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Effects of Cooperative Learning on the Enhancement of Listening Comprehension in EFL

Efectos del aprendizaje cooperativo en el desarrollo de habilidades auditivas en inglés como lengua extranjera

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This paper reports a quasi-experimental, action-research study on the use of cooperative learning to enhance listening comprehension skills in English at an English teacher education program in Chile. The study aimed to improve fourth-year students' advanced listening competencies by incorporating a series of cooperative listening activities over one semester. Data were gathered through a pre-test at the beginning and a post-test at the end of the intervention. The action-research component guided the design, implementation, and reflection on the cooperative strategies used. Results showed that students in the experimental group strengthened their listening skills compared to their pre-test performance and outperformed students in the control group. The findings suggest that cooperative learning can effectively improve advanced learners' listening skills.

Keywords: cooperative learning, EFL teacher education, English level, listening comprehension

Este artículo presenta un estudio cuasiexperimental y de investigación-acción sobre el aprendizaje cooperativo para mejorar la comprensión auditiva en inglés en un programa de formación de profesores de inglés en Chile. El estudio buscó fortalecer las competencias auditivas avanzadas de los estudiantes mediante la incorporación de actividades cooperativas durante un semestre. Los datos se recogieron mediante una prueba diagnóstica al inicio y otra al término de la intervención. El componente de investigación-acción orientó el diseño, la implementación y la reflexión sobre las estrategias cooperativas empleadas. Los resultados evidenciaron que los estudiantes del grupo experimental mejoraron sus habilidades auditivas y superaron al grupo de control. Los hallazgos sugieren que el aprendizaje cooperativo mejora la comprensión auditiva en estudiantes avanzados.

Palabras clave: aprendizaje cooperativo, comprensión auditiva, formación de docentes de inglés, nivel de inglés

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Introduction

Cooperative learning is a transformative teaching strategy that has become a pedagogical tool to enhance student engagement. Research shows an explicit connection between cooperative learning and higher classroom participation and motivation, key markers of student engagement (Han, 2015; Kirbas, 2017; Tang, 2022; Wright, 2021). Cooperative learning falls into the category of social learning strategies that emphasize collaboration when content material makes student engagement necessary. At the heart of cooperative learning lies the fundamental belief that each person is essential and contributes to the learning process of the rest of the classmates (Gökçe Erbil, 2020).

Studies in foreign language learning from the 1980s onwards have shown that cooperation is highly beneficial when learning languages (André et al., 2013; Carbone & De la Barra, 2024; De la Barra & Carbone, 2020; Gillies, 2016; Sharan, 2010; Slavin, 1985; Zhang, 2018), especially in the development of productive skills such as speaking and writing. Nonetheless, some recent studies have suggested that cooperative learning may positively impact receptive skills, such as listening comprehension, by improving motivation and achievement (Tang, 2022; Wright, 2021).

The present study aims to investigate whether cooperative learning can improve listening comprehension skills among fourth-year English Pedagogy students at a Chilean public university enrolled in their advanced English language course, *Communicative Competence I*. The interest in researching this aspect stems from the results of 3rd- and 5th-year English Pedagogy students on the Aptis test in 2022 and 2023. This test—developed by the British Council (https://www.britishcouncil.org/exam/aptis)—has shown that listening comprehension is the least developed skill among English pedagogy students. The results of the Aptis test in 2023 revealed that only 64% of the third-year students and 63% of the fifth-year students reached the C1 level in the listening section.

This study addresses the following research question: Can cooperative learning enhance listening skills in 4th-year university students in an English teacher education program at a public university in Santiago, Chile?

The main objectives of the study were:

- To analyze the impact of cooperative learning activities on the development of listening skills in fourth-year university students.
- To explore how cooperative learning dynamics contributed to students' improvement in listening comprehension.

Theoretical Framework

Cooperative learning is a pedagogical approach that emphasizes student collaboration and teamwork to achieve shared learning goals. A critical theoretical foundation for cooperative learning is social interdependence theory, which clearly distinguishes cooperative from competitive and individualistic learning (Johnson et al., 2014). According to social interdependence theory, how individuals' goals are structured results in different interaction patterns that predict their effort outcomes. Johnson and Johnson (1989) developed this theory to show that cooperative goals, where success depends on the group's collective effort, lead to more effective interactions and more robust achievements than individualistic goals.

Johnson and Johnson (1989) also provided a prominent structure for cooperative classrooms, highlighting that cooperation is based on specific principles: positive interdependence, individual accountability, face-to-face promotive interaction, social skills development, and group processing. Although these principles are well known, it is worth describing them since they are vital to this research.

According to Johnson and Johnson (1989), "positive interdependence is the perception that one is linked with others in a way so that one cannot succeed unless they do (and vice versa) and/or that their

work benefits one and one's work benefits them" (p. 24). In other words, students achieve a certain degree of awareness that, to reach a goal, they depend on the success of others, and they must rely on each other to make progress. They hold that there are different types of positive interdependence, such as (a) goal interdependence—which occurs when the group works towards the same role— (b) task interdependence, when each member is responsible for completing a specific task contributing to the final group product; (c) resource interdependence, where group members combine or share resources (e.g., information, materials) to complete the task; and (d) role interdependence, which occurs when each member has a specific part to play for the group to succeed.

Individual accountability means that each student is responsible for their contributions to the group's work. This principle ensures that social loafing—where one or more members contribute less to the group's work—is minimized. This can be achieved by giving individual quizzes or assessments based on group work, randomly assigning one student to explain the group work, and assigning each student a specific part.

Face-to-face promotive interaction occurs when group members encourage and facilitate the group's success by offering help, feedback, or guidance. For promotive interaction, students must work closely, discuss ideas, explain concepts, and so on.

Social skills development occurs when students practice interpersonal and small-group skills, including communication, leadership, trust-building, decision-making, and conflict resolution. Finally, group processing takes place when the group reflects on its performance, identifying what worked well and what can be improved. While group processing occurs, students discuss how well their group functions, which behaviors helped, and what they can do to improve their performance later.

As previously stated, Johnson and Johnson (1989) pioneered research on cooperative learning, and although their first contributions date back to the 90s, they have continued to publish on the topic. Their most recent study confirmed that cooperative learning improves academic achievement because group commitment helps students become aware of their learning. It also seems that students develop more profound cognitive skills, helping them improve their critical thinking, peer relationships, and emotional well-being (Johnson & Johnson, 2019).

Connection With Vygotsky's Constructivist Theory

An essential theoretical underpinning of cooperative learning is Vygotsky's (1978) sociocultural theory of cognitive development. He pointed out that "learning awakens a variety of internal developmental processes that are able to operate only when the child is interacting with people in his environment and in cooperation with his peers" (p. 90). From his perspective, learning is a socially mediated process, and cognitive functions are developed through social interactions within a cultural context.

One of the central concepts in Vygotsky's theory is the zone of proximal development (ZPD), defined as the distance between what learners can achieve independently and what they can achieve with guidance and support from a more knowledgeable other. In a cooperative learning group, peers become "more knowledgeable others" for one another, helping everyone accomplish tasks they could not complete on their own. Cooperative learning structures are in line with Vygotsky's concept of the ZPD. In a cooperative environment, students work together to solve the same problem and construct shared knowledge, working within their ZPD.

Learners internalize new concepts and strategies through dialogue and interaction, leading to cognitive development. By operating in cooperative groups, the scaffolding process—whereby the amount of support decreases as learners acquire expertise—is easily

provided as peers adjust their assistance to meet each other's needs.

Moreover, Vygotsky emphasized the importance of language as a tool for thought. In cooperative learning settings, language is how students negotiate meaning, ask questions, and explain their reasoning. This talk-based discourse strengthens language abilities and stimulates cognitive development, which may not be as evident during nonverbal activities. When students can verbalize their ideas and listen to the views of others, they build on their insights and co-construct knowledge (Mercer, 2000).

The social constructivist principles underpinning Vygotsky's theory suggest that learning is a social endeavor and that knowledge is built through interactions. In addition, cooperative learning leads to an active student-centered classroom environment where learners share and build their knowledge. Collaboration produces a richer, more situated understanding of any given material.

Integration With Existing Theories

While Johnson and Johnson (1989) laid the groundwork for cooperative learning theory, Kagan (1994) developed a structural approach, emphasizing that its application is required to facilitate interaction. These structures are designed to be simple and to be used repeatedly in class to help students internalize cooperative strategies. For him, cooperative learning is beneficial because it allows every student to participate (including the shy ones, who might not feel confident enough to participate in a more traditional setting). In this way, equality is promoted within the learning environment.

Building on Kagan's emphasis on classroom structures, Cohen (1994) introduced the sociological perspective, that is, how social structures within the classroom impact learning outcomes. Whereas Kagan focused on interactional structures to promote equality, Cohen's work delved into how cooperative learning could address social inequalities by designing open-ended tasks that require diverse talents and skills, ensuring that all students, regardless of background, can participate and contribute.

While Cohen's work focuses on the social dynamics of cooperative learning, addressing mainly equity issues, Slavin (1985) defines the concept in terms of achievement. The STAD (student teams-achievement divisions) method, which Slavin developed, combined the principles of cooperative learning with structured assessment, offering a model that highlighted group collaboration and individual accountability.

Although cooperative learning became popular in the 1990s, research continues to develop, refining the foundational theories. For instance, Gillies (2016) built on the research produced by Johnson and Johnson, focusing mainly on the effects of cooperative learning on critical thinking, and Van Ryzin and Roseth (2021) explored its significance on the development of socio-emotional skills among students, showing that cooperative learning is still relevant and can make contributions to the field of education. On the other hand, Gillies and Ashman (2003) found interesting connections between cooperative learning and positive learning outcomes for students with disabilities. All in all, the implications of cooperative learning to date have proven relevant and transversal.

Cooperative Learning in EFL Contexts

Several studies have determined how efficient cooperative learning is in English as a foreign language (EFL). Studies such as Pérez-Cañar and Troya-Sánchez's (2023) have identified the effectiveness of cooperative learning in developing writing skills in a public high school in Ecuador. Liao (2006) demonstrated that cooperative learning techniques improved students' motivation and grammar. McCafferty et al. (2006) proved that cooperative learning strategies foster social and cognitive development, in addition

to improving linguistic skills. Zhao and Jacobs (2005) showed that cooperative learning strategies help students improve their reading skills by discussing texts more profoundly and clarifying questions. Bilen and Mügue Tavil (2015) also proved the positive effect of cooperative learning on fourth-year students' reading comprehension and vocabulary development. De la Barra and Carbone (2020) implemented cooperative learning strategies in two vulnerable schools, demonstrating that the method helped students develop their linguistic skills much better than a traditional approach. Carbone and De la Barra (2024) also found that teachers regarded the experience of implementing cooperative learning as valuable and fulfilling, and it helped them realize how important their role as agents of change was. "Nonetheless, the results also suggest that teachers face important challenges when introducing cooperative learning at schools, which are related to the school communities' culture and what is expected from teachers" (p. 391). These results confirmed what Nguyen et al. (2021) found regarding the perceptions of teachers who had implemented cooperative learning, which were, in general, positive. Regarding the negative aspects perceived by teachers, they mentioned big class size, noise, and the fear of losing classroom control.

Complementing what was mentioned above, Meena (2020) revealed that students who engage in cooperative learning strengthen their oral skills compared to those who use more traditional methods. Wu and Tao (2022) suggest that motivation increases when students begin working in a cooperative way and that cooperative learning has a positive effect on both achievers' and underachievers' motivation, even after only one week of exposure. Similarly, cooperative learning has been found to develop listening skills. Han (2015) demonstrated that students in the experimental group showed significant improvement in their listening skills, and most students agreed that this method was effective, which helped them actively participate in class. On the other hand, Kirbas (2017) also proved that cooperative learning skills fostered various listening comprehension skills (e.g., deriving meaning from context, identifying subjects, determining main ideas, and summarizing information) compared to the control groups. Furthermore, Remache Carrillo et al. (2019) found that students who participate in cooperative learning activities improve their reading skills. Cooperation helped the group increase comprehension and resolve doubts together, enabling them to process information in English more effectively.

Consequently, cooperative learning has been found to be a highly effective approach to learning, deeply rooted in both social interdependence theory and Vygotsky's constructivist theory. When used in an EFL context, it helps students develop productive and receptive skills, such as reading and listening, by leveraging social interaction and collaborative problem-solving.

Method

We combined a quasi-experimental design and action research to carry out this study, which took place in the first semester of 2024. According to Creswell (2014), quasi-experimental designs are appropriate when random assignment is not possible. This allows researchers to study the effects of an intervention in realistic settings. In contrast to classical experimental methods, quasi-experimental designs do not randomly assign participants to control or experimental groups. Instead, groups are formed based on existing conditions (Creswell, 2014; Hernández Sampieri et al., 2023). In this study, there were two sections of the same course. One served as the control group, while the other was the experimental group where the action-research approach was used.

Although quasi-experimental designs may pose particular problems in terms of internal validity due to lack of randomization, according to Creswell (2014), they have numerous advantages in education settings

where random assignment cannot be practically or ethically conducted, as shown in the following section.

In order to mitigate potential threats to internal validity, some measures were implemented. Both groups were comparable in academic level, course objectives, and demographic composition, which secured initial equivalence between the control and experimental groups. Consistent instruction was maintained across both groups, as the same syllabus, coursebook, and testing material were used. This minimized possible differences unrelated to the intervention. Additionally, both teachers ensured their planning and content aligned, with the only difference being the use of cooperative learning strategies in the experimental group. Finally, the pre- and post-tests were identical for both groups and based on standardized Cambridge English tests.

Rationale for Using a Quasi-Experimental Design

There are three essential reasons that justify the application of the quasi-experimental design in this study: first, its accurate world applicability. In most educational contexts, randomization may disrupt the learning process (Creswell, 2014). Usually, teachers start their academic year without knowing who their students will be. Therefore, conducting research with the group assigned by the academic coordination is easier. Secondly, it is logically feasible; in other words, working with the assigned classes dispenses scheduling difficulties, classroom allocation, and administrative approval. Teachers can conduct interventions as part of their regular teaching assignments, thereby preserving the university's dynamics. Third, there is an ethical issue, as random assignment may be questionable, especially when one method is perceived as superior (Creswell, 2014). Finally, working with existing groups makes it easier for participants to engage in the study without additional commitments or disruptions. In this study, we worked with naturally divided sections, making the process cost-effective and less intrusive.

As mentioned earlier, the experimental group was the section in which the cooperative learning activities were implemented. This intervention was part of the action-research stage of the study. Teacher A, who was in charge of the course section, implemented the activities, planned the intervention, and recorded the data for later analysis. The main goal, as stated in the objectives of this article, was to bring about practical change, improve the groups' listening skills, and reflect on the results later. The control group—where cooperative learning was not employed but the same learning objectives and material were followed—was taught by Teacher B.

Rationale for Using Action-Research Design

Action research is a participatory, collaborative methodology that creates the conditions for solving specific problems in education. As it ensures inclusive participation and considers multiple perspectives, all members of the educational community benefit. Besides, in the world of education, teachers are usually faced with very specific problems that require solving. Action research ensures that findings are directly applicable in the classroom, so the positive effects are also perceived by students.

While action research promotes cooperation among participants, it also supports professional development by empowering teachers through the planning, acting, observing, and reflecting cycle, leading to meaningful, contextually relevant outcomes.

Combining quasi-experimental and action research designs allows researchers to implement rigorous interventions that provide answers to specific problems in a class. This also allows for further planning and intervention to deepen the findings and generate positive change in real-world settings.

Study Design

In this study, we used a pre-test/post-test control group design. This involves measuring the dependent variable—listening comprehension skills—before and after the intervention in both the experimental and control groups (Creswell, 2014; Hernández Sampieri et al., 2023). The pre-test establishes a baseline for each group, while the post-test measures the effect of the intervention.

This design allows for comparing changes over time and assessing the intervention's impact. Despite potential threats to internal validity, such as selection bias and maturation, steps were taken to mitigate these issues:

- Initial equivalence: Both groups were equivalent in terms of academic level (fourth-year university students enrolled in an advanced English course) and demographic characteristics (age range, gender distribution).
- Consistent instruction: In addition to the cooperative learning intervention in the experimental group, both groups received identical curriculum content, instructional time, and assessments, ensuring that any differences in outcomes could be attributed to the intervention.

Participants

The study included 27 senior students (age range: 23–24) from an English teaching education program at a public university in Santiago, Chile. They were taking the course *Communicative Competence I*, designed to align with the objectives of the advanced level according to the Common European Framework of Reference (CEFR). The control group consisted of 13 students (3 men and 10 women), while the experimental group, taught by Teacher A, consisted of 14 students (2 men and 12 women). In listening classes, cooperative learning activities were conducted for 80 minutes per week in the experimental group, whereas in the control group, a traditional, more individualistic approach was adopted. The cooperative learning class was further organized into four subgroups that remained the same throughout the semester. These subgroups were formed with consideration of students' affinities and interests. In each group, some students had more skills, while others had more difficulty with listening. Table 1 shows the composition of the subgroups within the experimental group. Participants were given pseudonyms to protect their identities.

Table 1. Composition of the Quasi-Experimental Group

Group	Members
1	Pamela, Frances, Mary, and Olympia
2	Fanny, Alexandra, Olivia, and Julian
3	George, Paulette, and Samsa
4	Susy, Moxy, and Sandra

Data Collection

For both groups, Test 1 from the *Cambridge English Advanced Practice Tests* (Harrison, 2014) was used as the pre-test, and Test 4 as the post-test. The pre-test was administered in March 2024, and the post-test in July 2024.

The listening section of the Cambridge tests contains four parts and lasts about 40 minutes. In the first part, candidates listen to three short conversations and answer multiple-choice questions. In Part 2, students listen to a monologue or a dialogue and complete sentences based on the information they hear. In Part 3, students listen to a longer conversation and answer multiple-choice questions. Finally, in Part 4, candidates listen to five short monologues and match each speaker to the statements provided.

Research Procedures

The experimental group implemented 10 cooperative learning activities throughout the semester. Students sat in their groups, paying attention to aspects of the recording played by the teacher. Each student had a different role. After the recording was played once, they discussed in their groups, sharing the specific aspects

they had paid attention to. These cooperative learning activities stressed face-to-face interaction, interpersonal and group skills, positive interdependence, and individual accountability. The students addressed all the listening tasks from their textbook, *Gold Advanced* (Burgess & Thomas, 2014). After the cooperative learning activity finished, the teacher played the recording again, and this time, students were asked to work individually on the task. After that, the activities were checked.

Table 2 summarizes some activities carried out during the intervention. Although all five of Johnson et al.'s (1994) principles were present in the activities, some were more evident than others.

Data Analysis

To analyze the data, a statistical approach was used to determine whether there was a significant difference between the pre-test and post-test in both the experimental and control groups. Data were analyzed using Microsoft Excel 365 with an AI-assisted tool that employed the paired-samples *t*-test to determine whether there is a statistically significant difference between two sets of observations. In a *t*-test, each subject is measured twice, at the beginning and at the end of an intervention. The analysis of the difference in results verifies whether the intervention was significant.

Ethics

Students were informed about the study's aims and the implications of participation through a consent form. All participants agreed to and signed the consent forms before the intervention began. The information regarding their personal and institutional information was assured to remain anonymous.

Results

This section presents the results of the statistical analysis conducted to evaluate the impact of cooperative learning on students' listening comprehension. The findings are organized in three parts. First, the performance of the control group is analyzed, comparing students' pre-test and post-test scores to determine whether any improvement occurred without intervention. Second, the results of the experimental group are examined to assess the effects of the cooperative learning intervention. Finally, a comparison between the two groups is made using Cohen's *d* to assess the effect size and determine the practical significance of the intervention.

Control Group

Table 3 shows the students' pre-test and post-test results in the control group. Each student has been identified with a number.

By running the *t*-test for paired samples, the mean score indicates a significant improvement in the students' post-test results. Besides, the one-tailed *p*-value is 0.0016, and the two-tailed *p*-value is 0.0032. Both *p*-values are well below the common significance level of 0.05, which indicates that the improvement is statistically significant.

Experimental Group

Table 4 shows the students' results from the pre-test and the post-test, and the difference in scores between them.

By running the paired *t*-test for paired variables, it can be inferred that the mean score increased substantially from 71.29 (pre-test) to 86.36 (post-test), indicating a significant improvement in these variables.

The one-tailed *p*-value is 0.0000204, and the two-tailed *p*-value is 0.0000409. Both *p*-values are extremely small, far below the common significance level of 0.05, indicating that the improvement is statistically significant.

The statistical analysis strongly suggests a significant improvement in students' scores from the pre-test to the post-test. The very small *p*-value confirms that the improvement is not due to random chance but likely due to the intervention and the cooperative learning activities applied between the two tests.

Table 2. Sample of Cooperative Learning Activities

Activity	Date	Description	Most visible cooperative principle
Listen to a woman talking about moving to a remote village	April 8	Students listen to the same audio, but each member of the group listens to something specific, and then they share this information with the group. This is a think-pair-share type of activity.	Positive interdependence (task interdependence) and individual accountability Social skills development (communication skills)
Listen to a podcast about a way to improve contact between neighbors	April 22	The audio is split into four parts. Each student has a specific task, such as answering listening comprehension questions, paying attention to grammar structures, and explaining vocabulary expressions. This is a jigsaw-type activity.	Face-to-face interaction Positive interdependence (role interdependence) Social skills development (trust-building skills)
Listen to four students giving their opinions	May 6	Students listen to four students giving their opinions about the importance of communication. This is a think-pair-share sort of activity, as each participant listens to one piece of the recording and then shares their thoughts and ideas with their group.	Positive interdependence (resource interdependence) Individual accountability (assigning each student a specific part of the task)
Listen to three different extracts and answer questions	May 20	The students listen to three different extracts, but each student in the group has different guiding questions for listening comprehension. This is a jigsaw-type activity.	Social skills development (leadership skills) Individual accountability (each student is given a specific task)
Listen to an interview with Angus Johnson	June 5	The interview is divided into sections (introduction, middle, and conclusion). Each student in the group focuses on one specific topic: Angus Johnson's background, his challenges, and advice. This is a jigsaw activity.	Positive interdependence (goal interdependence)
Listen to the problems with perfectionism	June 19	Students listen to the audio as a class. After listening, the teacher provides a few guiding questions for students to reflect individually (e.g., the effects of perfectionism, the impact of perfectionism on mental health, coping solutions) Then students get together in their cooperative groups and discuss based on the notes taken. This is a think-pair-share sort of activity.	Face-to-face promotive interaction Social skills development (students negotiate and come to a consensus)
Listen to a scientist called Jim Weller talk about robots he has created and how they function like termites	July 10	Within their cooperative groups, each student takes notes on specific elements of the recording, and then they come together to provide constructive feedback on each other's notes. This is a think-pair-share sort of activity.	Positive interdependence Individual accountability (having each student explain what he/she learned) Face-to-face promotive interaction (students provide feedback on each other's note-taking)

Table 3. Control Group Results

Student	Pre-test	Post-test	Difference
1	64	77	13
2	60	70	10
3	82	93	11
4	86	80	-6
5	43	73	30
6	71	93	22
7	89	90	1
8	25	57	32
9	64	80	16
10	92	97	5
11	85	83	-2
12	53	57	4
13	53	80	27
Mean	**66.69**	**79.23**	

Table 4. Experimental Group Results

Student	Pre-test	Post-test	Difference
Pamela	78	100	22
George	94	97	3
Susan	58	80	22
Fanny	78	97	19
Frances	67	83	16
Mary	67	93	26
Alexandra	100	97	-3
Moxi	57	77	20
Olivia	92	90	-2
Paulette	58	77	19
Sandra	60	77	17
Olympia	43	67	24
Samsa	75	87	12
Julian	71	87	16
Mean	**71.29**	**86.36**	

Additionally, it was observed that the learning dynamics of the cooperative activities created in the groups fostered opportunities for students to engage collaboratively with the listening tasks. Group members discussed answers, shared comprehension strategies, and provided peer support. Also, they assessed their own work, looking for ways to improve their comprehension, note-taking, and information-sharing. Students were required to negotiate meaning, clarify ideas, and co-construct meaning, so when they worked individually on the listening task, the whole class performed well, increasing their motivation and trust in their skills.

Comparison Between the Post-Test Results of the Control and Experimental Groups

The Cohen's *d* test was used to compare the means across groups. The mean for the post-test in the control group was 79.23, while in the experimental group it was 86.35. The pooled standard deviation for the data provided is 11.34, and Cohen's *d* is 0.63. Interpretation of Cohen's *d* suggests that the effect of applying cooperative learning to enhance listening skills in the experimental group ranged from a medium to a large effect. In practical terms, it suggests that the intervention applied in the experimental group had a remarkable effect compared to the control group, and this difference is likely to have a relevant impact in a real context.

Discussion

The study found a statistically significant improvement in listening comprehension scores in the experimental group compared to the control group, with a medium-to-large effect size (Cohen's $d = 0.63$), indicating a meaningful impact of the cooperative learning intervention. The significant improvement in the experimental group's listening skills may be attributed to the increased engagement and motivation that cooperative learning fosters. Working collaboratively likely enhanced students' attentiveness and provided immediate opportunities for feedback, facilitating deeper processing of auditory information.

It can also be attributed to the several and distinct aspects that cooperative learning entails, such as the structured role assignment that made it possible for each member in the group to participate actively in the tasks. The different principles considered by Johnson et al. (1994), such as individual accountability and face-to-face promotive interaction, encouraged participation and ensured long-lasting motivation. This aligns with Vygotsky's theory of peer collaboration within the ZPD, leading to greater cognitive development. Furthermore, immediate feedback from peers is likely to have reinforced understanding of the listening material, allowing participants to process information more effectively.

Our findings are consistent with Han (2015) and Kirbas (2017), who also reported significant improvements in listening comprehension through cooperative learning. The results are also consistent with those of Jermsittiparsert et al. (2021), who assessed the effects of two cooperative strategies (jigsaw and information gap) on listening comprehension and found significant improvement in both experimental groups compared to the control group. Furthermore, our findings confirm that incorporating cooperative activities enhances listening comprehension effectiveness in university-based contexts, as suggested by Tang (2022), who highlights the importance of clearly defined roles and interactive group work. Finally, Wright (2021) demonstrated that group listening quizzes, in which students first complete a listening comprehension test individually and then collaborate to discuss their answers, foster deeper comprehension of auditory content, enhance participation, and develop metacognitive and social skills.

English language teachers, especially those in charge of advanced courses, should consider incorporating cooperative techniques like jigsaw, think-pair-share, and role assignment to foster active listening and peer support in the language classroom. Most of the time, teachers use group work in English lessons, but to make these activities cooperative, they must ensure the core principles of cooperative learning are also implemented. We foster positive interdependence by designing tasks in which students rely on each other to succeed and are individually accountable for their contributions. Additionally, teachers should promote interaction (e.g., through face-to-face discussions within the group), the development of social skills to reinforce collaboration and communication in solving conflicts, and, finally, the principle of group processing, which allocates time for groups to reflect on their own performance. Together, these principles enable consistent cooperation and secure the desired learning effects.

While this study provides valuable insights, the lack of random assignment and potential instructor bias may limit the generalizability of the results. Since students were not randomly assigned to groups, inherent differences between the two classes could have influenced the outcomes. For instance, variations in student motivation, prior proficiency levels, prior listening ability, or group dynamics might have contributed to the differences observed, independent of the cooperative learning intervention. While mitigation efforts, such as consistent instructions, the same intervention period, uniform exposure to contents, and similar pre- and post-tests, were made to ensure equivalent traits between experimental and non-experimental groups, they cannot entirely eliminate the possibility of pre-existing differences in the results.

One of the interesting insights of this study was the combination of quasi-experimental and action-research designs, as the establishment of a control group enabled comparison with the experimental group. In fact, we strongly believe that the study gained in terms of contextual insight and helped understand why the intervention worked beyond statistical analysis. Apart from this, action research helped ground the implementation experience in the real needs of the class, making the findings relevant and applicable.

Conclusion

The study aimed to investigate the impact of cooperative learning strategies on the listening comprehension skills of advanced EFL learners within an English teacher education program in Chile. By integrating structured cooperative activities throughout one semester, we sought to determine whether these pedagogical approaches would lead to significant improvement in students' listening performance compared to traditional, individualistic teaching methods.

Findings revealed that the experimental group, which engaged in cooperative learning tasks, demonstrated a statistically significant improvement in listening comprehension compared with the control group, with a medium-to-large effect size. This substantial effect suggests that cooperative learning fosters a more engaging and interactive learning environment. By promoting active participation, peer collaboration, and the sharing of diverse perspectives, cooperative learning appears to enhance the processing and retention of auditory information, thereby improving listening comprehension.

These results are consistent with previous research (e.g., Han, 2015; Kirbas, 2017) that highlight the benefits of cooperative learning in language acquisition. However, the higher effect size observed in this study may be attributed to the specific cooperative activities implemented, such as positive interdependence and individual accountability, which were meticulously designed to align with Johnson et al.'s (1994) principles. The tailored activities likely promoted deeper cognitive engagement and critical thinking, contributing to the enhanced outcomes.

The results have significant implications for professionals in language education and curriculum design. The integration of cooperative learning techniques—such as jigsaw, think-pair-share, and role assignment—into language instruction has been shown not only to improve students' listening proficiency but also to foster greater engagement in the learning process. Educators are strongly encouraged to implement these strategies to create a collaborative and interactive learning environment. By doing so, they can effectively enhance students' linguistic skills while simultaneously cultivating essential soft skills such as teamwork, communication, and problem-solving. These skills are highly valuable in both educational and professional contexts, contributing to students' overall development and success.

In terms of limitations, one stems from the sample. Participants were all senior students with a high proficiency level (aligned with CEFR advanced levels) and specific career aspirations in teaching. Their motivation and learning strategies might differ for learners at lower proficiency levels or with different goals. On the other hand, the small sample sizes (13 in the control group and 14 in the experimental group) further limit the generalizability of the results. Further research could consider larger sample sizes across multiple institutions to confirm the effectiveness of cooperative learning strategies. Further research could also explore the efficacy of cooperative learning among lower proficiency levels (A1–B1) and assess whether sustained cooperative learning interventions lead to long-term improvements. Longitudinal studies would be valuable in examining the sustainability of listening comprehension improvements and the potential impact of cooperative learning on other language skills, such as speaking, reading, and writing.

Moreover, incorporating qualitative measures, such as student interviews and classroom observations, could yield deeper insights into the student experience and the mechanisms by which cooperative learning influences language acquisition. Understanding students' perceptions and attitudes toward cooperative learning can inform the refinement of instructional strategies to better meet learners' needs.

To conclude, the findings of this study present compelling evidence of the efficacy of cooperative

learning in advancing listening comprehension skills among advanced EFL learners. The substantial progress witnessed emphasizes the transformative potential of collaborative strategies to enrich language learning experiences through the cultivation of an interactive and nurturing classroom environment. Embracing cooperative learning leads to improved linguistic outcomes and equips students with the essential collaborative skills vital for their future professional endeavors.

As the educational landscape continues to evolve, adopting innovative approaches like cooperative learning becomes increasingly important. Institutions and educators are encouraged to integrate cooperative frameworks into their curricula to optimize student engagement and proficiency outcomes. Continued exploration and rigorous research into cooperative learning strategies are recommended to fully understand their potential across diverse language skills and learning environments. Embracing such pedagogical innovations holds promise for enriching language education and preparing learners to thrive in a collaborative, globalized world.

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