. They highlighted that they would like to introduce the COCA to their learners, use it in the same way as the teacher, and plan to use it to teach words in reading texts.

Discussion, Conclusion, and Suggestions

The results presented in this study enable us to understand L2 learners' perspectives on the benefits and challenges of using a discovery learning corpus-based approach to practice the properties of near-synonymous words through DDL tasks. This study presents learners' experiences of L2 learners' experiential corpus-based tasks with a specific focus on exploratory learning. Based on these results, the overall conclusion, related discussion points, limitations, and future research directions are presented.

As a conclusion for the first research question, the salient benefits of corpus-driven vocabulary learning tasks are learning the meanings and collocations of near-synonymous words in context, improving reading and writing skills, and facilitating learners' confidence in English vocabulary. The most prominent finding to emerge from this part is that corpus tools are perceived as useful in terms of making the learners remember what they work to find out, providing authentic language input, evoking the element of curiosity, raising lexical awareness, enhancing the understanding of contextual features of the words, actively engaging the learners in the language learning process, and fostering autonomous learning experiences. These benefits are supported through the facilities of the corpus in emphasizing the properties of words such as their register, part of speech, and morphological processes; teaching vocabulary in context with a focus on collocations; surrounding elements in concordance lines; presenting diachronic information and genre-specific tendencies of words; formality levels of the words; and subtle differences between near-synonymous words. Because learning the properties of near-synonymous words is a pedagogically challenging task, the learners' aforementioned benefits may be related to the nature of DDL and the exploratory and discovery-oriented vocabulary learning experience provided to them. More specifically, as documented in previous research, DDL embraces concepts of learner autonomy, induction, exemplar-based learning, and constructivism and it enables learners to autonomously explore linguistic patterns, instead of being provided with predigested rules (Boulton & Cobb, 2017). These multilayered benefits have a facilitative effect on learners' retention of near-synonymous words. Additionally, DDL proves itself to be an effective language learning method as it changes the very nature of the L2 classroom (Karras, 2016) by enabling active participation, discovery learning, willingness and motivation to do research, and inductive reasoning by identifying different properties of words. These benefits would have a sustainable impact on learners' future teaching practices, as they provide corpus training to pre-service English language teachers. Empowerment of the benefits of corpus use and provision of corpus training in initial teacher training would enable further integration of corpora into classroom practice (Leńko-Szymańska, 2022; Szudarski, 2022; Zareva, 2017).

Another notable finding is that spending too much time and effort on analyzing the data and concordance lines, limited queries, and confusion about the corpus interface posed difficulties to the learners. The learners highlighted certain challenges concerning the guidance of corpus use, along with emphasizing barriers to the corpus.

Given the multilayered notion of technology-driven challenges, much of the discourse on the corpus tool is framed around the corpus interface. One of the challenges is learners' unfamiliarity with the use of the corpus, its features, and its functions as a tool. L2 learners, who use the corpus for the first time, need the teacher's support as they expect proper and prolonged teacher assistance to get the maximum benefit from it (Sinha, 2021). To achieve this, providing technical support guiding learners to interact using a corpus would promote their autonomous discovery of the language. Once learners gain familiarity with the corpus interface, they can move on to more divergent or autonomous tasks (Geluso & Yamaguchi, 2014). For this reason, there is also an overall need for substantial and specialized training in digital literacy (Pérez-Paredes et al., 2019). More specifically, initial corpus training is compulsory to facilitate learners' corpus literacy (Yang & Mei, 2024). This argument is echoed by Selivan (2023), who argues that learners can be encouraged to establish an initial form-meaning link and move on to more contextual aspects of vocabulary practice through concordancing. In this regard, the teacher plays a crucial role as it contributes to learners' positive attitudes toward using the corpus (Yoon & Hirvela, 2004). Access to technological tools is also reported as a barrier to their effective access to corpus data. Although Pérez-Paredes (2019) noted that access to technology was not identified as an impeding factor, this research reveals a different finding by documenting digital divide-related drawbacks. Overall, additional training and assistance would help learners overcome technical impediments and further develop corpus analytical and literacy skills.

Moving on to the second research question, this study documents that L2 learners have a positive attitude toward corpus-driven vocabulary teaching tasks. The findings in relation to their attitudes contribute in several ways to our understanding of corpus-based vocabulary teaching and provide a basis for using this approach to teach the properties of near-synonymous words. In contrast to the view that low-proficiency learners may not benefit from corpus use, this study notes numerous benefits without downplaying these challenges. To overcome potential challenges, this study suggests that there is a need to enhance learners' mastery of corpus consultation skills through teachers' mediation and support. The key to managing synonyms for L2 learners is to increase exposure to these words and present their salient collocations in meaningful contexts (Liu & Zhong, 2016). This study also revisits the need to enhance corpus literacy skills and integrate corpus tools into teacher training contexts. This integration may be achieved by using corpora to select relevant vocabulary, developing language syllabi and pedagogical materials, and using corpus data as a teaching technique (Szudarski, 2022).

Another notable suggestion of this study is the emerging need to enable L2 learners' exposure and engagement with concordance lines, which provides rich context information (Lin & Chung, 2021) to enhance and enrich their understanding of word properties. Learners use inference skills and verify their inferences by using visual expressions or providing evidence from concordance (Yang & Mei, 2024).

For this reason, it is crucial that the concordance lines provided in the corpus are comprehensible to learners and offer enough contextual clues to facilitate their exploration and understanding of target lexical items during their linguistic investigations (Lee et al., 2019). A particularly interesting observation that results from the analysis of open-ended questions is that they provide deep insight into L2 learners' attitudes toward the challenges and perspectives. Addressing the challenges in dealing with the subtle differences between near-synonymous words, providing continuous encouragement, and boosting their motivation may help learners overcome the reported barriers. The current results are significant in that the learners have surface-level challenges (i.e., corpus software, time), and these challenges can be overcome through familiarity with these learning experiences, hands-on practices, teacher modeling, and fostering autonomous language learning processes. Teacher mediation, the provision of a rich multimodal context (O'Keeffe, 2023) and transforming 'data-driven learning' into 'data-driven use' for autonomous learning are suggested (Gilquin & Granger, 2022).

Considering these findings of the study, this study has some limitations. Given the idiosyncratic nature of each educational context and learner characteristics, this study is limited in terms of a specific sample size which can potentially lead to a lack of generalizability of the benefits and challenges. The collection of additional data through dairies may provide another complementary perspective for elaborating on the findings. Further, a longitudinal study may expand and enhance our understanding of the long-term effects and dynamics of data-driven applications for language education. For future research, analyzing teachers' attitudes toward using corpora in their classes would present a composite picture for better applications. Additionally, the consequences of corpus-driven materials and tools observed in different local settings may uncover dynamic and effective variables through case studies. A follow-up study could examine learners' vocabulary levels after the implementation of data-driven learning tasks. Another study could investigate the long-lasting impacts of corpus-based training on the participating learners by uncovering their integration of corpora into their teaching practices.

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Syntax of DP Deletion and Pragmatics of DP Movement in Passive Voice

Sintaxis de la eliminación de DP y
pragmática del movimiento de DP en voz
pasiva

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Abstract

This study examines the syntax of DP deletion and pragmatics of DP movement in passive voice from applied linguistics methodology. The data collection was a purposive sampling method as the study specifically alternated the data from Q1 SCOPUS publications, Thai national publications (TCI 1), and Thai undergraduate students' independent studies (IS) from a private university. There were 99 tokens. The data analyses were linguistics and inferential statistics. Linguistic analysis follows generative grammar, whereas the statistical analysis follows inferential statistical analysis SPSS29. The results of the study showed the similarities of DP by-phrase agent deletion between Q1 SCOPUS, TCI 1, and IS. However, the results in these publications were different pragmatically. The discussion was explained syntactically and pragmatically. The DP arguments in passive voice were omitted due to the reason of widely-known agents. Pragmatically, the movement of DP argument in Q1 SCOPUS and TCI 1 complies with the theory of pragmatic discourse of givenness, while this was not applied in IS. It is expected that the results in this study would be useful for English learners in how to apply passive voice to write research methodology appropriately.

Keywords: applied linguistics methodology, passive voice, pragmatics of DP movement, syntax of DP deletion

Resumen

Este estudio examina la sintaxis de la eliminación de la frase determinante (DP por sus siglas en inglés) y la pragmática de su movimiento en voz pasiva desde la metodología de la lingüística aplicada. La recolección de datos fue realizada mediante un muestreo intencionado, ya que el estudio alternó específicamente los datos de publicaciones Q1 de SCOPUS, publicaciones nacionales tailandesas (TCI 1), y estudios independientes (IS por sus siglas en inglés) de estudiantes de pregrado de una universidad privada. Se analizaron 99 muestras. El análisis de los datos incluyó lingüística y estadística inferencial. El análisis lingüístico sigue la gramática generativa, mientras que el análisis estadístico se basó en el análisis estadístico inferencial usando SPSS29. Los resultados del estudio mostraron similitudes en la eliminación del agente de la frase por DP entre las publicaciones de SCOPUS Q1, TCI 1 e IS. Sin embargo, los resultados de estas publicaciones fueron pragmáticamente diferentes. La discusión se explicó desde una perspectiva sintáctica y pragmática. Los argumentos de DP en voz pasiva fueron omitidos debido a que los agentes eran ampliamente conocidos. Pragmáticamente, el movimiento del argumento DP en SCOPUS Q1 y TCI 1 se ajusta a la teoría del discurso pragmático de la información conocida, mientras que esto no se aplicó en los IS. Se espera que los resultados de este estudio sean útiles para los estudiantes de inglés en cuanto a cómo aplicar la voz pasiva para escribir adecuadamente la metodología de investigación.

Palabras clave: metodología de lingüística aplicada, voz pasiva, pragmática del movimiento de DP, sintaxis de la eliminación de DP

Resumo

Este estudo examina a sintaxe da eliminação da frase determinante (DP pela sua sigla em inglês) e a pragmática do seu movimento na voz passiva a partir da metodologia da linguística aplicada. A coleta de dados foi realizada por meio de uma amostragem intencional, já que o estudo alternou especificamente os dados de publicações Q1 do SCOPUS, publicações nacionais tailandesas (TCI 1) e estudos independentes (IS pela sua sigla em inglês) de estudantes de graduação de uma universidade privada. Foram analisadas 99 amostras. A análise dos dados incluiu linguística e estatística inferencial. A análise linguística segue a gramática gerativa, enquanto a análise estatística se baseou na análise estatística inferencial utilizando o SPSS29. Os resultados do estudo mostraram semelhanças na eliminação do agente da frase por DP entre as publicações do SCOPUS Q1, TCI 1 e IS. No entanto, os resultados dessas publicações foram pragmaticamente diferentes. A discussão foi explicada a partir de uma perspectiva sintática e pragmática. Os argumentos de DP na voz passiva foram omitidos devido ao fato de os agentes serem amplamente conhecidos. Pragmaticamente, o movimento do argumento DP no SCOPUS Q1 e TCI 1 está em conformidade com a teoria do discurso pragmático da informação conhecida, enquanto isso não se aplicou nos IS. Espera-se que os resultados deste estudo sejam úteis para os estudantes de inglês em como aplicar a voz passiva para redigir adequadamente a metodologia de pesquisa.

Palavras-chave: metodologia de linguística aplicada, voz passiva, pragmática do movimento de DP, sintaxe da eliminação de DP

Introduction

In English classrooms, passive voice is normally taught as the interchangeable structure of active voice. The learners of English as a Foreign Language (EFL) are likely to use the two structures interchangeably because they are interpreted the same semantically. However, they have never realized their differences regarding pragmatic aspects, specifically why the determiner phrases (DP), such as “Jerry” as in “Tom hit Jerry”, are moved from the object position to become the subject. Consequently, passive voice is a problematic structure among EFL learners. In generative grammar, English is a non-null-parameter subject language (Chomsky, 1965; Radford, 2009). This means that the subject in English is required in all clauses owing to Extended Projection Principle or EPP (Radford, 2009). This denotes that the finite constituent T that is extended into the TP node must have the subject filled in (Bošković, 2002; Radford, 2009; Svenonius, 2002). Even though most arguments in English are in situ, the DP subject in passive voice is analyzed differently since it is moved via the chain of A-movement to the Spec T (Radford, 2009). With this perspective, passive voice in English is considered under the linguistic theories of markedness. The unmarked form is regular, but the marked form is irregular (Andrews, 1990). The syntactic representation of passive voice is interpreted as a marked structure where the DP movement is illustrated below.

Figure 1. Chain of A-movement

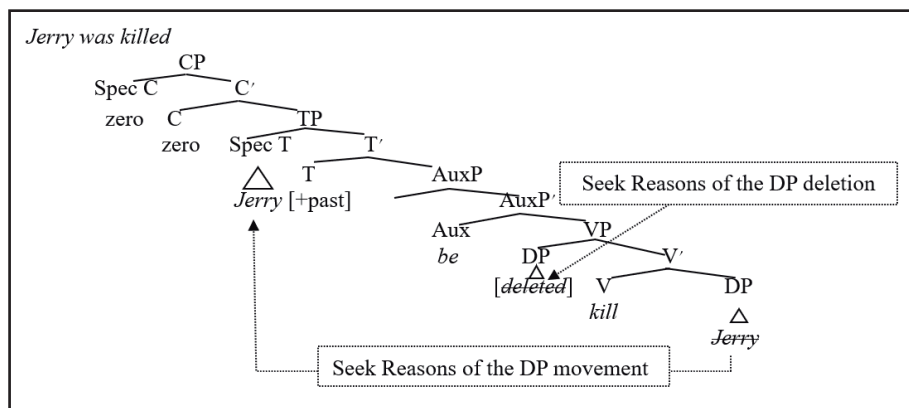


Figure 1 shows A-movement. The argument movement is sometimes called DP movement (determiner phrase). Arguments refer to the entities who perform an action or receive the energy from an action. For example, “Jerry” is the DP, and it originates as the complement of the transitive verb. The DP was moved via A-chain movement to be landed in the Spec T, becoming passive voice. The DP receives the theta-role theme prior to moving to the subject position.

Regarding the transformation from active to passive voice, there are four steps to follow (Radford, 2009). First, the argument is moved, with the DP relocated to the Spec T position. Second, a feature is added, specifically the auxiliary “be”, which is inserted according to the tense of the finite verb in the active voice. Next, the main verb undergoes a transformation, changing into its past participle form. Finally, the processes of movement, addition, and transformation are illustrated in (1a) -(1b)

(1a) ABC company fired Mr. Jack yesterday.

(1b) Mr. Jack was fired yesterday.

Example 1a is active voice while example 1b is passive voice. “Mr. Jack” is the object in active voice. The DP is moved to be landed as the subject in passive voice due to the agent concealment for the company’s positive reputation. A concealed agent is, therefore, the reason of the DP deletion in passive voice (Swan, 2015). However, different genres seem to have different reasons for the DP by-phase agent deletion. Accordingly, the current study seeks the reasons for DP by-phase agent deletion in applied linguistics research methodology.

To apply the DP deletion and DP movement in passive voice, the current study employed the techniques of vicinities to determine how passive voice is used with other syntactic structures in adjacent areas. Vicinity was originally coined by corpus linguists (Sinclair, 1996; McEnery & Hardie, 2011). The boundaries to the left and the right are simultaneously investigated with the key. The vicinities between four and six words are adequate to investigate the collocations in corpus-based studies. For example, expletive “it” constructions in English were frequently collocated with the adjectives “clear”, “true” and “possible” as in “it is clear”, “it is true”, and “it is possible” (Uchida, 2024). Nevertheless, the vicinities in this study refer to the whole sentences on either side of the passive voice.

As mentioned, it seems possible that various syntactic structures can be colligated with passive voice. For example, subjective complement is the syntactic structure to give additional information concerning the subject of the sentence. Swapping the DPs between subject and the copular “be” complement does not affect the grammaticality of the sentence (Wongkittiporn, 2024). However, they are the same semantically such as 2a and 2b.

(2a) **Mr. Obama** was the USA president.

(2b) The USA president was **Mr. Obama**.

Examples 2a-2b are subjective complements. The DP “Mr. Obama” in 2a is the subject. The DP “Mr. Obama” is the copular be complement in 2b. Despite having different positions, they have the same truth value, referring to a fact in the real world (Kearn, 2011). Therefore, 2a and 2b are syntactically and semantically identical.

Aside from that, noun clause complements are syntactic structures to fill in factual reports. The Verb Phrase (VP) complements of this structure can be cognitive, communicative and presentative, such as “believe”, “think”, “report”, “address”, and “show”. The VP complement can be replaced by the pronoun *it* (Wongkittiporn, 2024), as in “Mr. Jack reported that GDP increased five percent in 2024” or “Jack reported it”. The complementizer phrase (CP) “that GDP increased five percent in 2024” is the complement, which can be replaced by the pronoun “it”. In addition, transitive complement is the structure that consists of the subject, verb and object. Usually, the subject of the sentence plays a theta-role of agent, referring to the one who instigates an action (Radford, 2009). For example, “Mr. James ate an apple”.

Regarding the use of passive voice in English, the DP movement of the passive voice complies with either topic focus or principle of givenness. The topic focus means that the writers would like to put an emphasis on the topic of sentence as the agents are widely known, as in “Jerry’s bag was stolen”. The agent of the sentence was not mentioned or spelt out as it is commonly known as a thief (Swan, 2015). However, the passive voice is sometimes used for the benefit of discourse analysis to link information together seamlessly. For example, “Tom played with Jerry. It was hit by Tom. So, he laughed at him”. The structures in these sentences were analyzed as SVO-OVS-SVO. The pronoun with the case marking “it” was derived from “Jerry” and the pronoun with the case marking *he* was derived from *Tom*.

Previous studies focused on the syntactic structure of passive voice in different genres, such as medical texts and news articles. Passive voice is often used in these texts because the agents are widely-known agents. For example, the person who can prescribe antibiotic medication is a doctor (Amdur, Kirwan & Morris, 2010) and the people who write news articles are journalists (Almahameed, Bataineh & Amari, 2022). To fill the gap, this study investigated passive voice and their vicinities in applied linguistics methodology. At the present time, most university students are instructed to conduct a mini-research project after their coursework studies. Even though they are taught research methodologies, the subject of writing research, especially written in the English language, is not specifically taught at universities. Consequently, students are faced with the difficulties of writing their research papers in English. They select the right research methods for their research projects but writing them in English is a challenging task. As mentioned by Widdowson (2011), the section of methodology is considered an important one. The information about how a research study was conducted must be clearly provided in steps for the sake of replication in the future. A clear explanation in this section results in the reliability and validity of the study. Examining Q1 (Quartile 1) SCOPUS Q1, Thai Journal Citation Index (TCI 1) publications and undergraduate students’ Independent Study (IS) is considered as an effective way to learn how language is used. Accordingly, EFL learners could have more examples from the results in this study to advance the quality of their writing. This information leads to the following research objectives of the study.

Objectives of the study

1. To examine the syntactic reasons of the DP by-phrase agent deletion in passive voice in applied linguistics methodology
2. To examine the pragmatic reasons of the DP movement in passive voice via their syntactic vicinities in applied linguistics methodology

Methodology

Data Collection

To investigate the DP deletion and DP movement, the data in this study were divided into three datasets. The first phrase was the collection of passive voice and their vicinities in Q1 SCOPUS applied linguistics methodology. The second phrase was the collection of passive voice and their vicinities in TCI 1 applied linguistics methodology.

This study followed purposive sampling method as the researcher focused on the material of applied linguistics methodology only in Q1 SCOPUS and TCI 1. The first dataset was collected from an international journal called System. System is a reliable applied linguistics research journal that has been indexed in Q1 SCOPUS database for more than a decade. There were 10 research articles that were collected for this study. Approximately 100,000 words contained 52 tokens for data collection in this study. To avoid the bias that may occur during data collection, various topics from applied linguistics research articles were gathered to study, such as pedagogical approach, English for Specific Purposes (ESP), and teaching technology.

The second dataset was collected from three Thai national journals as index in TCI 1, which were Journal of Studies in the English Language (jSEL), Thoughts and NIDA Journal of Language and Communication. These three national journals were selected as they are journals of English applied linguistics where the articles, sent to be reviewed, were written in English. They are reliable publications in Thailand. Approximately 150,000 words contained 40 tokens for data collection. Various topics of applied linguistics research were gathered to study.

The dataset from the third phase was derived from Independent Studies (IS) as written by fourth-year students, majoring in English, at a Thai private university. The students wrote their IS before they graduated. They were allowed to select topics concerning applied linguistics that they were personally interested in. The topics include the study of figurative language, English songs, the study of speech acts in English movies, and a survey of English among university students. Twenty-five

undergraduate students' IS papers focusing on methodology were randomly selected to study their use of passive voice and their vicinities. A total of 25,000 words provided only 7 tokens containing passive voice. These IS papers were not published, but they were part of the students' graduation requirement.

Data Analysis

Once the data were collected, the concept of vicinity, or the areas near or surrounding areas, follows McEnery and Hardie (2011). Vicinity refers to the whole sentential boundaries to the left and to the right that were collocated with passive constructions as the target sentence structure in this study. For example, "the data were collected from English newspapers. They were analyzed based upon generative grammar. The data analysis was checked by three experts from different universities". The sentences "the data were collected from English newspapers and the data analysis was checked by three experts from different universities" are the vicinity which were collocated with the target sentence. As mentioned, the current study focused on the syntactic structure that is used before and after passive voice. The whole sentence to the left and to the right of the passive voice were gathered to study. The data analysis in this study was given according to collocation patterns below

Collocation Patterns

Passive Voice + **Passive Voice** + Passive Voice

Passive Voice + **Passive Voice** + Passive Voice

Passive Voice + **Passive Voice** + Noun Clause Complement

Passive Voice + **Passive Voice** + Noun Clause Complement

Passive Voice + **Passive Voice** + Subjective Complement

Passive Voice + **Passive Voice** + Subjective Complement

Passive Voice + **Passive Voice** + Transitive Complement

Passive Voice + **Passive Voice** + Transitive Complement

Transitive Complement + **Passive Voice** + Transitive Complement

Transitive Complement + **Passive Voice** + Transitive Complement

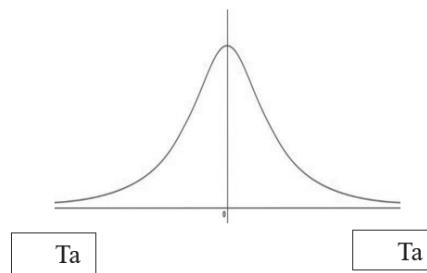
This research paper examined passive voice and their vicinities in applied linguistics methodology to interpret how they were semantically and pragmatically used. Both descriptive statistical and inferential statistical analysis via SPSS 29 were used to calculate the data.

Table 1. Coding Schema

Code 1	Code 2
Code 1 was given if passive voice and their vicinities complied with the prototypes in Q1 SCOPUS applied linguistics methodology	Code 2 was given if passive voice and their vicinities did NOT comply with the prototypes in Q1 SCOPUS applied linguistics methodology

As mentioned above, this current study was designed as a quantitative study, the data analysis followed inferential statistical methods via SPSS 29. The statistical analysis in this study was based on Pearson Correlation where the r value was between 1 and -1. The p -value was judged to be significant if the p -value was equivalent or less than 0.5. As mentioned by Matthey (1998), a p -value of 0.05 or less in the field of social sciences and humanities was considered significant. After filling either code 1 or code 2 in SPSS program, the researcher clicked “analyze” and “correlate”. Select “two tails”. When selecting the statistical analyzes of two tails, the results of the p -value could be both plus and minus.

Figure 2. Two-Tailed Test in Statistical Analysis



Statistically, a two-tailed test is a way to check a distribution whether the sample of the study is greater or less than a range of values, so the results of p -value could be either plus or minus.

According to Swan (2015), omitting the by-phrase agent in passive voice could be explained by four reasons including unknown agents, widely known agents, concealed agents and unimportant agents. The unknown agent is explained in that the instigator

of the action is unknown, such as murderers, thieves and commanders. The widely-known agents are the DP who is well-known. Spelling it out is not necessary, as in “the patient was prescribed antibiotic drugs for 7 days”. The only person who can prescribe antibiotics is a doctor. Concealed agents are known agents, but the reason for concealment is for positive reputation as in “20 employees were fired after rebranding”. The last reason for omitting the by-phrase agent is unimportant agents. This again is not the main focus of the story, so it is not necessary to be spelt out, as in “the house was cleaned perfectly”.

Results of the Study

This section presents the results in this study regarding the DP by-phrase agent deletion. From a total of 52 tokens in the Q1 SCOPUS, 40 tokens in TCI and 7 Token in IS, the results of this study were given in Table 2.

Table 2. DP by-phrase Agent Deletion

Classifications	Q1 SCOPUS	TCI 1	IS
Total	52	40	7
DP Deletion	50 (96.15%)	39 (97.5%)	6 (86.57%)

Table 2 shows that passive voice in the section of methodology was used with the DP deletion. Only a few tokens were found to be used with by-phrase agents.

(3a) The earliest intelligent chatbots, ELIZA and PARRY, were developed **by Joseph Weizenbaum and Kenneth Colby** in 1966 and 1972, respectively (Q1 SCOPUS)

(Kim & Su, 2024, p. 3).

(3b) To maintain accuracy, the results were cross-checked **by the three of us** regularly during and after the analysis (TCI 1) (Pupipat, Runngaew & Meeparp, 2022, p. 10).

(3c) “The data were analyzed by using Searle (1976) theory. (IS)

The DPs “Joseph Weizenbaum and Kenneth Colby” in 3a are the original developers of intelligent chatbot. Without spelling out the name of these developers, it would violate the maxim of quantity in pragmatics. As the writers did not provide adequate information for the readers to understand. So, the by-phrase agents must be kept. 3b was kept as the researcher wanted to place emphasis on several validators to give enough information for the reader to understand. The DP in 3c was kept as the researcher wanted to place emphasis on the conceptual framework that the study followed. To sum up this point, the syntactic structure of deleting DP in passive voice among the three datasets went along the same lines.

Phase 1

From the total of 52 tokens in the Q1 SCOPUS, the results were reported in Table 3.

Table 3. Passive Voice and their Syntactic Vicinities

Passive Voice and their Syntactic Vicinities	Freq.	%
Passive Voice + Passive Voice + Passive Voice	17	32.69
Transitive Complement + Passive Voice + Transitive Complement	15	28.84
Transitive Complement + Passive Voice + Passive Voice	7	13.46
Passive Voice + Passive Voice + Transitive Complement	6	11.54
Passive Voice + Passive Voice + Noun Clause Complement	5	9.61
Passive Voice + Passive Voice + Subjective Complement	2	3.84
Total	52	100

Table 3 represents the vicinities of passive voice in Q1 SCOPUS applied linguistics methodology. The collocation pattern of passive voice + passive voice + passive voice occurs at 32.69 percent. Passive voice colligated with transitive complements on the left side and the right side were reported at 28.84 percent. The collocation pattern of transitive complement + passive voice + passive voice was reported at 13.46 percent. The empirical evidence of these patterns is given in the following section.

Passive Voice + Passive Voice + Passive Voice

The collocation pattern of passive voice + passive voice + passive voice occurred frequently in this study. This pattern was always found in the section of methodology in applied linguistics research articles, such as 4a-4c.

(4a) Approval for the study was obtained from the principal of the school. **The data were collected using a printed survey, which was sent to the participating school by postal service.** Before performing the surveys, the students were informed that participation was voluntary (Hirosawa, Kono & Oga-Baldwin, 2024, p. 4).

(4b) "A mixed-methods design was applied in this study. **All data were analyzed using SPSS software, version 25.0.** First, means and standard deviations were calculated to assess the willingness to communicate (WTC) levels and provide an overall description of the data (Kim & Su, 2024, p. 6).

(4c) An initial questionnaire was structured to measure three main constructs: intensity of engagement, perceived usefulness of their engagement and satisfaction of

engagement. **Each of these were measured in relation to an object, a key aspect of the learning process and environment.** Four aspects were chosen for the questionnaire: teachers, peers, activities, and teaching content used in the classroom (Teravainen-Goff, 2023, p. 4).

Passive voice and the vicinity of passive voice in applied linguistics research articles were found in the section of research methodology. They were used to report the process of data collection, data analysis, ethical consideration.

Transitive Complement + Passive Voice + Transitive Complement

The second frequent collocation pattern in this study was the vicinity of transitive complement + passive voice + transitive complement as in 5a-5b.

(5a) The students' age ranged from 13 to 15 years old [...]. **All students were raised in Japan, with Japanese as their mother tongue and cultural background.** The school's focus on test performance mirrors the heavy educational focus found in many Japanese secondary schools (Hirosawa, Kono & Oga-Baldwin, 2024, p. 4).

(5b) A total of 65 students participated in the study. **They were enrolled in an elementary-level Korean language elective at a higher education institution [...].** According to the internal guidelines, each language class accommodates 20 to 25 students (Kim & Su, 2024, p. 3).

The collocation pattern of transitive complement + passive voice + transitive complement was used to report methods in applied linguistics research articles. The first transitive complement provided factual information of the participants either numerical data or experimental process. The passive voice explains further about the participants or the activity they were doing in the study.

Transitive Complement + Passive Voice + Passive Voice

Another collocation pattern was transitive complement+ passive voice + passive voice which was usually found in the section of methodology.

(6a) Its limitation becomes evident when there are potential hierarchical factors, sub-scales, and items associated with constructs other than their primary target factor. **This scenario is frequently encountered in psychology and education research, including the scales in this study.** Researchers are often faced with unintended cross-loadings due to the inclusion of multiple related factors within the study (Hirosawa, Kono & Oga-Baldwin, 2024, p. 5).

(6b) None of the participants reported pronunciation training and more than one month of immersion experience in an English-speaking country. **Given that the participants were in China, the opportunities to communicate with other native and non-native speakers of English were highly limited.** After the pre-tests, the participants were randomly assigned to the experimental (Ruan & Saito, 2023, p. 4).

The collocation pattern of transitive complement + passive voice + passive voice is used mostly in the section of methodology. It indicated the challenges the researcher encountered and how they resolved them.

Passive Voice + Passive Voice+ Transitive Complement

The collocation pattern of passive voice+ passive voice + transitive complement was usually found in the section of methodology.

(7a) [...] the Perceived Competence Scale (PCS) were collected. **Items were rated on a 5-point Likert scale, [...].** Each point indicated the degree to which the students agreed with the statements (Hirosawa, Kono & Oga-Baldwin, 2024, p. 4).

(7b) The chatbots developed by the researchers with the Danbee AI platform were employed as a learning tool in this study. **The selection and development of the chatbots were done based on two considerations.** First, previous research underlined the need for well-prepared materials appropriate for the levels and requirements [...] (Kim & Su, 2024, p. 4).

The passive voice in this pattern was used to report data collection or how the data was employed to be used. On the other hand, transitive complements were used for data interpretation and support from previous studies.

Passive Voice + Passive Voice + Noun Clause Complement

Although the collocation pattern of passive voice + passive voice + noun clause complement was often found, there was no specific use in any particular section.

(8a) The three orientations have been discussed in a continuum from different. **However, the distinction in this linear progression is challenged by scholars advocating for the use of translanguaging practices to fulfill their pedagogical goals for L2 students in EMI classrooms that may intimidate them into English-only orientations.** To be more specific, studies have demonstrated that translanguaging performed beyond the classroom can create multiple translanguaging spaces for L2 students (Mu, Lee & Choe, 2023, p. 3).

(8b) First, AI chatbots can be integrated into the KFL classroom as a feasible approach to strengthening WTC and ultimately facilitating students' L2 communication. **Based on the argument that L2 WTC can be more precisely conceptualized as a process rather than just personality traits of individual learners, researchers regard L2 WTC as a dynamic, temporal, and contextual phenomenon.** Consequently, they have been arguing that it can be demonstrated at a comprehensive level [...] (Kim & Su, 2024, p. 10).

Example 8a was written in the section of literature review. Example 8b was written in the section of discussion.

Passive Voice + Passive Voice + Subjective Complement

Although the collocation pattern of passive voice + passive voice + subjective complement was also found twice, there was no specific use in any particular section.

(9a) It can also be called an “intelligent personal assistant.” **The earliest intelligent chatbots, ELIZA and PARRY, were developed by Joseph Weizenbaum and Kenneth Colby in 1966 and 1972, respectively.** These chatbots were text-based systems that mimicked human communication (Kim & Su, 2024, p. 3).

Example 9a was written in the section of literature review. Example 9b was written in the method section.

Phase 2

While phase 1 is the results of passive voice and their syntactic vicinities in Q1 SCOPUS applied linguistics methodology, phase 2 examines the use of passive voice and their syntactic vicinities as written by Thai writers. The data collection was derived from 15 applied linguistics methodologies as indexed in TCI 1 from 2021 to 2024. There were 40 tokens of passive voice and their vicinities to study. The results of the study were compared with the results in phase 1 to seek correlation. If the data of applied linguistics methodology in TCI 1 (Journal of Studies in the English Language (jSEL), Thoughts and NIDA Journal of Language and Communication) are the same with the vicinity as reported in Table 2, code 1 was given, if not it was code 2. The data were coded into the inferential statistical analysis SPSS29 to seek a significant relationship.

Table 4. Passive Voice and their Syntactic Vicinities

Passive Constructions and their Syntactic Vicinities	Ranking
Passive Voice + Passive Voice + Passive Voice	1
Transitive Complement + Passive Voice + Transitive Complement	2
Transitive Complement + Passive Voice + Passive Voice	3
Passive Voice + Passive Voice + Transitive Complement	4
Passive Voice + Passive Voice + Noun Clause Complement	5

Table 5. Passive Voice and their Syntactic Vicinities in Tier 1 Applied Linguistics Research Articles

Correlations			
		Tokens	Compliance with Q1
Passive Voice and their Vicinities	Pearson Correlation	1	-.135
	Sig. (2-tailed)		.405
	N	40	40

According to Table 5, although 80 percent of passive voice and their Syntactic Vicinities in Tier 1 applied linguistics methodology were similar to the patterns in Q1 SCOPUS applied linguistics methodology, there was no statistically significant relationship between the two variables where the p-value was reported at .405.

Regarding their similarities, the pattern “passive voice + passive voice + passive voice” occurred frequently in TCI 1 applied linguistics methodology, such as (10).

(10) Results were reported in percentages. **To maintain accuracy, the results were cross-checked by the three of us regularly during and after the analysis.** Contradictions were discussed and consensus won out (Pupipat, Rungkaew & Meepar, 2022, p. 10).

Passive voice is used to report the mean of data analysis, data validation and the consensus after the data validation. In addition, passive voice was used to describe the whole process of data collection.

(11) A questionnaire and a semi-structured interview were employed in order to explore how Thai university undergraduates perceived mother tongue-based language teaching in English classrooms. **The questionnaire was adapted from the study of Korean students’ and teachers’ attitudes regarding use of their L1 in English classrooms.** The questionnaire and the interview questions were translated into Thai to ensure that the participants clearly understood the items in the questionnaire (Bunmak, 2023, p. 49).

Example 11 shows the use of passive voice to denote the use of instrument. The instrument was adapted to make it particularly suitable for the participants in the study. Another similar pattern between the two datasets is passive voice that was used with the vicinities of transitive complement.

(12) Private university undergraduates in Chiang Mai, Thailand participated in this study. **The participants were selected via the purposive sampling method.** The students [...] responded to the questionnaire and took part in the semi-structured interview (Bunmak, 2024, p. 48).

The first sentence is a transitive complement which is used to address the participants in the study. The second sentence is passive voice, which is the syntactic structure to denote the selection of the sampling method. The third sentence is a transitive complement which is used to denote the format of the research.

Despite having similarities, some differences were also found. The syntactic structure of existential “there” constructions was found in TCI 1 applied linguistics methodology.

(13) In this study, there are 414 clauses which consist of the victims or the perpetrators from three Thai news agencies. Each clause was analysed according to Halliday’s [...] view on Transitivity analysis. At first, the process type was determined and then the elements of the clause were analysed and identified [...] (Suebclin & Vunthong, 2022, p. 41).

Normally, the sentence to report data collection is a passive construction, as in “the data collection in this study is 414 clauses”. The researcher in example 13 reported the data collection with existential “there” constructions to mean something exists. The syntactic structures of subjective complements were used around passive voice as in 14.

(14) The overarching research site is Thailand where rape crimes are quite prevalent [...]. **Our purposively selected data was taken from three Thai news agencies.** Bangkok Post is an English-language daily newspaper published in broadsheet and digital platforms [...] (Suebclin & Vunthong, 2022, p. 40).

Normally, the data collection in the methodology is used with passive voice. For example, “the data in this study was collected from Bangkok Post, which is an English newspaper”. This section is asked to provide the data collection rather than the factual information of Bangkok Post. So, the readers needed to understand that the researcher collected the data from the Bangkok Post.

Phase 3

For phase 3, due to limited data collection, using inferential statistical calculation might not be appropriate to gain validity. Descriptive statistical analysis via percentage was, therefore, employed to calculate the data collection. The results of the third phase involved undergraduate students’ IS papers in the field of applied linguistics. Approximately 250,000 words, or 26 applied linguistics research methodologies, provided 7 tokens that were used with passive voice with different syntactic vicinities. 85.72 percent appeared similar to the Q1 Scopus database. The examples are given below.

(15a) Twenty-two were female, and 8 were male. Most of them were 26-30 years of age. **The sampling group was assigned through the convenience sampling technique.** The data were collected in the academic year 2023. (ST20)

(15b) The Thai language version of the questionnaire was made to prevent any misunderstanding, and it was administered to the students through the platform Google Forms. **The quantitative data were then analyzed by mean, SD, and percentage.** Regarding the quantitative data, they were analyzed through a thematic approach. (ST20)

(15c) The samples in the analysis were 15 utterances produced by Woody. **These utterances were collected from dialogues between characters in the movie.** Woody was selected because of his kindness and bravery.” (ST13)

(15d) This research collected the content analysis to analyze data and classified the utterances performing an illocutionary act. **The data were analyzed by using Searle’s (1976) theory.** They proceeded by classifying the types of illocutionary speech acts. (ST13)

(15e) This part sought to investigate students’ attitudes about the usage of the Metaverse in the learning of English. After identifying these categories, **the students were interviewed using a series of closed-ended questions.** The data was evaluated yielding frequency, percentage, and mean values. (ST11)

(15f) Each song includes a list of words used in Avril Lavigne’s 39 songs. **The singer’s songs are classified as Pop-Punk.** In the music industry in Europe and today, she is still a famous artist with outstanding works. (ST06)

(15g) First, the descriptive method is used to analyze Sky’s utterances, which uses the classification of illocutionary acts proposed by Searle. **Second, the statistical method is used to count the number of utterances from the type of speech acts and to calculate the percentage from the data.** Last, the interpretative method explains the intention of the meaning of Sky’s utterances. (ST02)

In 15a, the passive voice in the second sentence is not necessary. The writer could have used a subjective complement to mean the same thing as in *the sampling group was convenience sampling technique*. The passive voice in 15b is arbitrary, where it is unreasonable and unexplainable as to why the writer used it. There is no link between the subject and the quantitative data in the passive voice with the information in the previous discourse. The passive voice in 15e is arbitrary, which is unreasonable and unexplainable. There is no link between the subject the students in passive voice with the information in the previous discourse.

Table 6. Passive Voice and their Syntactic Vicinities between Q1 SCOPUS and Students' IS

Passive Voice and their Syntactic Vicinities	Freq. Q1	Freq. IS
Passive Voice + Passive Voice + Passive Voice	17	1
Transitive Complement + Passive Voice + Transitive Complement	15	4
Transitive Complement + Passive Voice + Passive Voice	7	0
Passive Voice + Passive Voice + Transitive Complement	6	1
Passive Voice + Passive Voice + Noun Clause Complement	5	0
Passive Voice + Passive Voice + Subjective Complement	2	0
Subjective Complement + Passive Voice + Passive Voice	0	1
Total	52	7

The fourth-year undergraduate students, majoring in English at a Thai private university had a very limited ability to use passive voice and their vicinities when compared with Q1 SCOPUS international writers. The one that undergraduate students, majoring in English, produced the most was the colligation of transitive complement + passive voice and transitive complement. However, this complies with the literature review in that passive voice is a difficult structure among EFL learners.

Discussion

The uses of passive voice between professional writers and non-professional writers are the same. However, the differences between the two groups of writers are pragmatic aspects of the DP movement.

DP Deletion

Despite there being differences, the similarity between professional writers and non-professional writers is that they use passive voice to omit the agent. According to Swan (2015), passive voice is used for several agentless reasons, such as concealed agents, unknown agents, and widely known agents. However, this study found that passive constructions are commonly used for the reason of widely known agents. It is not necessary to spell out the researchers repetitively as the readers know who conducted the research studies (Djuwari, Saputri & Authar, 2022).

(16a) Approval for the study was obtained from the principal of the school. **The data were collected using a printed survey, which was sent to the participating school by postal service.** Before performing the surveys, the students were informed that participation was voluntary (Hirosawa, Kono & Oga-Baldwin, 2024, p. 4).

(16b) A mixed-methods design was applied in this study. **All data were analyzed using SPSS software, version 25.0.** First, means and standard deviations were calculated to assess the WTC levels [...] (Kim & Su, 2024, p. 6).

(c) “An initial questionnaire was structured to measure three main constructs [...]. **Each of these were measured in relation to an object, a key aspect of the learning process and environment.** Four aspects were chosen for the questionnaire [...]” (Teravainen-Goff, 2023, p. 4)

Passive voice allowed the writer to omit the agent, referring to the one who instigated the action. It is widely known who conducts the processes of data collection, data analysis, and data validation. The use of passive voice to report experimental processes also helps avoid subjectivity via the use of the pronouns I and we (Traugott, 2010). Similarly, undergraduate students knew that the by-agents are able to be omitted, such as 17a and 17b.

(17a) Twenty-two were female, and 8 were male. Most of them were 26-30 years of age. **The sampling group was assigned through the convenience sampling technique.** The data were collected in the academic year 2023.

(17b) The Thai language version of the questionnaire was made to prevent any misunderstanding [...]. **The quantitative data were then analyzed by mean, SD, and percentage.** Regarding the quantitative data, they were analyzed through a thematic approach.

The agents of passive voice in these examples are the researchers. This is widely known, and it is not necessary to be spelt out.

DP movement

One of the differences between passive voice and their vicinities between professional writers and non-professional writers is explained by the theory of pragmatic discourse of givenness. The pragmatic discourse of givenness refers to providing the given information first before giving the new piece of information (Smolka, 2011; Smolka, 2017). Passive voice in applied linguistics methodology is used to comply with this theory.

(18a) A total of 65 students participated in the study. **They** were enrolled in an elementary-level Korean language elective at a higher education institution in Guangdong Province, China (Kim & Su, 2024, p. 3).

(18b) “The testing materials included both trained and untrained items. **The untrained words** were used to check the extent to which the effects of instruction can be generalized to novel words (Ruan & Saito, 2023, p. 4).

Example 18 shows that the researcher employed passive voice to link information with other constructions, such as transitive complements in 18a-18b. Although most researchers in Q1 SCOPUS and TCI 1 used passive voice with the reason of cohesion to comply with pragmatic discourse of givenness, passive voice with their vicinities written by Thai undergraduate students is sometimes inconsistent, arbitrary and not systemic as in 19.

(19) The Thai language version of the questionnaire was made to prevent any misunderstanding [...]. **The quantitative data were then analyzed by mean, SD and percentage.** Regarding the quantitative data, they were analyzed through thematic approach.

Even though they knew to use the collocation of “passive voice + passive voice + passive voice”, the function of language use deviated from the prototypical member as shown in Q1 SCOPUS and TCI 1. The results seem to comply with the explanations of passive voice in grammar texts (Swan, 2015) explaining that passive voice is the interchangeable structure of active voice. In addition, the vicinity of the passive voice to the right is the sentence to give justification about why the data collection and the data analysis were selected accordingly. In the research method, the researchers used their justification to back up the decision to use certain data collection and data analysis to make their research studies valid and reliable (Widdowson, 2011), such as 20.

(20a) **They were enrolled in an elementary-level Korean language elective at a higher education institution in Guangdong Province, China.** According to the internal guidelines, each language class accommodates 20 to 25 students (Kim & Su, 2024, p. 3).

(20b) **In the present study this activity was mainly used as an exercise for student recognition of compliments and CRs, but its results were not part of the quantitative analysis presented in section 4.1.** After this, students practiced producing compliments and CRs (step d) through a closed learner-learner role.” (Iraheta, 2024, p. 4).

(20c) **Items were rated on a 5-point Likert scale, suggested by Hirosawa and Quint Oga-Baldwin (2022) to match the cognitive level of younger learners.** Each point indicated the degree to which the students agreed with the statements (1 = disagree very much, 2 = somewhat disagree, 3 = neither agree or disagree, 4 = somewhat agree, 5 = agree very much) (Hirosawa, Kono & Oga-Baldwin, 2024, p. 4).

(20d) **The selection and development of the chatbots were done based on two considerations.** First, previous research underlined the need for well-prepared materials appropriate for the levels and requirements of the learners (Kim & Su, 2024, p. 4).

The justifications in research methodology were given via the syntactic structures of transitive complements and subjective complements. These justifications

include the interpretations of scores, the advantages of certain tools, and a supporting reason given by other reliable sources. However, the semantic denotation of justifications is different as the unprofessional writer did not justify why certain data collection and analysis were applicable to the study as in 21.

(21a) The Thai language version of the questionnaire was made to prevent any misunderstanding, and it was administered to the students through the platform Google Forms. **The quantitative data were then analyzed by mean, SD, and percentage.** Regarding the quantitative data, they were analyzed through a thematic approach.

(21b) This part sought to investigate students' attitudes about the usage of the Metaverse in the learning of English. After identifying these categories, **the students were interviewed using a series of closed-ended questions.** The data were evaluated yielding frequency, percentage, and mean values.

Unlike professional writers, where the vicinities of passive voice are used for the reason for employing a certain data analysis method, unprofessional writers only report factual information. The vicinities of transitive complements, noun clause complements and subjective complements were rarely found in the work of unprofessional writers as they used the vicinities of justification as reproduced in Table 7.

Table 7. Passive Voice and their Syntactic Vicinities between Q1 SCOPUS and Students' IS

Passive Voice and their Syntactic Vicinities	Freq. Q1	Freq. IS
Passive Voice + Passive Voice + Passive Voice	17	1
Transitive Complement + Passive Voice + Transitive Complement	15	4
Transitive Complement + Passive Voice + Passive Voice	7	0
Passive Voice + Passive Voice + Transitive Complement	6	1
Passive Voice + Passive Voice + Noun Clause Complement	5	0
Passive Voice + Passive Voice + Subjective Complement	2	0

The slot of semantic denotations of justification is semi-fixed. Reasons can be justified with various syntactic structures, such as noun clause complements, transitive complements and subjective complements. Justifications are factual. These syntactic structures are the structures to report facts.

Conclusion

The current study examined passive voice with syntactic vicinities in applied linguistics research methodology from different datasets to answer the following research questions.

1. What are the syntactic reasons of the DP by-phrase agent deletion in passive voice in applied linguistics methodology?
2. What are the pragmatic reasons of the DP movement in passive voice via their syntactic vicinities in applied linguistics methodology?

Passive voice was found to be colligated with various syntactic structures, such as passive voice, transitive complements, subjective complements, and noun clause complements. The most frequent colligation was *passive voice + passive voice + passive voice*. This pattern was used to connect data collection, data analysis, and data validation. When passive constructions were used with transitive complements, they were used to link information together to create cohesion in the methodology. However, transitive complements, subjective complements, and noun clause complements used after passive voice were the syntactic structures to give reasons as to why the researchers selected certain data, instruments, and data analysis in their study. The DP by-phrase agents in passive voice are omitted due to widely known agents as the ones who conducted the research methodology are the researchers themselves. The pragmatic reasons for the DP movement to the Spec T are due to the pragmatic discourse of givenness to link an old piece of information with the previous discourse.

Regarding the new knowledge of this research paper, the idea of passive voice and active voice as interchange structures could be counteracted by the results of this study. Even though they are the same semantically, they are different in terms of their pragmatic aspects focusing on their movement. The DP movement of the theme towards the Spec T in passive voice leads to sentential cohesion and coherences that most EFL learners have been faced with the problem of linking one sentence to the other seamlessly. Therefore, the results of this paper finally offer a possible solution.

The results of this study could provide EFL learners with concrete examples for writing the research methodology section more effectively. Specifically, the findings illustrate how form, meaning, and use can be integrated, helping learners apply these linguistic elements simultaneously in their applied linguistics research. By doing so, students are likely to enhance cohesion and coherence in their writing, as they are encouraged to master different syntactic structures in related areas simultaneously. This, in turn, fosters the development of more professional writing skills among EFL learners. However, a limitation of this paper is the restricted data set used in the study. If possible, future research should employ a corpus-based approach. This would

enhance the generalizability and external validity of the findings. The study of passive constructions and their vicinities in this study was limited to only the materials of applied linguistics research articles. Applying the results of this study to other materials such as news articles and other types of texts may not be applicable to the optimal level.

Pedagogical Implications

When EFL teachers teach the subject of academic writing in English, they may shed light on the language features that frequently occur in the section of research methodology. For example, not only are passive constructions used due to the omission of the subject, but the object is also raised to link with the information in the previous discourse. Learners can apply either noun clause complements or transitive complements as the following sentence to explain why a certain method is selected. Therefore, the learners could learn the right research method and the right language patterns at the same time. For example, the teachers may recommend several sampling methods, including simple sampling method, convenience sampling method, and purposive sampling method. Then, the teachers can teach the syntactic structures of passive voice, transitive complements, and subjective complements. Finally, the learners can be instructed to fill in their information into the syntactic structures taught. For example, “the data collection in this study is convenience sampling method. Convenience sampling method was applied for the data collection in this study. This research study follows a convenience sampling method”. Language teachers can facilitate the learners’ practical knowledge by narrowing down the language features that are authentically used in the section of methodology.

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Investigating the impact of test anxiety and self-regulation on foreign language learning: A quantitative correlational approach

Investigación del impacto de la ansiedad ante los exámenes y la autorregulación en el aprendizaje de lenguas extranjeras: Un enfoque cuantitativo correlacional

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Abstract

The present study investigated the self-regulated learning strategies adopted by EFL learners, their levels of cognitive test anxiety, and the potential correlations between self-regulated learning and cognitive test anxiety. The study also examined whether gender and level of language proficiency had a significant effect on self-regulated learning and cognitive test anxiety. A correlational survey design was employed to investigate EFL learners and cross-sectional data were collected through an online questionnaire. Data analysis of 269 undergraduate students revealed that gender consistently emerged as a significant variable. Notably, female students exhibited higher mean scores in both self-regulated learning and cognitive test anxiety. Furthermore, the results consistently found a correlation between self-regulated learning and cognitive test anxiety, with self-regulated learning effectively predicting cognitive test anxiety. Specifically, the predictive power of self-regulated learning for cognitive test anxiety was found to be statistically significant only within the group of students at A2 language level.

Keywords: cognitive test anxiety, self-regulated learning, EFL learners, higher education, foreign language learning, test anxiety

Resumen

El presente estudio investigó las estrategias de aprendizaje autorregulado adoptadas por los estudiantes de EFL, sus niveles de ansiedad cognitiva ante los exámenes y las posibles correlaciones entre el aprendizaje autorregulado y la ansiedad cognitiva ante los exámenes. El estudio también examinó si el género y el nivel de competencia lingüística tenían un efecto significativo sobre el aprendizaje autorregulado y la ansiedad cognitiva ante los exámenes. Se empleó un diseño de encuesta correlacional para investigar a los estudiantes de EFL y se recogieron datos transversales mediante un cuestionario en línea. El análisis de los datos de 269 estudiantes universitarios reveló que el género se reveló sistemáticamente como una variable significativa. En concreto, las estudiantes obtuvieron puntuaciones medias más altas tanto en aprendizaje autorregulado como en ansiedad cognitiva ante los exámenes. Además, los resultados mostraron de forma consistente una correlación entre el aprendizaje autorregulado y la ansiedad cognitiva ante los exámenes, con el aprendizaje autorregulado prediciendo eficazmente la ansiedad cognitiva ante los exámenes. En concreto, el poder predictivo del aprendizaje autorregulado para la ansiedad cognitiva ante los exámenes resultó ser estadísticamente significativo sólo en el grupo de estudiantes de nivel A2.

Palabras clave: Ansiedad cognitiva ante los exámenes, aprendizaje autorregulado, estudiantes de inglés como lengua extranjera, educación superior, aprendizaje de lenguas extranjeras, ansiedad ante los exámenes

Resumo

O presente estudo investigou as estratégias de aprendizagem autorregulada adotadas pelos alunos de EFL, seus níveis de ansiedade cognitiva em exames e as possíveis correlações entre a aprendizagem autorregulada e a ansiedade cognitiva em exames. O estudo também examinou se o gênero e o nível de competência linguística tinham um efeito significativo sobre a aprendizagem autorregulada e a ansiedade cognitiva em exames. Foi utilizado um desenho de pesquisa correlacional para investigar os alunos de EFL, e foram coletados dados transversais por meio de um questionário online. A análise dos dados de 269 estudantes universitários revelou que o gênero se mostrou consistentemente como uma variável significativa. Especificamente, as alunas obtiveram médias mais altas tanto em aprendizagem autorregulada quanto em ansiedade cognitiva em exames. Além disso, os resultados mostraram de forma consistente uma correlação entre a aprendizagem autorregulada e a ansiedade cognitiva em exames, sendo que a aprendizagem autorregulada previu eficazmente a ansiedade cognitiva em exames. Especificamente, o poder preditivo da aprendizagem autorregulada para a ansiedade cognitiva em exames revelou-se estatisticamente significativo apenas no grupo de estudantes de nível A2.

Palavras-chave: Ansiedade cognitiva em exames, aprendizagem autorregulada, alunos de inglês como língua estrangeira, ensino superior, aprendizagem de línguas estrangeiras, ansiedade em exames

Background of the Study

The role of self-regulated learning and test anxiety in language learning has long been a topic of interest and research. Scholars from around the world have conducted an investigation into the relationship between test anxiety and several variables, such as self-efficacy (Lei et al., 2021), academic buoyancy (Putwain et al. 2023), coping strategies (Thomas et al., 2017), goal orientation, perfectionism, and academic achievement (Eum & Rice, 2011). Similarly, self-regulation in learning has been investigated from many aspects, and researchers from various disciplines have documented that it facilitates learning (Chen, 2022; Ozer & Ispinar Akcayoglu, 2021; Tse et al., 2022; Tseng et al., 2017). Both self-regulated learning and cognitive test anxiety have been recognized as having a significant impact on the language learning process. While cognitive test anxiety can lead to poor concentration (Amate-Romera & de la Fuente 2021), fear of failure (Cassady, 2004; Lowe et al., 2008), and in some cases, students freezing up (Németh & Bernáth 2023), self-regulation strategies may play a role in mitigating the negative impact of cognitive test anxiety (Chen, 2022). Given the importance of self-regulated learning and cognitive test anxiety in foreign language learning, it is important to develop a better understanding of the relationship between the two variables. This literature review builds on existing research findings on the effects of cognitive test anxiety and self-regulated learning strategies on foreign language learning. The review focuses on the sources and consequences of anxiety, as well as the strategies that learners use to mitigate its impact.

Sources and effects of test anxiety in foreign language learning

The literature underscores the significant effects of test anxiety on the foreign language learning process (Cassady & Johnson 2002). The study of Aydın et al. (2020) emphasizes the relevance of understanding the sources and impacts of test anxiety among learners. Zheng and Cheng (2018) further contribute to this discourse by establishing cognitive test anxiety as a substantial negative predictor of academic achievement in language learning. This suggests that test anxiety not only affects learners' psychological well-being but also bears tangible implications for their language proficiency and academic performance. In a comprehensive study by Aydın et al. (2020), an exploration of test anxiety among learners of English as a foreign language (EFL) reveals multifaceted sources and effects. The study identifies physical, test-related, and affective problems as key sources of test anxiety among EFL learners. In another study, Aydın (2012) confirmed that fear of negative evaluation was a reason for test anxiety. All these sources contribute to learners' experiences of distress, which can hinder their language learning progress. Cognitive test anxiety embodies multifaceted

dimensions, including general worry, freezing up, and fear of failure, among other dimensions (Németh & Bernáth 2023). Putwain (2019) also found that higher self-handicapping was associated with poorer examination performance, mediated by lower perceived control and higher worry. His findings suggest that increasing perceived control and reducing self-handicapping could be effective strategies for test anxiety interventions. In a separate study, Aydın and Yerin Güneri (2022) investigated the role of psychological inflexibility, rumination, perfectionism cognitions, cognitive defusion, and self-forgiveness in the context of cognitive test anxiety in a sample of 715 EFL learners at a public university. Their findings indicated that psychological inflexibility, rumination, and perfectionism cognitions exhibited positive correlations with cognitive test anxiety and were predictors of test anxiety. A 30-year meta-analytic review by von der Embse et al. (2018) found that self-esteem was a significant and strong predictor of test anxiety. The perceived difficulty and high-stakes consequences of the test were also associated with higher levels of test anxiety.

Overall, test anxiety has been found to negatively predict students' academic performance and success (Balogun et al., 2017; Cassady, 2004; Möcklinghoff et al., 2023; Thomas et al., 2017; Zheng & Cheng, 2018). The negative impact of anxiety on language learning exhibit variability based on the context, educational levels of students, and the target language (Aydın et al., 2021; Teimouri et al., 2019). Andujar and Cruz-Martínez (2020), Aydın et al. (2021) and Horwitz (2010) support the assertion that foreign language anxiety persists across learners of different proficiency levels. This persistent role implies that anxiety does not diminish as learners progress in their language studies. Such a conclusion underscores the need for continuous attention to anxiety management strategies throughout the language learning journey.

Self-Regulated learning strategies of language learners

While anxiety exerts detrimental effects, self-regulated learning strategies exert a positive influence on language learning outcomes. Even though there is a huge amount of theoretical basis, most of which have been proposed and tested especially since the 2000s onwards (Chen, 2022), self-regulated learning mainly covers some principal components. Despite the many different names and forms self-regulated learning can take, it is prudent to say that it comprises goal setting, self-monitoring, and self-evaluation, amongst others (Andrade & Evans 2012; Cassidy, 2011; Zimmerman & Schunk, 2001), and they are all interrelated (Peel, 2019). All the components of self-regulated learning help learners regulate their learning to improve their performance and adapt to changing contexts (Zimmerman & Schunk, 2001).

Self-regulated learning occurs when there is a reciprocal relationship between forethought, performance, and self-reflection (Zimmerman, 2002). This reciprocal relationship provides researchers with a rich ground for gaining insights into student

learning and sustaining lifelong learning. In the context of foreign language learning, there exists a gradually growing body of research. Seker (2016), for example, conducted a study on 222 undergraduate foreign language learners and found that self-regulated learning is a significant predictor of foreign language achievement, even though participants in her study reported using self-regulation strategies at only moderate to low levels. This suggests that self-regulated learning is an important skill for foreign language learners to develop, and that even using SRL strategies to a limited extent can lead to improved language learning outcomes. Martirossian and Hartoonian (2015) assert that the implementation of these strategies empowers learners to take control of their learning process, thereby enhancing their academic engagement. Guo et al. (2018) delve deeper into this aspect, exploring Chinese EFL learners' utilization of self-regulatory strategies to combat foreign language anxiety. Their research identifies cognitive, metacognitive (appraisal), and affective strategies as particularly favoured by learners. The findings suggest that learners who are better able to regulate their emotional and cognitive processes exhibit enhanced language learning performance. There are also some studies indicating that self-regulated learning occurs more effectively when formative assessment is preferred (Lam, 2015; Xiao & Yang, 2019). Lam (2015), for instance, studied the relationship between explicit strategy instruction and the development of metacognitive knowledge, along with the mental processes that underlie students' utilisation of strategies in a process-oriented EFL writing course. According to his research, strategy instruction in writing is likely to increase the capacity for self-control and resourcefulness in coping with diverse writing tasks.

The synthesis of these findings holds valuable implications for foreign language teaching. EFL teachers need to be attentive to the multifaceted sources of test anxiety. This awareness might enable language teachers to create a supportive classroom environment that addresses physical, test-related, and affective concerns, thereby fostering a more conducive learning atmosphere. Additionally, Guo et al. (2018), by exploring self-regulated learning strategies, suggests that educators should encourage learners to adopt cognitive, metacognitive, and affective strategies to effectively manage anxiety. This approach not only enhances learners' emotional well-being but also positively impacts their language learning.

Present Study

The existing body of literature underscores the significant role of test anxiety and self-regulated learning strategies in shaping the foreign language learning process. While test anxiety poses challenges by hindering language proficiency and test scores (Zheng & Cheng, 2018), self-regulated learning strategies offer a wealth of opportunities to mitigate the negative effects of anxiety. The persistent nature of foreign language anxiety across proficiency levels highlights the need for ongoing efforts to address and manage anxiety throughout the language learning journey. On

the other hand, students with higher levels of test anxiety were found to engage less in self-regulating their learning, as demonstrated by Amate-Romera and de la Fuente (2021), in a sample of university students in Spain. By incorporating these insights into foreign language teaching practices, educators can cultivate a more nurturing and more supportive learning environment that promotes language learning.

The underlying premise was that the recruitment of EFL learners across diverse proficiency levels would yield insightful data regarding the mechanisms through which language learners at the university level manage their learning processes and test-related anxiety. Therefore, the purpose of this investigation was to delve into the self-regulated learning strategies adopted by EFL learners, their levels of test anxiety, and the potential correlations between test anxiety and self-regulated learning. Specifically, this study aimed to determine whether low self-regulation is a predictor of higher levels of test anxiety. The present study aimed to build on previous research on how cognitive test anxiety is affected by the way EFL learners approach their learning, act to achieve their learning goals, and evaluate their performance accordingly. Based on previous research, it was hypothesised that there would be significant negative statistical relationships between learners' perceived anxiety and self-regulated learning means. It was also hypothesised that anxiety would persist across language proficiency levels.

Underlying this discussion, the following research questions were posited:

1. How do students with different levels of language proficiency and genders differ on self-regulated learning and cognitive test anxiety?
2. Is there a significant correlation between self-regulated learning and cognitive test anxiety?
3. How does self-regulation among EFL learners predict cognitive test anxiety?

Data and Methods

The study employed a correlational survey design to investigate EFL learners who had been studying for one year at a school of foreign languages. It utilised cross-sectional data collected through an online questionnaire, which investigated the relationship between students' test anxiety, self-regulated learning factors, and sociodemographic factors.

Study population

A cross-sectional study was conducted among EFL learners at a state university in southern Turkey. The students were enrolled in the Preparatory Year Programme (PYP) of the School of Foreign Languages, which provides a foundation for students to proceed to their departmental courses. All undergraduate programmes at the university are offered in English, so language instruction in the PYP is a requirement for all students before advancing to the undergraduate programme in which they are enrolled.

A total of 284 students responded to the survey, but due to incomplete, non- or inconsistent responses, the data from 269 respondents were subjected to data analysis. Of the respondents, 43.9% were male and 56.1% were female. The students were studying in different proficiency groups at the school, with 51.3% at A2 level, 32.7% at B1 level and 16% at B2 level. The age of the students ranged from 18 to 46 years, with a mean age of 19.79 years ($SD = 2.62$).

Data collection tools

The survey instrument comprised a range of multiple-choice and Likert-type questions, allowing respondents to rate their agreement with each item.

The Scale on Self-Regulation in Learning (SSRL), developed by Erdogan and Senemoglu (2016), is a self-report instrument designed to quantify cognitive and motivational aspects related to self-regulation in learning. The scale comprises four dimensions: 'before study' ($\alpha = 0.78$), 'during study' ($\alpha = 0.77$), 'after study' ($\alpha = 0.82$), and 'motivation' ($\alpha = 0.81$). The sections and main dimensions of the instrument are modular in design, allowing researchers to tailor their use to their specific needs. In this study, only the three cognitive factors ('before study', 'during study', and 'after study') were utilised. Respondents rated each item on a 5-point scale, with 1 representing 'never' and 5 representing 'always'.

Test anxiety among university students was assessed using the Turkish version of the Cognitive Test Anxiety Scale-Revised (T-CTAR), validated by Bozkurt et al. (2017). This 23-item assessment tool demonstrates a unidimensional structure, consistent with the conceptualisation of cognitive test anxiety and previous examinations of the original scale, developed in English. The instrument used in the present study is TCAR, which is the Turkish revised version of the Cognitive Test Anxiety Scale (CTAR) originally developed by Cassady and Johnson in 2002. The CTAR was developed to measure only the cognitive aspects of test anxiety, throughout the learning-testing cycle. The 23-item T-CTAR's internal consistency was found to excellent, aligning with previous research findings (Cronbach's $\alpha = .93$). Respondents rate their suitability on a 4-point scale, with 1 indicating 'not suitable for me at all' and 4 indicating 'very suitable for me'.

Data collection and analysis

After obtaining ethical clearance from the Human Research Ethic Committee at the university where the study took place, the researchers distributed the questionnaire within the school via an online platform. Data were collected using convenience sampling during the spring term of the 2021-2022 academic year. Respondents were directed to an online survey via a link, which presented an informed consent page before proceeding. Participants were informed of their right to refuse participation or withdraw from the study at any time. As a result, the participation was voluntary. Only students who provided informed consent were permitted to proceed to the questionnaire.

All calculations were made using IBM SPSS Statistics, Version 21 for Windows. The threshold for statistical significance was set at ' $p < 0.05$ '. Descriptive statistics are reported, including absolute frequencies (n), mean and standard deviation (\pm), and relative frequencies (%) for categorical variables. The statistical analyses were conducted in three stages. The independent variables were assessed for normal distribution. After the distribution was confirmed to be normal, parametric tests were selected for analysis. Firstly, independent samples t-tests and ANOVA analysis were used to compare differences between the distributions of means across pairs of independent groups (males/females) and proficiency level groups (A2, B1, and B2 language levels), respectively. In one case, when the assumption of homogeneity of variance was violated, a robust Welch's ANOVA test was used. Secondly, Pearson's correlation coefficient was calculated to determine the relationship between self-regulated learning strategies and cognitive test anxiety. To determine the association between self-regulated learning and cognitive test anxiety, a linear regression test was conducted. Finally, the effect size was calculated to determine the statistical significance of the differences between the variables.

Results

The results are presented in the order of the research questions. First, the relationship between self-regulated learning and cognitive test anxiety was examined to determine whether it varied depending on the student's levels of language proficiency or gender. Second, correlation analysis was used to identify the association between the two dependent variables. Finally, self-regulated learning was used as a predictor of cognitive test anxiety in a linear regression model to identify differences between the groups.

Table 1. Gender and language proficiency related differences in variables: means, standard deviations, t-test and ANOVA

Variable		n	Self-regulated learning		Cognitive test anxiety	
			Mean \pm SD	p.	Mean \pm SD	p.
Gender	Female	151	3.22 \pm .053	.004	2.91 \pm .075	.000
	Male	118	3.04 \pm .050		2.48 \pm .084	
Levels of language proficiency	A2	138	3.15 \pm .046	.358**	2.83 \pm .079	.069
	B1	88	3.09 \pm .052		2.62 \pm .086	
	B2	43	3.22 \pm .069		2.57 \pm .079	

** The Welch's ANOVA test was run as the variances of the variable across the groups were not equal.

When they were tested by gender, there were significant differences in the mean scores of cognitive test anxiety $t(267) = -4.457, p = .000$ and of self-regulated learning $t(267) = -2.889, p = .004$. The effect size, as measured by Cohen's d , was $d = 3.494$, indicating a small effect. No statistically significant difference was found in average self-regulated learning [$F(2) = 1.032, p = .358$] or cognitive test anxiety [$F(2) = 2.707, p = .069$] according to the levels of language proficiency.

To examine the relationship between self-regulated learning and cognitive test anxiety in response to the second research question, a Pearson correlation coefficient was calculated.

Table 2. Correlations between self-regulated learning and cognitive test anxiety (N = 269)

		Self-regulated learning	Cognitive test anxiety
Self-regulated learning	Pearson correlation Sig. (2 tailed)	1	.205 .001
Cognitive test anxiety	Pearson correlation Sig. (2 tailed)	.205 .001	1

The results showed a significant, positive correlation of .205 between the two variables ($p = .001$), indicating that higher levels of test anxiety are associated with higher levels of self-regulated learning.

Linear regression analyses were conducted to identify the relationship between self-regulated learning and cognitive test anxiety. Table 3 shows the standardized coefficients for the regression analysis.

Table 3. Regression analysis for self-regulated learning in predicting cognitive test anxiety

Variable	B	Std. Error	B	t	p
Constant	1.713	.298		5.742	.000
Self-regulated learning	.321	.094	.205	3.427	.001
R	.205				
R ²	.042				

* Dependent variable: cognitive test anxiety

A significant regression equation was found, with self-regulated learning explaining 4.2% of the total variation in cognitive test anxiety ($F(1, 267) = 11.742, p = .001$). Although the analysis revealed a significant difference between self-regulated learning and cognitive test anxiety, it is noteworthy that only 4.2% of the variation in the cognitive test anxiety variable is explained by self-regulated learning. This implies that predictive power of self-regulated learning over cognitive test anxiety is relatively modest.

Table 4. Linear regression models of self-regulated learning as predictor of cognitive test anxiety by each level of language proficiency

		B	Std. Error	B	t	p
A2 (n = 138)						
	Constant	1.176	.442	2.659	.009	
	Self-regulated learning	.525	.139	.308	3.782	.000
	R ²	.095				
B1 (n = 88)						
	Constant	1.858	.553		3.360	.001
	Self-regulated learning	.248	.177	.149	1.401	.165
	R ²	.022				
B2 (n = 43)						
	Constant	2.221	.586		3.790	.000
	Self-regulated learning	.108	.178	.094	.606	.548
	R ²	.009				

* Dependent variable: cognitive test anxiety

The results showed that the predictor of self-regulated learning explained 9.5% of the total variation in cognitive test anxiety ($F(1, 136) = 14.304, p = .000$). The p -value for the regression coefficient was less than 0.001, which indicates that the relationship between self-regulated learning and cognitive test anxiety was statistically significant. The results of the test showed that there was no statistically significant relationship between the two variables within B1 and B2 groups.

Discussion

Even though this is a complex area, lower levels of self-regulation and cognitive test anxiety are generally thought to negatively impact language achievement. This study adds to the existing body of evidence that investigates the associations between self-regulated learning and cognitive test anxiety focusing on the case of EFL learners at the tertiary level.

First, the study findings revealed that the levels of self-regulated learning and cognitive test anxiety varied significantly by gender, with female students possessing higher mean scores both on self-regulated learning and cognitive test anxiety. Several scholars have reported higher levels of test anxiety among female students (Aydın et al., 2021; Aydın & Yerin Güneri, 2022; Santana & Eccius-Wellmann, 2018; Zheng & Cheng, 2018). Similarly, females exhibited significantly higher levels of self-regulation than their male counterparts. This finding has been echoed in the existing literature in recent years. For example, Tseng et al. (2017) examined EFL learners' self-regulatory capacity and found gender-related differences. Specifically, female EFL learners had better control over their strategy use than males. In a recent study by Liu et al. (2021), researchers explored gender differences in self-regulated learning among a group of Chinese students. The findings indicated that across all three dimensions—preparatory, performance, and appraisal phases—of self-regulated learning, female students outperformed their male counterparts. However, it is worth to note that these findings are not uniform across disciplines and educational levels. The existing literature demonstrates conflicting results. For instance, a study by Hong et al. (2016) in the Chinese context found that male language learners scored higher on a measure of self-regulated learning than female language learners. However, it is essential to interpret these findings cautiously. This is because higher levels of cognitive test anxiety do not always lead to poor test performance. There were no significant differences observed in the scores for either self-regulated learning or cognitive test anxiety on levels of language proficiency. Some studies, such as that by Aydın and Yerin Güneri (2022) and Zheng and Cheng (2018), indicate a connection between language level and cognitive test anxiety. Therefore, the findings we obtained in our sample might need to be acknowledged in future studies.

Second, we found that self-regulated learning and cognitive test anxiety have a positive correlation. However, the findings in the literature are not consistent and show contradictory results. Despite the limited number of studies investigating the relationship between test anxiety and self-regulation for learning, a negative correlation is often reported (Cassady & Finch, 2020; Romera & de la Fuente, 2021).

Last, it was found that self-regulated learning successfully predicted cognitive test anxiety. However, the regression model explained 4.2% of the variance in cognitive test anxiety scores. Future research could attempt to add other related variables, such as academic buoyancy and self-handicapping, to their regression models to see if they can help explain more of the variance in cognitive test anxiety. There have been few studies investigating the associations between cognitive test anxiety in higher education settings. One example is the work of Putwain et al. (2016), who suggested that academic buoyancy could be effective in ameliorating performance-interfering worries. Putwain (2019) examined how test anxiety develops from executive self-regulation processes and self-beliefs using a structural equation model. He found that higher self-handicapping was linked to worse examination performance through lower control and higher worry. In the present study, the predictive power of self-regulated learning for cognitive test anxiety was found to be statistically significant only within the group of students possessing the lowest language proficiency among the three language levels. In particular, when the A2 level group was compared to learners of other language levels, it was observed that self-regulated learning effectively predicted the levels of cognitive test anxiety among these language learners. Fear of failure (Németh & Bernáth, 2023; Zeidner, 2007) and perceived low proficiency levels (Andujar & Cruz-Martínez, 2020; Aydın et al., 2021) are two strong sources of test anxiety. This connection likely influenced the experiences of A2-level language learners examined in our study. As students' language proficiency advances throughout their learning journey, their test anxiety is likely to decrease, aligning with the cognitive appraisal model's principles (Cassady & Johnson, 2002).

Conclusion

This study is a cross-sectional survey of Turkish EFL learners at a state university. The main goal of this study was to add to the body of knowledge by investigating the potential for better identifying the connections between self-regulated learning and cognitive test anxiety. To this end, we discuss the effects of gender and language proficiency levels on respondents' cognitive test anxiety and self-regulated learning levels. We also examine the effects of gender and language proficiency levels on respondents' cognitive test anxiety and self-regulated learning levels. The study also determines the strength and direction of the linear relationship between these two ordinal variables. Learners with higher levels of self-regulated learning have been

found to have a tendency towards higher levels of cognitive test anxiety. This is quite interesting, as it contradicts the majority of findings in the existing literature. Therefore, these findings should be investigated further. Self-regulated learning was found to be a predictor of cognitive test anxiety. However, this finding is neither inherently positive nor negative. When students are anxious about a test, they may focus their attention and avoid distractions. They may also use effective learning strategies, such as setting goals and monitoring their progress. It is also worth gaining insight into the reasons for the existence of significantly higher self-regulated learning and cognitive test anxiety scores among A2 level learners, as previous research suggests that lower levels of English proficiency can be a source of test anxiety. The results are important for language educators, as they can help students identify the sources of their anxiety and develop coping strategies. Additionally, the findings can be helpful for researchers examining the sources of negative emotions students experience before and during exams, and how this affects their ability to persevere in the face of academic difficulties and improve their academic performance.

Although this study poses a few conundrums to be addressed by researchers, there are two notable limitations. The participants were from the School of Foreign Languages, where a full-year language instruction is offered. As a result, the students may not necessarily engage with their departmental courses during this period. Therefore, the results obtained may not be generalizable to other groups of EFL learners. This includes those who are learning English in addition to their departmental courses, as well as those studying at other educational levels. Another shortcoming is that due to the use of cross-sectional data instead of time-series data, both fellow researchers and language education practitioners should exercise caution when interpreting causal relationships identified in this study.

Disclosure statement

No potential conflict of interest was reported by the authors.

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Book Review

Bilingualism

Shahrzad Mahootian, 2020

Publisher: **Routledge, 199 pgs.**

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In the realm of linguistics research, the topic of bilingualism and its intricate dimensions has been a subject of considerable interest, leading to a myriad of theoretical perspectives and empirical studies. Among the numerous contributions to this academic discourse, Mahootian's (2020) textbook on bilingualism presents a comprehensive narrative, charting bilingualism's multifaceted nature. Building on established linguistic theories and empirical evidence (Baker, 2011; Grosjean, 2010), the author strives to reconcile varied perspectives on bilingualism, ranging from individual linguistic competence to societal linguistics trends within six chapters, with the last one providing a summary. By doing so, the author imparts a broad-based understanding that reflects the complexities inherent in the study of bilingualism.

Mahootian's (2020) meticulous approach to presenting research strengthens the book's validity by providing a clear and comprehensive picture of key concepts related to bilingualism. Its well-organized structure and clear explanations offer a thorough introduction to the subject, making it particularly valuable for novice researchers and students. The foundational approach not only supports readers in grasping complex concepts but also encourages critical thinking and meaningful engagement with the material. Mahootian's work stands out as an excellent starting point for those new to the field. Mahootian's (2020) work is particularly timely and relevant given the burgeoning field of research exploring the cognitive implications of bilingualism. As evident in

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Chapters 4 and 5, the book provides a much-needed synthesis of current research on topics such as language processing in the brain, the development of bilingualism in children, and the potential cognitive advantages (and costs) associated with navigating two languages. By directly addressing these key areas of inquiry, Mahootian (2020) offers readers a subtle understanding of how bilingual experience shapes the mind and brain. Furthermore, by engaging with ongoing debates and highlighting areas for future research, Mahootian (2020) ensures that her work remains relevant and thought-provoking for those at the forefront of this dynamic field.

In comparison to other works in the field, Mahootian's book provides a broad overview of bilingualism but does not delve as deeply into specific areas as some other texts. For instance, Grosjean's *Bilingual: Life and Reality* (2010) offers an in-depth exploration of the lived experiences of bilingual individuals, while Costa's *The Bilingual Brain* (2016) focuses more on the neural mechanisms underlying bilingualism. Altarriba and Heredia's *An Introduction to Bilingualism: Principles and Processes* (2018) provides detailed theoretical frameworks and research methodologies. These books offer specialized insights and in-depth analysis in their respective areas, whereas Mahootian's work serves as a comprehensive and accessible entry point into the broader field of bilingualism. This makes Mahootian's book particularly suitable for undergraduate students who need a foundational understanding before delving into more specialized texts.

This work of Mahootian (2020) stands out for its interdisciplinary approach, effectively bridging insights from linguistics, psycholinguistics, neurolinguistics, and cognitive science. Unlike some books that focus narrowly on specific aspects of bilingualism, this text provides a holistic view, illuminating the interconnectedness of language, brain, and cognition. This approach aligns with a growing trend in scholarship that recognizes the value of integrating knowledge from diverse fields to gain a more comprehensive understanding of complex phenomena like bilingualism. By synthesizing research from various disciplines, Mahootian (2020) not only enhances the book's scholarly significance but also makes it a valuable resource for readers seeking a broader perspective on the multifaceted nature of bilingualism.

In Chapter 1 of her textbook on bilingualism, Mahootian (2020) offers a subtle understanding of the phenomenon, emphasizing that bilingualism extends beyond the mere usage of two languages to encompass capability and context. This rejection of a simplistic bilingual/monolingual binary lays the groundwork for her later exploration of the cognitive dimensions of bilingualism, a key argument throughout the book. Mahootian (2020) argues that numerous factors, including cultural, educational, and historical circumstances, shape an individual's journey toward becoming bilingual. Therefore, a comprehensive framework of bilingualism needs to account for varying fluency levels, different contexts of use, and the multifaceted influences driving bilingual behaviors. She highlights six core elements: age, manner of acquisition, sequence of acquisition, literacy skills, function, and fluency, all of which contribute to a more

delicate understanding of bilingualism. Ultimately, Mahootian (2020) highlights the need for a perspective that values bilingualism as an intricate phenomenon, moving beyond simple definitions to embrace the complexities of why, how, and when languages are used and learned.

Following the same chapter, Mahootian (2020) delves further into the complexity of language acquisition, challenging the traditional binary view of monolingual and bilingual followed by Edwards (2012a) and Hoffmann (1991) among others. Instead of a binary, she presents bilingualism as a varied spectrum influenced by a multitude of factors. For instance, the age of language acquisition, particularly the notion of a critical period during early childhood, plays a significant role, although its impact continues to be debated. Similarly, the learning environment and timeline significantly affect the speed and fluency of acquisition. Importantly, Mahootian (2020) distinguishes between language acquisition and literacy. While literacy is a significant educational feature, it is not a deciding factor in determining bilingualism itself. As Mahootian explains, literacy does not influence whether someone is bilingual, but rather it can shape the style or type of bilingualism. The functionality of each language in a bilingual individual's life is another highlighted aspect, reflecting both the status of each language within a society and the influence of context, such as setting, audience, and topic. Mahootian's (2020) analysis reveals the dynamic and multifaceted nature of bilingualism, shaped by a complex interplay of personal and social factors. Consequently, this comprehensive view promotes a more inclusive definition of bilingualism and enriches our comprehension of human linguistic abilities.

Chapter 2 investigates the societal impacts of bilingualism, examining its historical and linguistic dimensions. Mahootian (2020) underlines the ubiquity of multilingualism throughout history, from ancient eras to the present day. For instance, stone columns in Persepolis and reliefs on mountainsides in Kermanshah, Iran, dating back to 522–486 BC, feature inscriptions in Old Persian, Elamite, and Babylonian, all detailing the conquests of King Darius the Great. Similarly, the Rosetta Stone, from around 196 BC, bears inscriptions in three scripts: Egyptian hieroglyphs, Egyptian demotic script, and Greek, reflecting the languages used in different spheres of Ptolemaic Egypt (Mahootian, 2020). Within the same chapter, she challenges the misconception that monolingualism is the norm, highlighting the prevalence of plurilingual societies throughout history and today. However, she also acknowledges that not all citizens within multilingual societies are themselves multilingual. Mahootian probes the complexities of plurilingual societies, exploring how language shapes identity, unifies or divides communities, and can even lead to cultural endangerment, a theme she revisits throughout the book. She discusses two specific types of bilingualism, Stable +/- diglossic bilingualism and maintaining bilingualism, to illustrate how environmental factors, social domains, and the perceived value of each language influence both the prevalence and transmission of bilingualism across generations.

Mahootian (2020) further uncovers the profound impact of societal perceptions on bilingual individuals, particularly within immigrant contexts. Negative sentiments, often rooted in language differences, fuel prejudiced views and widespread misconceptions about the influence of bilingualism on the economy, safety, and intelligence. This societal outlook not only contributes to xenophobia but also potentially triggers language endangerment, particularly impacting indigenous languages with significant historical and cultural richness. However, Mahootian (2020) also emphasizes the vital role language plays in shaping individual and collective identities, ultimately leading to diverse forms of bilingualism. She advocates for a broader understanding of bilingualism that recognizes its historical continuity, global prevalence, and the often-unseen consequences of language contact. By elucidating the potential for linguistic diversity endangerment, she highlights the urgency of language preservation and the need to integrate a comprehensive understanding of bilingualism into modern linguistic studies.

In Chapter 3, Mahootian (2020) explores the phenomenon of code-switching, citing various studies (e.g., Auer & Dirim, 2003; Blommaert, 2005; Edwards, 2012b; Eversteijn, 2011; Mahootian, 2005; Scotton & Ury, 1977) to support her argument that code-switching is governed by social and grammatical rules. Auer and Dirim (2003), for instance, provide a foundational model that has been widely accepted in the field, but Blommaert (2005) offers a more detailed perspective, emphasizing the importance of context in shaping code-switching behaviors. While both sources are integral to understanding code-switching, Blommaert's focus on contextual dynamics adds depth to Mahootian's argument, suggesting that code-switching cannot be fully understood through grammatical rules alone. Mahootian (2020) explores the diverse functions of code-switching, highlighting its role in:

- **Signaling shifts in conversation topics or social dynamics:** For example, a speaker might switch to a different language to introduce a new topic or to signal a change in formality.
- **Enhancing social and political statements:** Code-switching can be used to emphasize a point, express solidarity with a particular group, or challenge existing power structures.
- **Revealing the speaker's identity and group affiliations:** Language choice can be a powerful marker of personal and social identity, reflecting a speaker's cultural background, ethnicity, or social class.

The same chapter highlights the dynamic interplay between language choice, code-switching, and the fluid concept of identity. The author argues that language is integral to shaping both personal and national identity, connecting individuals to their cultural heritage, signaling social standing, and influencing perceptions of power. She introduces the concept of "cultural code-switching," which encompasses not only language but

also shifts in behavior and communication style to navigate different cultural norms. For example, as argued by the author, many African American Vernacular English speakers feel obligated to switch to a “White” variety of English to gain acceptance, be taken seriously, and navigate racial dynamics. This forced codeswitching highlights the social inequalities linked to language, where one language variety is unfairly privileged over another. Mahootian (2020) acknowledges that multilingual communities often face prejudice and assumptions based on their language use, highlighting the need for greater understanding and sensitivity. She concludes by emphasizing that code-switching is a rich and complex phenomenon, deeply embedded within the social fabric of multilingual communities. As globalization brings diverse cultures into closer contact, recognizing and appreciating the nuances of code-switching becomes increasingly vital for fostering cross-cultural respect and effective communication.

Chapter 4 explores the intricacies of childhood bilingualism, meticulously addressing seven key areas to provide a comprehensive understanding of this complex topic. The author, begins by examining the various paths children take to becoming bilingual, exploring strategies like the “one person, one language” and the delicate balance between home and public languages, known as the “home language-public language method” approach. Maurice Grammont’s “one-person, one-language” approach, introduced in 1902, has evolved into the modern “one-parent, one-language” approach for raising bilingual children. This method encourages each parent to consistently use a different language with their child. While the terminology shifted to reflect its common use in families, the core principle remains: associating each language with a specific person to minimize confusion and support clear language development. The “home language-public language method,” or Minority Language at Home, promotes bilingualism by designating the minority language for home use and the majority language for public settings (Mennen, 2009). This approach, often favored by families, ensures consistent exposure to both languages. Using the minority language at home is particularly beneficial as it strengthens the weaker language (Grosjean, 2010; Hammer, 2013). While children may initially lag in the majority language upon entering school, studies show they catch up quickly with sufficient exposure. The chapter then shifts to the fascinating realm of bilingual cognition in infancy. Mahootian (2020) highlights research methodologies such as the high amplitude sucking procedure, visual fixation procedure, and habituation to illuminate how infants perceive and process two languages simultaneously. She tackles the question of language differentiation in bilingual children, evaluating competing theories like the unitary language hypothesis and the dual system hypothesis (Genesee, 1989; Vihman, 1985).

Addressing common concerns, Mahootian (2020) compares the developmental trajectories of bilingual and monolingual children. She explores whether bilingual upbringing significantly alters conventional language acquisition processes, considering factors like input quantity and developmental milestones. Importantly,

she presents evidence that bilingual children develop language skills on par with their monolingual peers, dispelling the myth of language delay (Paradis & Jia, 2017; Pearson et al., 1993). The chapter further investigates the cognitive implications of bilingualism, examining concepts like executive functions and metalinguistic awareness. The author explores whether navigating two languages from an early age confers cognitive advantages, such as enhanced attentional control or greater cognitive flexibility (Bialystok, 2007; Haft et al., 2019). Mahootian (2020) revisits the phenomenon of code-switching, this time through the lens of childhood bilingualism. She analyzes whether children's code-switching patterns differ from those of adults and whether they reflect a unitary or independent language system (Gaskins et al., 2019; Reyes, 2004). Finally, the chapter emphasizes the crucial role of language maintenance in a bilingual child's environment. The author stresses the importance of supporting the home language and highlights the contributions of both family and community in fostering bilingualism. Chapter 4 concludes by advocating for a research agenda that is both rigorous and unbiased, urging researchers to challenge unfounded fears about bilingualism and to address socio-political issues head-on. By presenting a nuanced and evidence-based perspective on childhood bilingualism, Mahootian (2020) encourages readers to embrace the richness and diversity of multilingualism.

Chapter five probes the cognitive implications of adult bilingualism, offering an exploration into how the dynamics of multiple languages impact individual language processing and the use of brain regions. The text distinguishes between early and late bilinguals' language processing and investigates the potential cognitive enhancements or costs bilingualism may impart. It also scrutinizes the mechanisms of language control in bilingual individuals and analyzes how these individuals adeptly blend codes to communicate effectively, encapsulating an all-encompassing understanding of bilingualism's cognitive aspects. The author's perspective is enhanced by a detailed historical overview of technological advancements in understanding the bilingual and monolingual brains. Before the 1990s, psycholinguists and neurolinguists mainly utilized timed observational experiments for their insights. However, the advent of technological developments over the past two decades, including non-invasive Functional Magnetic Resonance Imaging (fMRI), Positron Emission Tomography (PET) with radioactive tracers, and Event-related potentials (ERPs) measuring electrical stimuli responses, has expanded access to real-time brain activity information (Mulert et al., 2002; Mullins, 2018; Phan et al., 2002). In turn, this has significantly deepened our comprehension of language storage and processing in both monolingual and bilingual brains.

The author further illuminates various methodological challenges in bilingual research, including inconsistent participant pool characteristics and a simplified, binary representation of bilingualism, which is better depicted as a continuum. Small sample sizes, coupled with varying participant backgrounds, are critiqued due to the lack of reliable extrapolations, and the incorporation of cross-linguistic results

is identified as problematic due to variability inherent to different languages. The author correlates these factors to the ongoing diversification of research outcomes, yielding contradictory conclusions. Furthermore, Mahootian (2020) defines a range of psycholinguistic and neurolinguistic concepts such as executive functions, cognitive load, working memory, neural activation, semantic memory, and semantic networks. She explicates executive functions as cognitive processes which mediate several mental operations, cognitive load as mental energy expenditure during information processing, and working memory as a limited capacity system that retains short-term information. Neural activation refers to brain region activity in response to various stimuli, whereas semantic memory pertains to our lifelong accumulation of word and concept knowledge, and semantic networks denote the conceptual links interconnecting words and ideas.

Within the same chapter, Mahootian (2020) scrutinizes five key research areas in bilingual studies. The first question investigates whether bilingual languages are processed in different or overlapping brain regions. The author highlights the roles of fluency and age of acquisition in neural activation, suggesting more fluent or early bilinguals require less processing time for language tasks. However, the eventual verdict on the impact of bilingual language exposure on the brain's language processing necessitates further inquiry. Secondly, the author ponders the question: Can early exposure to two languages affect processing? Shreds of evidence linking structural brain changes and variations in grey matter amount with differences in language processing between monolinguals and bilinguals are discussed, pointing to bilingualism's potential role in modifying language processing regions and even nonverbal processing areas. Thirdly, the chapter queries if there is a cognitive advantage to bilingualism in adulthood. While monolingualism is conventionally seen as the norm, Mahootian (2020) posits that bilinguals or multilinguals globally outnumber monolinguals, and evidence suggests that bilingualism can lead to cognitive benefits, giving a tentative yes to the question. The discussions reflect a need for more robust scientific explorations into bilingualism's potential advantages and effects.

The other two areas of inquiry in this chapter are, first, the question of whether the languages of a bilingual individual are activated at all times. An array of reported studies infers some degree of continuous activation and interaction between a bilingual individual's languages, even in monolingual environments (Bartolotti & Marian, 2012; Schmid & Köpke, 2017). This is emphasized through the outcomes derived from priming tasks and lexical decision tasks. Secondly, the potential processing cost of switching between languages is considered. The literature is inconclusive; some research suggests switching involves executive functions, thereby increasing general executive processing time and demanding additional cognitive control (Garbin et al., 2010; Lehtonen et al., 2018). Despite the lack of certainty, it is also hypothesized that switching may enhance executive functions. The author accentuates that codeswitching is an intrinsic, systematic, and rule-governed part of bilingualism

exhibited as a dynamic behavior across bilingual speech communities. In reflecting on the author's approach in this chapter, there is an appreciated scientific impartiality. The author threads carefully in tracing the complexities of bilingual processes and the present understanding within academia, effectively portraying the map and terrain of bilingual studies. The author renders the landscapes of research and inquiry open-ended, which not only reflects the current state of research but also represents an invitation for future academic explorations of bilingualism.

Overall, Mahootian's (2020) work offers a significant contribution to the field of bilingualism by providing a comprehensive and accessible overview of key research and debates. The book's strength lies in its interdisciplinary approach, weaving together insights from psycholinguistics, neurolinguistics, and cognitive science to illuminate the complexities of bilingual language processing. By synthesizing research from diverse areas, the author clarifies complex concepts and highlights the dynamic interplay between language, brain, and cognition. This makes the book particularly valuable for students and researchers seeking a solid foundation in the field. Furthermore, the book goes beyond merely summarizing existing knowledge by actively engaging with current debates and controversies. For instance, Mahootian (2020) tackles the ongoing discussion surrounding the cognitive advantages of bilingualism, presenting a balanced perspective that acknowledges both the potential benefits and the methodological challenges inherent in this research area. This critical approach encourages readers to think deeply about the complexities of bilingualism and to engage with the nuances of the research findings.

Mahootian (2020) strategically structures her book to progressively guide the reader from broader societal and linguistic contexts of bilingualism towards the more intricate realms of childhood bilingualism and its cognitive implications. This approach is evident in the progression of chapters, beginning with definitions and societal implications, moving through language mixing and childhood bilingualism, and culminating in an in-depth exploration of bilingualism and the brain. Throughout the book, the author skillfully weaves together research findings, theoretical frameworks, and real-world examples to support her claims. She frequently cites key studies in psycholinguistics, neurolinguistics, and cognitive science, demonstrating a thorough understanding of the relevant literature. Moreover, her use of case studies and illustrative examples helps make complex concepts accessible to a wider audience, further strengthening her arguments and enhancing the overall clarity of the text. Upon reviewing the content and structure of Mahootian's (2020) book, it is evident that the text is well-crafted and achieves its objectives effectively. Given its comprehensive approach and the depth of analysis provided, the book does not necessitate further improvements at its current level. The detailed exploration and clear presentation of bilingualism make it a valuable resource for its intended audience.

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GiST acknowledges the increasing use of artificial intelligence (AI) tools in academic research and establishes the following guidelines to ensure integrity and transparency in the publication of manuscripts.

Author Responsibility

- **Comprehensive Responsibility:** Authors are fully responsible for the content of their manuscripts, including sections generated with the assistance of AI tools. This includes the obligation to ensure that the work complies with GiST's ethical and publication standards.
- **Originality and Transparency:** Authors are expected to ensure the originality, validity, and integrity of their contributions. Any use of AI tools must be conducted responsibly and documented to maintain transparency.
- **Plagiarism Prevention:** It is the author's obligation to ensure that their work is free from plagiarism, including content generated by AI. The use of AI does not exempt the author from this responsibility.
- **Transparency in the Use of AI Tools:** Authors must clearly and thoroughly declare how AI tools were used in the writing, image production, data analysis, or other processes within the manuscript.

Additionally, AI and AI-assisted technologies should not be listed as authors or co-authors. Authorship is an exclusively human responsibility, associated with tasks that can only be performed by people. In this regard, GiST does not recognize AI tools as having legal capacity or copyright ownership.

Declaration in the Manuscript:

- The use of AI must be explicitly disclosed in the manuscript, thus promoting transparency and trust.
- If AI was used in the methodology, details on when and how it was used must be included.
- If chatbots or AI were used for analytical work or processes, this should be clearly indicated in the Methods section.

- **Command/Prompt Declaration:** In such cases, authors must specify all commands used to generate AI content, facilitating scientific scrutiny and ensuring the reproducibility of results.
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- This declaration must be made in every submission of the article.

Guidelines for Authors

GiST Journal ISSN (1692-5777) is a peer-reviewed journal published bi-annually by the *Institución Universitaria Colombo Americana (ÚNICA)* in Bogotá, Colombia.

Content. GiST Journal disseminates the results of national and international studies in language education, particularly in bilingual education and language learning innovation. GiST addresses related topics including language policy, the relationship between language, culture, and society, the role of first and second languages, teaching methodologies, learning strategies, educational planning, and other topics related to language education.

Journal Aim. To disseminate the results of national and international research carried out in the field of language education, in particular bilingual education, as well as innovations in language teaching and learning.

Readership. GiST Journal is directed towards students, researchers, educators, policy makers, and other parties interested in the field of (or in fields related to) language education.

Periodicity. GiST is published in English bi-annually by ÚNICA, Bogotá Colombia. The January- June issue includes articles accepted from October to January of the year of the publication, and the July- December issue articles accepted from the previous April – July of the year of publication.

Submission of articles. Authors must submit documents exclusively and directly via the platform of Open Journal Systems (OJS). Users must register, and articles should be submitted by clicking on the link “online submissions.” Submissions are received in the dates established and published by GIST. Submissions to GIST can be sent via: <https://latinjournal.org/index.php/gist/issue/view/66>

Documentation required. Additionally, authors must attach these documents via the OJS platform.

1. Letter addressed to the Editor of GiST Journal, requesting the evaluation of the article.
2. The Letter of Copyright Assignment Agreement and Conflict of Interest Statement, both signed by the author(s), verifying that the article is original, and that it has not been published or submitted to another journal for consideration. This format is available on GIST’s page, in the Editorial section, also in the OJS platform.
3. CV for each author including studies, professional experience, current position, and institutional affiliation. In addition, each author’s full name should be given in the order in which they wish to appear.

Article Presentation Format

Language. The article should be in English.

Tone. Articles should present scientific, scholarly, and professional research on language education. All biases towards gender, sexual orientation, racial, or ethnic groups should be avoided, as should all prejudiced statements involving disabilities or age. Historical and interpretative inaccuracies (quoting a work inappropriately) are not acceptable.

Length. At least 15 but no more than 25 pages.

Software. The article should be submitted in a recent version of Microsoft Word.

Style. Authors should follow *the Publication Manual of the APA (Seventh Edition, 2019)* for writing style in general as well as references. Some key aspects of the general APA style include:

- a. Using just one space, not two, between all words and sentences.
- b. Using a ½ inch (five to seven space) indentation on every paragraph.
- c. Placing reference citations within the text (and not as a footnote).
- d. Spacing in-text references according to the example: (Johnson, 2003).
- e. Keeping direct quotations to a minimum. When included, following the APA guidelines for short quotations (less than 40 words, identify the quotation with quotation marks as part of the main text format, and include the page number of the source), and long quotations (more than 40 words, use block paragraph format for the quotation and include the page number of the source).
- f. Placing punctuation *within* quotation marks, according to the example: ...word.”
- g. Using the 12 point Times New Roman font, for readability.
- h. Double-spacing the entire text.
- i. Utilizing commas before the word *and* or *or* in a series of three or more items.
- j. Using digits (e.g., 10; 78; 394) only for numbers 10 and above. Other numbers under 10 may be written out (e.g., four, nine, seven).
- k. Differentiating in the format used with a *table* and a *figure* in the graphics which accompany one’s article.
- l. Implementing the editorial “we” or “I” (with the active voice), which is perfectly acceptable nowadays, and even preferred over the use of the passive voice.
- m. Using the five levels of APA heading, (which are not to be numbered).

Although we encourage authors to use the reference lists of previously published GIST Journal articles as a model, seven general examples follow. Please notice that each reference includes the authors name, date of publication, title of the work, and publication data.

Martínez, A. A., Jones, B. B., & Schmidt, C. C. (1997). Título de artículo en español [Title of article translated into English]. *Name of Journal*, 8(3), 492-518.

Chang, F. F., & Donovan, P. P. (Eds.). (1985). *Title of work*. Location: Publisher.

Martínez, A. A. (2009). Title of chapter. In E. E. Godoy (Ed.), *Title of book* (pp. xx-xx). Location: Publisher.

Martínez, A. A., & Jones, B. B. (2010). Title of article. *Title of Periodical*, 24, pp. xx-xx. doi:xx.xxxxxxxx

Martínez, A. A., & Jones, B. B. (2010). Title of article. *Title of Periodical*, 24, pp. xx-xx. Retrieved from <http://name.of.website>

Chang, F. F (2000, July). *Title of paper or poster*. Paper or poster session presented at the meeting of Organization Name, Location.

Martínez, A. A. (2002, October 12). Title of article. *Name of Newspaper*, pp. B2, B6.

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Title. The article's title should be brief and allow readers to identify the topic and content easily.

Origin of the Article. It is necessary to specify if the article is the result of research, a graduation thesis, an essay, or critique. In the case of it being a product of a research project, the author should indicate the project title, the financing source, sponsoring institution, and project phase.

Abstract. All abstracts should be in English and in Spanish. The abstract should include the scope and intention of the paper, with a concise description of the methodology, supporting theories, general results, and main conclusions.

Keywords. There is a maximum of seven keywords, which must be presented in English as well as Spanish.

Types of Articles

1. **Scientific or technological research article:** A document which presents in detail the original results of a research project. The structure generally contains seven important sections: and abstract, an introduction, a review of the literature, the methodology, the outcomes, the conclusions, and a reference list.
2. **Reflective article:** A document which presents in detail the results of a research project from the analytical, interpretive, or critical perspective of the author, on a specific topic, with clear references to the original sources.
3. **Review Article:** A document which is the result of research in which the results of certain research projects which have or have not been published are analyzed, systematized, and integrated together with the objective of demonstrating advances and developmental tendencies. This type of manuscript is characterized by its presentation of a careful bibliographic summary of at least 50 references.

Peer Review Process

As GIST is a bi-annual publication, the Editorial Committee publishes two calls for papers, in approximately April and November of each year. GIST then receives submissions until the published deadline, and carries out the following process with each submission:

The Editor carries out a preliminary evaluation before assigning peer reviewers, with the purpose of verifying that the article complies with the established criteria and guidelines for presentation of articles. This revision is usually completed within a three-week period.

In the case of articles that do not comply with the standards for presentation, according to the specifications of the journal, the Editor requests that the authors adjust the article in order to prepare it to be reviewed by peer reviewers. Authors are given a two-week period to make the requested modifications, and re-send the manuscript again to the Editor for consideration. Once the Editor has verified that the article fits the standards of presentation and specifications of the journal, the process of peer review may begin.

The Editor informs authors of the decision to submit the article to peer review or not within one month.

Articles that fulfill the presentation requirements are submitted to anonymous, double-blind peer review by experts in the field. This means that authors do not know the identity of the reviewers, and vice versa.

The Editor, with the help of members of the Editorial Committee, assigns peer reviewers according to the specific topic of each article. The Editor then invites peers to conduct the review, and once these individuals accept, they are informed as to the procedure for accessing articles in the OJS. In this same message, reviewers are informed of the expected time period and proposed deadline for the review, approximately one month after a reviewer agrees to conduct the evaluation. It is the hope to always conduct the peer reviews in a timely fashion; nevertheless, adjustments may be made to ensure reviewers' participation.

In order to carry out the evaluation, peer reviewers complete the evaluation form, and in this way, recommend the article for publication or not as well as specifications for revision, if this is recommended. The results of this evaluation serve as input for the Editor and Editorial Committee to decide if the article is publishable, publishable with minor adjustments, publishable with major adjustments, or not publishable.

Once the evaluation is complete, the Editor communicates with the author(s) and informs them of the decision that has been made, indicating whether or not the article will continue in the revision process. Authors have a one-month period to adjust the article and send the revision once again to the Editor. The Editor then reviews the article and reaches the final decision as to whether the revised version will be accepted for publication, bearing in mind its revision according to the input received from the peer reviewers, and the Editor's own independent criteria.

The Editorial Committee will decide on the publication of an article according to the following criteria: the fulfillment of the above stated conditions, methodological and conceptual rigor, originality, scientific quality, and relevance.

If the article is accepted for publication, the Editor proceeds with the editing and proofreading process. Once the final version of the article is completed, it is sent to the author for final approval, and is then forwarded to the design team for its preparation.

Relinquishing of Rights and Distribution of Published Material

The publication of articles in GIST implies that authors relinquish all rights to the article and its content. Authors also authorize GIST to promote and distribute the article via the means it deems appropriate, be it in print or electronically. For this purpose, authors should sign and send both the letter of relinquishment, and the declaration of conflict of interest upon submission of the article. These formats are available in the OJS platform of the Journal.

Code of Ethics and Good Practices

The Editorial Committee of GiST Education and Learning Research Journal, as part of its commitment to the scientific community, strives to guarantee the ethics and quality of its articles. The publication takes the code of conduct and good practice of the Committee of Ethics in Publications (COPE) as its point of reference, which defines standards for editors of scientific journals, as well as the legal and ethical standards of the American Psychological Association (APA) in the sixth edition of its Style Manual.

All parties involved in the publication of the journal (Editor, Committees, Authors, and Peer Reviewers) must accept and adhere to the ethical guidelines and principles outlined here.

Editor Obligations and General Responsibilities

The Editor of the journal is responsible for ensuring strict compliance with the policies and principles of the journal. Specifically, the Editor is expected to act in an ethical manner in the following aspects:

Decision making. The Editor guides all decisions regarding articles submitted and published according to verifiable criteria of impartiality and fairness, taking into consideration the primary objectives of the journal.

The works submitted are evaluated objectively, based solely on the scientific merit of their content, without discrimination in regards to race, gender, sexual orientation, religion, ethnic background, nationality or political persuasion.

Confidentiality. The Editor is committed to the principle of confidentiality and anonymity in communications between Editor and Authors, and Editor and Peer Evaluators. The Editor shall not disclose information related to the article or its process with third parties or colleagues not related to the journal, except in cases when an

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Compliance. The Editor strives to comply with the editorial policies of the Journal, and the publication of each online and print issue according to its established publication schedule.

In the same fashion, to:

- Consult the opinion of the members of the Editorial Board and Committee.
- Generate initiatives of support and constantly improve editorial practices.
- Support initiatives to educate researchers on issues of publication ethics and other ethical aspects of the journal.
- Take responsibility for the process of all articles submitted to the Journal, and develop mechanisms of confidentiality and peer evaluation up to the point of publication or rejection by the journal.

Other principles to follow include:

Peer Review Process and Editorial Decisions. The decision to publish or not shall be established via the process of peer evaluation, according to the “double blind” method in order to guarantee that the evaluation process that is free of conflict of interest between the parties. This rigorous procedure allows peer reviewers to value the technical quality, originality, and scientific contribution of the articles, among other aspects, and at the same time provides authors with the means to improve the article. For this revision process, a sufficient number of peer reviewers will be provided, selected from qualified area experts, with the intention of allowing for a more critical, expert, and objective editorial decision- making process.

Editing and Publication Schedule. The Editor provides for the fulfillment of the editing and publication schedule of articles accepted for publication. Upon the publication of each issue, the Editor and the editorial team accept responsibility for the promotion and distribution of the journal to its readers, subscribers, authors, peer reviewers, and other organizations with whom the institution holds agreements, as well as the data bases and national and international indexing services.

General Editor Obligations and Responsibilities

Authors must present their articles in the link indicated on the OJS-web page, according to the guidelines for the presentation of articles established by the journal. Authors are responsible for the ideas expressed in the articles, and for the ethical appropriateness.

Originality, plagiarism and exclusivity. Authors must explicitly state that the article is original in its creation, and that every effort has been taken to respect the intellectual

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Authorship. Articles with more than one author should order authors' names in hierarchical fashion, indicating by this the degree of function, responsibility, and contribution to the article. By the same token, mention must be made to any individuals who have made significant scientific or intellectual contributions to the research, composition, and editing of the article.

Responsibility. All authors submitting articles must assume full responsibility for their work, and ensure that it presents an exhaustive review and discussion of the most recent and relevant literature.

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Conflict of interest. The Editor shall not consider articles that possibly represent a real or potential conflict of interest, resulting from financial or other relationships of competition or collaboration between authors, companies, or institutions mentioned in the article.

Errors in articles published. Any error or imprecision shall be communicated by the editorial team, and the necessary corrections in the online version of the article made.

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In the revision process, peer reviewers shall adhere to the following principles:

Confidentiality. Peer reviewers shall not share any information with third parties related to the article or its publication process. In such case that an external opinion may be necessary, reviewers shall seek express written authorization from the Editor in Chief, explaining the reasons. By the same token, reviewers shall not use the content of non-published articles for their own benefit or that of others, except with the express

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