

Enhancing Grammatical Competence Through Kagan Cooperative Learning Structures: A Quasi-Experimental Study Among Hospitality Management Students

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ABSTRACT

Grammatical competence is essential to effective professional communication in Hospitality Management, yet tertiary grammar instruction often remains dominated by decontextualized and rule-based practices that may not sufficiently support students' communicative needs. This study examined the effectiveness of Kagan Cooperative Learning Structures in improving the grammatical competence of first-year Bachelor of Science in Hospitality Management students compared with conventional instruction. Using a quasi-experimental pretest–posttest control group design, the study involved 54 students from North Eastern Mindanao State University, Tandag Campus, with 27 participants in the control group and 27 in the experimental group. The instructional implementation covered 15 hours across 10 sessions, including the pretest, four grammar instructional modules, and the posttest. A 100-item grammatical competence test assessed students' performance in pronoun–antecedent agreement, subject–verb agreement, tenses of verbs, and voices of verbs. Data were analyzed using means, standard deviations, independent-samples *t*-tests, paired-samples *t*-tests, and gain-score analysis. Pretest results showed no significant differences between the control and experimental groups across the four grammatical domains, indicating comparable baseline performance, with *t*-values ranging from 0.20 to 1.33 and *p*-values from .362 to .842. Posttest results significantly favored the experimental group in pronoun–antecedent agreement, $t = 15.17, p < .001$; subject–verb agreement, $t = 8.60, p < .001$; tenses of verbs, $t = 8.52, p < .001$; and voices of verbs, $t = 9.14, p < .001$. Gain-score analysis further indicated greater improvement among students exposed to Kagan Cooperative Learning Structures. The findings suggest that structured cooperative grammar instruction may contribute to stronger grammatical performance among Hospitality Management students and may inform the development of context-responsive materials for Hospitality English and English for Specific Purposes instruction.

Keywords: Kagan Cooperative Learning Structures; grammatical competence; Hospitality English; quasi-experimental design; cooperative learning

INTRODUCTION

Grammatical competence is a central component of communicative effectiveness because it supports clarity, accuracy, and meaning in both spoken and written discourse. Its importance is particularly evident in Hospitality Management, where students are expected to communicate appropriately in guest interaction, service delivery, reservations, workplace correspondence, and other professional contexts that require precise and functional English. Studies on Hospitality English emphasize the need for instruction that responds to workplace demands while developing both linguistic accuracy and communicative appropriateness (Gopal, Quah, & Gengatharan, 2021; Manalastas, 2023). Accordingly, grammar instruction for Hospitality Management students should be understood not merely as mastery of formal rules, but as an essential aspect of preparation for effective professional communication.

Despite this need, grammatical difficulties continue to affect tertiary learners, particularly in areas that influence comprehensibility and accuracy. Philippine studies have documented persistent problems in subject–verb agreement and related grammatical structures among college students and academic writers (Rueda, 2022; Hernandez, 2023; Morallo & Dita, 2025). These concerns are also relevant to the present context, which identifies below-average grammatical competence among Bachelor of Science in Hospitality Management freshmen at North Eastern Mindanao State University. Such difficulties suggest that conventional grammar instruction, especially when limited to isolated rule explanation and drill-based practice, may not be sufficient to help learners apply grammatical knowledge meaningfully in communication. Supporting this view, Ellis (2022) argues that attention to grammatical form is more productive when embedded in meaningful language use, while Nassaji (2020) highlights the value of interactional feedback in helping learners notice and correct errors during communicative activity.

Given these instructional concerns, cooperative learning offers a relevant pedagogical response because it positions students as active participants in the construction of knowledge. Through peer explanation, collaborative problem-solving, and shared responsibility, learners are given opportunities to process grammatical forms more deeply and apply them through interaction. Empirical studies have shown that collaborative and cooperative approaches can support grammar achievement and broader academic learning when participation is deliberately structured (Ariani & Valiantien, 2022; Odehova, Nevska, & Perlova, 2022; Öztürk, 2023; Keramati & Gillies, 2021). Within this orientation, Kagan Cooperative Learning Structures provide a more systematic approach to classroom interaction by emphasizing positive interdependence, individual accountability, equal participation, and simultaneous engagement. Studies on structured cooperative activities further indicate that these features can promote repeated exposure to language forms, peer-supported correction, and metalinguistic discussion, which are particularly relevant to grammar learning (Dorji, Yangzom, & Tenzin, 2021; Humairoh, Roza, Reflinda, & Melani, 2024).

Although cooperative learning presents clear instructional possibilities, the literature also shows that its effectiveness is not automatic. Its value depends on how interaction is designed, how participation is monitored, and how closely tasks are aligned with learning objectives. Poorly structured collaboration may result in unequal participation, weak accountability, and limited learning gains, whereas well-planned cooperative activities can foster more purposeful engagement and support deeper understanding (Shumiye, 2024; Prieto-Saborit, Menéndez-Espina, Mendez-Alonso, Jiménez-Arberas, Llosa, & Hernandez, 2025). This distinction is especially important in grammar instruction, where interaction should remain focused on accurate form, guided practice, and meaningful application rather than on participation alone.

Against this backdrop, an important research gap remains. Although cooperative learning has been examined in language education and grammar instruction, limited empirical work has isolated the effect of Kagan Cooperative Learning Structures on specific grammatical domains among Hospitality Management students in Philippine tertiary education. Previous studies have generally focused on broader cooperative learning outcomes, general academic performance, or grammar development in non-specialized language contexts. Less attention has been given to the use of a structured Kagan-based intervention for improving pronoun–antecedent agreement, subject–verb agreement, tenses of verbs, and voices of verbs among students preparing for hospitality-related communication. Addressing this gap is important because discipline-responsive grammar instruction must connect linguistic accuracy with the communicative demands of professional contexts.

In response, this study investigates the effectiveness of Kagan Cooperative Learning Structures in improving the grammatical competence of first-year Bachelor of Science in Hospitality Management students at North Eastern Mindanao State University compared with conventional instruction. It focuses on four grammatical domains: pronoun–antecedent agreement, subject–verb agreement, tenses of verbs, and voices of verbs. The study contributes empirical evidence on structured cooperative grammar instruction and provides a basis for developing context-responsive materials for Hospitality English by examining these specific areas. Specifically, it seeks to answer the following questions: **(1)** What are the pretest and posttest grammatical mean scores of the research subjects before and after using the two methods of teaching in terms of pronoun–antecedent agreement, subject–verb agreement, tenses of verbs, and voices of verbs? and **(2)** Is there a significant difference between

the pretest and posttest scores in each grammatical category among the research subjects before and after exposure to the two methods of teaching?

METHODS

Research Design

The study employed a quasi-experimental pretest–posttest control group design to determine the effectiveness of Kagan Cooperative Learning Structures in improving the grammatical competence of first-year Bachelor of Science in Hospitality Management students. This design was appropriate because the participants were drawn from existing class groups in an authentic tertiary instructional setting, where random assignment of individual students was not feasible due to institutional scheduling, class organization, and the need to preserve regular course delivery. Instead of randomly reallocating students, the study compared two intact groups exposed to different instructional approaches: conventional grammar instruction for the control group and Kagan Cooperative Learning Structures for the experimental group. The use of both pretest and posttest measures allowed the study to examine initial group comparability and subsequent changes in grammatical performance after the intervention.

Several procedures were incorporated to reduce threats to internal validity. To address selection bias, participants were assigned to groups with consideration of their prior English performance using the Department of Education's grading scale and qualitative descriptors, and the pretest results were used to establish baseline equivalence before the intervention. The absence of statistically significant pretest differences across the four grammatical domains further supported the comparability of the groups prior to instruction. The possible testing effect arising from the administration of a pretest and posttest was controlled by applying the same assessment conditions to both groups; thus, any familiarity with the test format was experienced equally by participants in the control and experimental groups. Maturation was also minimized because both groups underwent the intervention during the same academic period, involved students at the same year level, and received instruction over an equivalent five-week, 15-hour instructional duration.

The design also considered instructional and implementation-related threats. To reduce teacher effect, the instructional sessions for both groups were delivered by a trained instructor rather than by the primary researcher, whose role was limited to observation and data collection using a standardized protocol. This arrangement helped lessen the possibility that differences in outcomes would be attributable to researcher influence or unequal teacher enthusiasm. Potential contamination between groups was reduced by maintaining separate instructional schedules and by delivering distinct teaching approaches within their assigned group sessions. Although complete prevention of information exchange among students cannot be guaranteed in natural classroom settings, the structured scheduling and separate treatment delivery helped limit direct overlap. Finally, equivalence of instructional time and content was maintained by ensuring that both groups studied the same four grammatical domains, pronoun–antecedent agreement, subject–verb agreement, tenses of verbs, and voices of verbs, within the same intervention period and with comparable instructional exposure. Accordingly, differences observed in posttest performance interpreted credibly in relation to the instructional methods rather than to unequal content coverage or contact time.

Participants and Setting

The study involved 54 first-year Bachelor of Science in Hospitality Management students enrolled in Business Communication at North Eastern Mindanao State University, Tandag Campus, during the second semester of Academic Year 2024–2025. The participants were drawn from two intact class blocks to preserve the natural classroom setting and regular course schedule, with Block A serving as the control group and Block B serving as the experimental group. The original class populations consisted of 45 students in Block A and 43 students in Block B; however, only 27 students from each block were included in the final matched sample through purposive selection based on prior English performance. Using the Department of Education's grading scale and qualitative descriptors, students were classified as Outstanding, Very Satisfactory, Satisfactory, and Fairly Satisfactory. To enhance group comparability, both groups included the same distribution of performance

categories: 5 Outstanding, 9 Very Satisfactory, 8 Satisfactory, and 5 Fairly Satisfactory students. Students who were not included in the matched sample were not removed from instruction and continued to participate in the regular learning activities of their respective classes, but their scores were excluded from the statistical analysis to maintain equal group sizes, strengthen baseline comparability, and reduce possible selection bias. Thus, all students received the classroom instruction assigned to their intact block, while only the matched participants were included in the computation of pretest, posttest, and gain-score results.

The study was conducted at North Eastern Mindanao State University, Tandag Campus, located in Rosario, Tandag City, Surigao del Sur, Caraga Region, Mindanao, Philippines. The Bachelor of Science in Hospitality Management program is offered under the College of Business and Management and prepares students for professional roles in hospitality-related fields where English communication is essential. This setting was appropriate for the study because it provided access to first-year Hospitality Management students whose grammatical competence is directly connected to discipline-specific communication, particularly in guest interaction, service delivery, workplace correspondence, and professional English use. The institutional setting also allowed the intervention to be implemented within an authentic classroom environment, making it suitable for examining the comparative effects of conventional grammar instruction and Kagan Cooperative Learning Structures on students' grammatical competence.

Research Instrument

The study utilized a 100-item grammatical competence test adopted from Lumabao's (2023) study. The instrument was selected because its content corresponded directly to the grammatical domains examined in the present investigation: pronoun–antecedent agreement, subject–verb agreement, verb tenses, and voices of verbs. The test was used to assess the grammatical competence of first-year Hospitality Management students before and after exposure to the instructional intervention. As an adopted instrument, it was employed without modification to ensure alignment with the objectives of the study and the linguistic competencies being measured.

Table 1. Distribution of Test Items According to Grammar Domain

Grammar Domain	Number of Items	Skill Measured	Scoring
Pronoun–antecedent agreement	25	Agreement accuracy	1 point per correct item
Subject–verb agreement	25	Agreement accuracy	1 point per correct item
Verb tenses	25	Tense consistency	1 point per correct item
Voices of verbs	25	Active–passive transformation	1 point per correct item

The instrument consisted of 25 items for each grammar domain, for a total of 100 items. Each correct answer was assigned one point, while incorrect responses received zero points, yielding a total possible score of 0 to 100 and domain-specific scores ranging from 0 to 25. The distribution of items is presented in Table 1.

To strengthen the validity evidence for the adopted 100-item grammatical competence test, the instrument was subjected to expert review prior to its use in the study. The review focused on the alignment of the test items with the four grammatical domains measured in the study, namely pronoun–antecedent agreement, subject–verb agreement, tenses of verbs, and voices of verbs. The experts evaluated the items in terms of relevance to the learning competencies, clarity of wording, appropriateness for first-year Hospitality Management students, and consistency with the intended skill measured in each domain. Items were retained because they corresponded directly to the target grammatical structures and were judged suitable for assessing students' grammatical competence in the context of Business Communication. This content validation process provided evidence that the instrument adequately represented the grammar areas examined in the study.

Although the 100-item grammatical competence test was adopted, no reliability coefficient was reported in the available source manuscript. Therefore, to establish the instrument's internal consistency in the present study,

the Kuder–Richardson Formula 20 (KR-20) was computed using the pretest item responses of the 54 participants. KR-20 was deemed appropriate because the test items were scored dichotomously, with one point for each correct answer and zero for each incorrect answer. The test yielded a KR-20 coefficient of 0.82, indicating good internal consistency and suggesting that the items consistently measured the targeted grammatical competence domains in the present sample.

Intervention Procedure

Prior to the intervention, lesson guides for both the control and experimental groups were prepared and content validated by experts to ensure alignment with the course curriculum and the four grammatical domains examined in the study: pronoun–antecedent agreement, subject–verb agreement, tenses of verbs, and voices of verbs. To minimize researcher bias and reduce possible teacher-effect threats, the same trained instructor delivered instruction to both groups, while the primary researcher served only as an observer and data collector using a standardized observation protocol. The intervention implementation covered a total of 15 hours across 10 sessions, inclusive of the pretest and posttest administrations. Specifically, 1.5 hours were allotted for the pretest, 12 hours for the four instructional grammar modules, and 1.5 hours for the posttest. Each instructional module was implemented for 3 hours or two class sessions. The control group met on Mondays and Thursdays, while the experimental group met on Tuesdays and Fridays, with both classes conducted from 9:00 to 10:30 AM serving as their first class of the day.

Both groups covered the same grammatical content, lesson objectives, instructional duration, and assessment schedule to maintain equivalence of exposure. Before the instructional sessions, both groups completed the 100-item pretest under standardized conditions to establish baseline grammatical competence. The subsequent lessons were designed to develop students’ ability to recognize, analyze, and apply grammatical rules accurately in the four target domains, particularly in identifying agreement errors, constructing grammatically correct sentences, maintaining tense consistency, and transforming active and passive voice structures. The control group received conventional grammar instruction characterized by teacher-led explanation, model examples, guided drills, and individual written practice. In contrast, the experimental group received instruction through sequenced Kagan Cooperative Learning Structures embedded in the grammar lessons to promote structured peer interaction, collaborative reasoning, individual accountability, and equitable participation.

Phase / Session Coverage	Activity or Grammar Focus	Duration	Kagan Structures Used	Learning Task / Procedure	Teacher Role	Assessment / Output
Pre-intervention Assessment	Administration of the pretest to determine baseline grammatical competence	1.5 hours; 1 session	Not applicable	100-item grammatical competence test administered under standardized conditions	Test administrator / proctor	Pretest scores
Instructional Module 1	Pronoun–antecedent agreement	3 hours; 2 sessions	Mix-N-Match; Numbered Heads Together; Team-Pair-Solo; Think-Write-Pair-Share	Pronoun–antecedent matching, peer grammar correction, agreement worksheets, independent paragraph writing	Facilitator, clarifier, feedback provider	Worksheets, corrected paragraph, writing output
Instructional Module 2	Subject–verb agreement	3 hours; 2 sessions	Think-Pair-Share; Numbered Heads Together; Team Stand-N-Share; Pairs Check; RallyCoach	Subject–verb identification, error correction, sentence construction, collaborative sentence task	Instructor, monitor, feedback provider	Group worksheets, sentence task, individual quiz
Instructional Module 3	Verb tenses	3 hours; 2 sessions	Think-Pair-Share; Numbered Heads Together; Jigsaw; Team Stand-N-Share; Round Robin Brainstorming; Mix-Freeze-Group; Inside-Outside Circle	Tense identification, tense transformation, error correction, collaborative paragraph writing, oral discussion	Facilitator, organizer, corrective feedback provider	Team handouts, short paragraph, reflection output
Instructional Module 4	Voices of verbs	3 hours; 2 sessions	Think-Pair-Share; Numbered Heads Together; Team Discussion; RallyTable; Simultaneous Round Table; Expert Groups; Jigsaw	Active–passive voice identification, transformation exercises, analysis of voice choice, strategic paragraph rewriting	Clarifier, facilitator, monitor	Worksheets, short quiz, strategic writing output
Post-intervention Assessment	Administration of the posttest to measure changes in grammatical competence	1.5 hours; 1 session	Not applicable	100-item grammatical competence test administered under standardized conditions	Test administrator / proctor	Posttest scores
Total Intervention Implementation	Pretest, four instructional grammar modules, and posttest	15 hours; 10 sessions	Kagan Cooperative Learning Structures applied during the instructional modules	Structured grammar intervention with baseline and outcome assessment	Trained instructor; researcher as observer and data collector	Pretest and posttest results, lesson-based outputs

Table 2. Summary Sequence of Activities

Note. The 15-hour intervention implementation consisted of 1.5 hours for the pretest, 12 hours for the four grammar instructional modules, and 1.5 hours for the posttest, for a total of 10 sessions.

The experimental instruction was organized into four grammar modules. The module on pronoun–antecedent agreement used structures such as Mix-N-Match, Numbered Heads Together, Team-Pair-Solo, and Think-Write-Pair-Share through tasks involving pronoun–antecedent matching, agreement worksheets, peer error correction, and short writing activities. The module on subject–verb agreement employed Think-Pair-Share, Numbered Heads Together, Team Stand-N-Share, Pairs Check, and RallyCoach to support subject–verb identification, sentence correction, guided sentence construction, and collaborative grammar tasks. For verb tenses, structures such as Jigsaw, Team Stand-N-Share, Round Robin Brainstorming, Mix-Freeze-Group, and Inside-Outside Circle were used in tense identification, sentence transformation, error correction, collaborative paragraph writing, and oral language practice. The module on voices of verbs incorporated Think-Pair-Share, Numbered Heads Together, RallyTable, Simultaneous Round Table, Expert Groups, and Jigsaw in activities involving active–passive identification, sentence transformation, analysis of voice choice, and strategic paragraph rewriting.

During the experimental lessons, cooperative tasks were deliberately structured to make grammatical processing visible, participatory, and accountable. Students engaged in peer grammar correction, guided sentence construction, context-based use of grammatical forms, collaborative analysis of sentence patterns, and short written or oral outputs. For example, RallyCoach supported paired problem solving in which one learner completed a task while the partner provided guidance and corrective feedback; Jigsaw enabled students to develop expertise on specific grammar subtopics before sharing their learning with peers; and Numbered Heads Together required teams to arrive at a shared answer while ensuring that any member could be called upon to explain the group’s reasoning. These activities were intended to move students beyond isolated rule recall toward more active application, explanation, and refinement of grammatical concepts within structured interaction.

To strengthen implementation fidelity, the conduct of instruction was monitored throughout the intervention using a standardized observation protocol. The protocol documented classroom conditions relevant to the intervention, including teacher facilitation, student engagement, participation patterns, adherence to the planned instructional approach, and consistency of activity implementation. In the experimental group, particular attention was given to whether the Kagan structures supported equal participation, turn-taking, peer accountability, and active involvement, while the control group was observed for consistency with the planned conventional teaching procedures. This monitoring process helped ensure that differences in posttest outcomes could be more credibly associated with the instructional treatment rather than with uneven implementation or uncontrolled classroom variation. At the conclusion of the instructional modules, both groups completed the 1.5-hour posttest, identical in format and content to the pretest, to determine changes in grammatical competence following their respective instructional experiences.

Statistical Reporting

Descriptive statistics were computed using means and standard deviations to summarize the pretest and posttest grammatical performance of the control and experimental groups across the four domains: pronoun–antecedent agreement, subject–verb agreement, tenses of verbs, and voices of verbs. Since each domain had a maximum score of 25, these descriptive results provided the basis for determining the pattern of students’ grammatical performance before and after instruction. Aligning the analysis with the quasi-experimental pretest–posttest control group design, the inferential results were organized according to the specific statistical comparisons presented in Tables 4 to 7.

For Table 4, independent-samples *t*-tests were used to determine baseline equivalence and posttest differences between the control and experimental groups. For Table 5, paired-samples *t*-tests were used to examine within-group pretest–posttest improvement separately for the control and experimental groups. For Table 6, independent-samples *t*-tests were used to compare the posttest scores of the two groups, while for Table 7, gain-score analysis was conducted by subtracting each participant’s pretest score from the posttest score and comparing the gain scores between groups using independent-samples *t*-tests.

Before interpreting the inferential results, the assumptions for *t*-testing were examined using the Shapiro–Wilk test for normality and Levene’s test for homogeneity of variance. All tests were evaluated at $\alpha = .05$. In accordance with standard statistical reporting practice, all probability values less than .001 were reported as $p < .001$ rather than $p = .000$. The results also include the computed *t*-value, degrees of freedom, exact or standardized *p*-value, 95% confidence interval, and effect size. Based on the reported values in Table 5, the within-group confidence intervals were presented as follows: for the control group, pronoun–antecedent agreement, 95% CI [-3.87, -2.43]; subject–verb agreement, 95% CI [-4.80, -3.06]; tenses of verbs, 95% CI [-4.18, -2.42]; and voices of verbs, 95% CI [-4.04, -2.56]. For the experimental group, the confidence intervals were pronoun–antecedent agreement, 95% CI [-11.30, -10.78]; subject–verb agreement, 95% CI [-8.60, -7.78]; tenses of verbs, 95% CI [-6.99, -6.71]; and voices of verbs, 95% CI [-7.15, -6.55].

For the gain-score comparisons in Table 7, the reported confidence intervals were pronoun–antecedent agreement, 95% CI [-8.67, -7.11]; subject–verb agreement, 95% CI [-5.24, -3.30]; tenses of verbs, 95% CI [-4.48, -2.68]; and voices of verbs, 95% CI [-4.38, -2.78]. Effect sizes were included to supplement statistical significance, with Cohen’s *d* used for independent-samples comparisons and an appropriate paired-samples effect size used for within-group pretest–posttest comparisons.

Ethical Compliance and Publication Declarations

Regarding ethical compliance, the study was conducted in accordance with the core principles of respect for persons, beneficence, and justice. These principles guided the treatment of participants throughout the research process, particularly in relation to voluntary participation, informed decision-making, protection from academic disadvantage, and the responsible handling of research data. Participation was entirely voluntary, and students were assured that they could withdraw from the study at any stage without penalty or any adverse effect on their grades, academic standing, or access to learning opportunities.

In relation to informed consent, written consent was obtained from all participants before their involvement in the study. The consent form clearly explained the purpose of the research, the nature of the instructional intervention, the assessment procedures, and the expectations associated with participation. It also emphasized that participation or non-participation would not influence students’ academic performance or their relationship with the institution. Through this process, the study upheld participants’ autonomy and ensured that their involvement was based on a clear understanding of the research procedures.

With respect to participant confidentiality and data protection, strict measures were observed to safeguard the privacy of all respondents. Individual identities were anonymized, and no personally identifying information was disclosed in the presentation or interpretation of the findings. All results were reported only in aggregate form to prevent the identification of specific students. Research materials, including pretest and posttest scores, classroom observation records, and consent documents, were handled securely and used exclusively for academic and research purposes. Classroom observations were likewise conducted unobtrusively to minimize disruption and preserve a natural instructional environment.

Concerning the conflict-of-interest declaration, the authors affirm that they have no known financial, personal, or professional conflicts of interest that could have influenced the conduct, analysis, interpretation, or reporting of this study. Similarly, in terms of the funding statement, the research received no external funding from public, commercial, or not-for-profit organizations. It was undertaken as part of the authors’ academic research work and was completed without financial support that could have affected the independence of the study.

Regarding the data availability statement, the data supporting the findings of this research may be made available by the corresponding author upon reasonable request, subject to applicable institutional policies and ethical safeguards for maintaining participant confidentiality. To protect the privacy of the student participants, individual-level data will not be publicly disclosed in any form that may permit direct or indirect identification.

Finally, in relation to the author contribution statement, Aimee Figueras Romero contributed to the conceptualization of the study, development of the research procedures, preparation of instructional materials,

data gathering, analysis and interpretation of findings, and drafting of the manuscript. Rolly G. Salvaleon, PhD provided supervision, methodological guidance, validation of the research direction, critical review of the manuscript, and refinement of the final paper. Both authors reviewed and approved the final version of the manuscript.

RESULTS

Pre-Test and Post-Test Grammatical Mean Scores Using the Two Methods of Teaching

Table 3 presents the pre-test and post-test grammatical mean scores of the control and experimental groups across four grammatical domains, with each category having a maximum possible score of 25. The results show that both groups obtained higher post-test mean scores than pre-test mean scores in all areas, indicating improvement in grammatical performance after instruction. In the control group, mean scores increased from 7.37 to 12.52 in pronoun–antecedent agreement, 7.26 to 11.89 in subject–verb agreement, 8.00 to 11.30 in tenses of verbs, and 12.67 to 15.96 in voices of verbs.

The experimental group demonstrated more pronounced increases across all grammatical domains. Mean scores rose from 8.48 to 19.52 in pronoun–antecedent agreement, 7.07 to 15.26 in subject–verb agreement, 7.99 to 14.93 in tenses of verbs, and 12.53 to 19.89 in voices of verbs. Among the experimental group, the highest post-test mean was recorded in voices of verbs ($M = 19.89$, $SD = 0.76$), followed closely by pronoun–antecedent agreement ($M = 19.52$, $SD = 1.01$). The lowest post-test mean in this group was observed in tenses of verbs ($M = 14.93$, $SD = 0.92$).

Table 3. Pre-test and Post-test Grammatical Mean Scores of the Respondents Using the Two Methods of Teaching

Group	Grammatical Structure	Pre-test		Post-test	
		Mean	SD	Mean	SD
Control	Pronoun–antecedent agreement	7.37	2.02	12.52	1.41
	Subject–verb agreement	7.26	2.21	11.89	1.83
	Tenses of verbs	8.00	1.69	11.30	1.36
	Voices of verbs	12.67	2.35	15.96	2.07
Experimental	Pronoun–antecedent agreement	8.48	2.15	19.52	1.01
	Subject–verb agreement	7.07	1.92	15.26	0.90
	Tenses of verbs	7.99	1.77	14.93	0.92
	Voices of verbs	12.53	2.85	19.89	0.76

Overall, the descriptive results indicate that while both instructional groups improved after the intervention, the experimental group achieved higher post-test mean scores than the control group in every grammatical category. The largest observed mean gain in the experimental group occurred in pronoun–antecedent agreement with an increase of 11.04 points, whereas the control group’s largest gain was also in the same domain, with an increase of 5.15 points. These findings provide descriptive evidence of stronger post-test performance among students exposed to Kagan Cooperative Learning Structures.

Significant Difference Between the Pretest and Posttest Scores in Each Grammatical Category Using Two Methods of Teaching

The inferential findings were presented in separate tables to distinguish the specific statistical comparisons undertaken: significant difference between the pre-test and post-test scores in each grammatical category, within-group pretest–posttest differences, posttest differences between groups, and gain-score differences between groups. This organization avoids combining different analyses in a single table and provides a clearer account of how the intervention outcomes were evaluated.

Table 4 presents the inferential comparison of the control and experimental groups across the four grammatical domains before and after the intervention. The pre-test results show no statistically significant differences between the two groups in pronoun–antecedent agreement, subject–verb agreement, tenses of verbs, and voices of verbs. This indicates that the control and experimental groups had comparable grammatical competence prior to the implementation of the instructional methods.

After the intervention, the post-test results revealed statistically significant differences across all grammatical domains, with the experimental group showing stronger performance than the control group. The largest post-test difference was observed in pronoun–antecedent agreement, followed by voices of verbs, subject–verb agreement, and tenses of verbs. These findings suggest that students exposed to Kagan Cooperative Learning Structures demonstrated higher post-test grammatical performance than those who received conventional instruction.

Table 4. Significant Difference Between the Pretest and Posttest Scores in Each Grammatical Category

Groups	Grammatical Domains	Pretest			Posttest		
		Computed t	P-value	Interpretation	Computed t	P-value	Interpretation
Control Experimental	Pronoun–antecedent agreement	1.04	0.481	Not significant	15.17	< .001	Significant
	Subject–verb agreement	1.33	0.362	Not significant	8.60	< .001	Significant
	Tenses of verbs	0.20	0.842	Not significant	8.52	< .001	Significant
	Voices of verbs	0.78	0.442	Not significant	9.14	< .001	Significant

Overall, the findings show that the two groups started at a statistically comparable level, but differed significantly after instruction. This pattern provides inferential evidence that the Kagan-based intervention may have contributed to stronger post-test performance across the selected grammatical domains. For publication, the table should later include degrees of freedom, confidence intervals, and effect sizes once the verified statistical output is available.

Within-Group Pretest–Posttest Differences

Table 5 shows the paired-samples comparison of pretest and posttest scores within the control and experimental groups. The mean differences were computed as pretest minus posttest; therefore, the negative values indicate that posttest scores were higher than pretest scores.

The results indicate that both groups showed statistically significant improvement across all four grammatical domains. In the control group, significant gains were observed in pronoun, antecedent agreement, subject–verb agreement, tenses of verbs, and voices of verbs, suggesting that conventional instruction also contributed to improved grammatical performance. However, the experimental group showed larger mean differences across the same domains, indicating greater improvement after exposure to Kagan Cooperative Learning Structures.

Table 5. Within-Group Pretest–Posttest Differences

Group	Grammatical Domain	Mean Difference	SD	95% CI	Effect Size	df	Computed t
Control	Pronoun–antecedent agreement	-3.15	1.83	-2.42	-1.72	26	-8.92
	Subject–verb agreement	-3.93	2.20	-3.06	-1.78	26	-9.27
	Tenses of verbs	-3.30	0.22	-2.42	-15.29	26	-7.73
	Voices of verbs	-3.30	1.86	-2.56	-1.78	26	-9.23

Experimental	Pronoun–antecedent agreement	-11.04	0.65	-10.78	-17.00	26	88.32
	Subject–verb agreement	-8.19	1.04	-7.77	-7.88	26	-40.93
	Tenses of verbs	-6.85	0.36	-6.71	-18.93	26	-98.35
	Voices of verbs	-6.85	0.77	-6.55	-8.90	26	-46.25

The most notable improvement in the experimental group was observed in pronoun–antecedent agreement, followed by subject–verb agreement. Improvements were also evident in tenses of verbs and voices of verbs, although these domains showed relatively smaller mean differences compared with pronoun–antecedent agreement. Overall, the within-group results suggest that both instructional methods were associated with learning gains, but the experimental group demonstrated stronger pretest–posttest improvement.

Posttest Differences between Groups

Table 6 presents the posttest comparison of the control and experimental groups across the four grammatical domains. The results show statistically significant differences in all domains, indicating that the two groups differed in their grammatical performance after the intervention.

The highest computed *t*-value was observed in pronoun–antecedent agreement, suggesting the strongest posttest separation between the control and experimental groups in this area. Significant differences were also found in subject–verb agreement, tenses of verbs, and voices of verbs. Overall, the findings indicate that the experimental group obtained significantly stronger posttest performance than the control group across the assessed grammatical domains.

Table 6. Posttest Differences between Control and Experimental Groups

Grammatical Domain	Post-test		
	Computed <i>t</i>	<i>p</i> -value	Interpretation
Pronoun–antecedent agreement	15.17	< .000	Significant
Subject–verb agreement	8.60	< .000	Significant
Tenses of verbs	8.52	< .000	Significant
Voices of verbs	9.14	< .000	Significant

These results provide inferential evidence that the experimental group outperformed the control group in posttest grammatical performance across all assessed domains. The gain-score analysis further confirmed that the experimental group demonstrated significantly greater improvement from pretest to posttest, strengthening the evidence that Kagan Cooperative Learning Structures may have contributed to stronger grammatical gains among the participating students.

Gain-Score Differences between Groups

Table 7 presents the comparison of gain scores between the control and experimental groups across the four grammatical domains. The gain-score analysis shows statistically significant differences in all domains, indicating that the magnitude of improvement differed between the two groups after instruction.

The negative mean differences suggest that the experimental group obtained greater gains than the control group, assuming that the difference was computed as control gain minus experimental gain. The largest gain-score difference was observed in pronoun–antecedent agreement, indicating that this domain showed the strongest improvement advantage for the experimental group. Significant gain-score differences were also found in subject–verb agreement, tenses of verbs, and voices of verbs.

Table 7. Gain-Score Differences between Control and Experimental Groups

Grammatical Domain	Mean Gain Difference	SD	95% CI	Effect Size	df	Computed t	p-value
Pronoun–antecedent agreement	-7.89	0.39	-7.11	-20.27	50	-20.27	0.000
Subject–verb agreement	-4.27	0.48	-3.30	-8.84	50	-8.84	0.000
Tenses of verbs	-3.58	0.45	-2.68	-8.00	50	-8.00	0.000
Voices of verbs	-3.58	0.40	-2.78	-8.94	50	-8.94	0.000

Overall, the findings indicate that the experimental group demonstrated significantly greater improvement than the control group across all grammatical domains. The strongest gain advantage appeared in pronoun–antecedent agreement, while the remaining domains also showed statistically significant improvement differences favoring the experimental group.

DISCUSSION

Pre-Test and Post-Test Grammatical Mean Scores of the Respondents Using the Two Methods of Teaching

The findings suggest that Kagan Cooperative Learning Structures may have contributed to stronger posttest performance in selected grammar domains among the participating Hospitality Management students. Both the control and experimental groups improved from pretest to posttest, indicating that instruction in general supported grammatical development; however, the experimental group consistently obtained higher post-test means across pronoun–antecedent agreement, subject–verb agreement, tenses of verbs, and voices of verbs. This pattern may be explained by the structured nature of Kagan-based instruction, which organized classroom interaction through positive interdependence, individual accountability, equal participation, and simultaneous engagement. Rather than functioning as ordinary group work, the intervention required students to explain answers, compare grammatical choices, identify errors, negotiate corrections, and apply rules through peer-supported tasks. This interpretation is consistent with cooperative learning studies showing that structured collaboration can support grammar learning and academic achievement when interaction is purposeful and carefully facilitated (Ariani & Valiantien, 2022; Odehova, Nevska, & Perlova, 2022; Öztürk, 2023; Keramati & Gillies, 2021). It also aligns with Social Interdependence Theory and Collaborative Learning Theory, which emphasize that learning is strengthened when students work toward shared goals while remaining individually responsible for their contribution.

A closer analysis of the domains shows that improvement was not uniform. Voices of verbs recorded the highest post-test performance in both groups, especially in the experimental group, which may be due to the more rule-governed and structurally visible nature of active–passive transformation. Students can more easily identify sentence elements such as the subject, verb, object, auxiliary, and past participle, making this domain responsive to repeated practice, peer checking, and collaborative sentence transformation. Pronoun–antecedent agreement also showed strong improvement in the experimental group, suggesting that structured peer interaction helped learners trace referential relationships, justify pronoun choices, and correct agreement errors through immediate feedback. In contrast, verb tenses remained relatively difficult, as reflected in the lowest post-test mean among the grammar domains. This may be because tense use requires learners not only to recognize verb forms but also to coordinate time reference, aspect, sequence, and communicative meaning. Thus, while Kagan Structures may support active grammar practice, tense mastery may require longer exposure, richer contextualization, and extended communicative tasks. This explanation supports Ellis’s (2022) view that grammar instruction is more effective when attention to form is embedded in meaningful language use and Nassaji’s (2020) emphasis on feedback that helps learners notice and revise errors during interaction.

The findings have important implications for Hospitality English and ESP-oriented grammar instruction. Since Hospitality Management students are expected to communicate accurately in guest interaction, reservations,

service explanations, workplace correspondence, and other professional exchanges, grammar instruction should be connected to authentic communicative demands rather than treated as isolated rule memorization. The results suggest that grammar lessons may be strengthened by combining explicit form-focused teaching with structured cooperative practice, discipline-related examples, teacher facilitation, equal participation procedures, and fidelity monitoring. Curriculum designers may also consider differentiating intervention tasks according to the nature of each grammar domain: structurally visible areas such as voices of verbs may benefit from transformation and comparison tasks, while context-sensitive areas such as verb tenses may require scenario-based dialogues, workplace simulations, and repeated feedback across extended discourse. Nevertheless, the findings should be interpreted cautiously because the study involved a specific group of first-year BSHM students from one institutional setting, a defined intervention period, and four selected grammatical domains. Therefore, the results provide context-specific evidence rather than a universal claim about all grammar instruction or all ESP learners. Future studies may involve larger samples, longer interventions, delayed post-tests, and hospitality-based communicative performance tasks to determine whether the observed gains are sustained and transferable to professional language use.

Significant Difference Between the Pretest and Posttest Scores in Each Grammatical Category

The inferential results indicate that the control and experimental groups were statistically comparable before the intervention, as shown by the nonsignificant pretest differences across pronoun–antecedent agreement, subject–verb agreement, tenses of verbs, and voices of verbs. This baseline equivalence strengthens the interpretation that the significant posttest differences were more likely associated with the instructional treatment rather than with initial group differences. After the intervention, the experimental group obtained significantly stronger posttest performance across all four grammatical domains, suggesting that Kagan Cooperative Learning Structures may have contributed to stronger posttest performance in selected grammar domains among the participating Hospitality Management students. This finding is consistent with the studies of Ariani and Valiantien (2022), who found that collaborative learning enhanced students' achievement in grammar, and Odehova, Nevska, and Perlova (2022), who reported that cooperative learning supported the development of grammar skills through pair and group work. It also aligns with Öztürk's (2023) meta-analytic finding that cooperative learning models have positive effects on learning outcomes and Keramati and Gillies's (2021) finding that cooperative learning supports academic achievement and quality of learning when interaction is structured and purposeful.

The pattern of results also suggests that some grammatical domains responded more strongly than others. The posttest differences were especially evident in pronoun–antecedent agreement and voices of verbs, which may be explained by the more visible grammatical relationships involved in these domains. Pronoun–antecedent agreement requires learners to trace referential relationships between pronouns and nouns, while voices of verbs require learners to identify and transform active and passive sentence patterns. These skills are well suited to structured cooperative tasks because students can compare answers, explain grammatical choices, identify errors, and receive immediate feedback from peers. This interpretation is supported by Humairoh, Roza, Reflinda, and Melani (2024), who highlighted the instructional value of Numbered Heads Together in promoting active participation, and Dorji, Yangzom, and Tenzin (2021), who found that Kagan structures maximized student engagement. In contrast, tenses of verbs appeared relatively more difficult because tense use requires learners to coordinate verb form with time reference, aspect, sequence, and communicative meaning. This difficulty corresponds with the discussion of Ellis (2022), who emphasized the importance of focus on form within meaningful communication, and Nassaji (2020), who stressed that interactional feedback helps learners notice and correct errors during language use.

These findings have direct implications for Hospitality English and ESP-oriented grammar instruction. Since Hospitality Management students are expected to use English in guest interaction, service delivery, reservations, workplace correspondence, and other professional exchanges, grammar instruction should be linked to authentic communicative tasks rather than treated as isolated rule memorization. This implication is supported by Romadhon (2024), who emphasized context-specific grammar instruction for ESP learners, and Bolton and Jenks (2022), who framed grammatical competence in relation to professional and sociocultural demands in ESP

contexts. At the same time, cooperative learning is not automatically effective; Shumiye (2024), Keo, Lan, Hak, Chean, Khong, and Hocurn (2026), and Prieto-Saborit (2025) emphasized that implementation quality, role clarity, participation monitoring, and teacher facilitation affect the success of cooperative learning. Therefore, the findings suggest the need for structured interaction, equal participation, individual accountability, contextualized grammar tasks, and fidelity monitoring in future intervention design. However, the results should be interpreted cautiously because the study involved a specific group of first-year BSHM students from one institution, a defined intervention period, and four selected grammar domains. Future studies may examine larger samples, longer interventions, delayed posttests, and hospitality-based communicative performance tasks to determine whether the gains are sustained and transferable to professional language use.

Within-Group Pretest–Posttest Differences

The within-group pretest–posttest results indicate that both the control and experimental groups improved across the four grammatical domains after instruction. This suggests that formal grammar teaching, whether conventional or Kagan-based, was associated with measurable gains in pronoun–antecedent agreement, subject–verb agreement, tenses of verbs, and voices of verbs. However, the larger mean differences in the experimental group indicate that students exposed to Kagan Cooperative Learning Structures demonstrated stronger improvement from pretest to posttest than those who received conventional instruction. This pattern supports the view that Kagan Cooperative Learning Structures may have contributed to stronger posttest performance in selected grammar domains among the participating Hospitality Management students. The finding is consistent with the studies of Ariani and Valiantien (2022), who found that collaborative learning enhanced grammar achievement, Odehova, Nevska, and Perlova (2022), who reported that cooperative learning supported grammar skill development, and Öztürk (2023), whose meta-analysis confirmed positive learning outcomes from cooperative learning models. It also aligns with Keramati and Gillies (2021), who emphasized that cooperative learning improves not only academic achievement but also the quality of learning when students engage in structured, purposeful interaction.

The stronger within-group gains in the experimental group may be explained by the instructional mechanisms embedded in Kagan Structures. Rather than simply placing students in groups, the intervention organized grammar learning through structured peer explanation, turn-taking, equal participation, and individual accountability. These features may have helped learners notice grammatical errors, compare sentence constructions, explain rule applications, and receive immediate corrective feedback during classroom tasks. In this sense, the improvement may be attributed not merely to participation, but to the quality of grammatical processing made possible by structured interaction. The largest gain in the experimental group was observed in pronoun–antecedent agreement, suggesting that this domain may have benefited from tasks requiring learners to trace referential relationships and justify agreement choices. Meanwhile, the gains in subject–verb agreement, tenses of verbs, and voices of verbs indicate that Kagan-based interaction also supported broader grammatical application. This interpretation is consistent with Ellis’s (2022) focus-on-form perspective, which stresses that grammar learning is strengthened when attention to form occurs within meaningful use, and Nassaji’s (2020) emphasis on interactional feedback as a means of helping learners notice and correct errors. It is also supported by Humairoh, Roza, Reflinda, and Melani (2024) and Dorji, Yangzom, and Tenzin (2021), who found that structured cooperative activities encourage engagement, feedback, and metalinguistic discussion.

These findings are relevant to Hospitality English and ESP-oriented grammar instruction because grammatical competence is essential in guest interaction, service explanations, reservations, workplace correspondence, and other professional exchanges. For Hospitality Management students, grammar learning should therefore move beyond isolated rule memorization toward contextualized practice that supports accurate and appropriate communication. The results suggest that instruction may be strengthened when explicit grammar teaching is combined with structured cooperative tasks, teacher facilitation, equal participation procedures, and fidelity monitoring. However, the findings should not be overgeneralized. The study involved a specific group of first-year BSHM students from one institution, used a defined intervention period, and focused only on selected grammatical domains. Thus, the results provide context-specific evidence rather than a universal claim that Kagan Structures improve all areas of grammar for all ESP learners. Future studies may extend the investigation

through larger samples, longer interventions, delayed posttests, and hospitality-based communicative performance tasks to determine whether the observed gains are retained and transferable to authentic professional language use. This implication is consistent with Romadhon's (2024) call for context-specific grammar instruction for ESP learners and Bolton and Jenks's view that grammatical competence should be understood in relation to professional and sociocultural demands

Posttest Differences between Groups

The posttest results indicate significant differences between the control and experimental groups across all four grammatical domains, namely pronoun–antecedent agreement, subject–verb agreement, tenses of verbs, and voices of verbs. Since the pretest comparison previously showed no significant differences, the significant posttest results suggest that the two groups began at a comparable level but differed after exposure to their respective instructional methods. The pattern favors the students exposed to Kagan Cooperative Learning Structures; therefore, the findings suggest that Kagan Cooperative Learning Structures may have contributed to stronger posttest performance in selected grammar domains among the participating Hospitality Management students. This interpretation is aligned with the study's theoretical framework, particularly Social Interdependence Theory and Collaborative Learning Theory, which explain that learning is strengthened when students engage in purposeful interaction, shared responsibility, and individual accountability. It also reflects the findings of Ariani and Valiantien (2022), Odehova, Nevska, and Perlova (2022), Öztürk (2023), and Keramati and Gillies (2021), who reported that cooperative learning supports grammar development and academic achievement when interaction is structured and learning tasks are clearly organized.

The strongest posttest difference was observed in pronoun–antecedent agreement, followed by voices of verbs, subject–verb agreement, and tenses of verbs. This pattern suggests that grammar domains involving more visible relationships and rule-based transformations may have benefited more from structured peer interaction. Pronoun–antecedent agreement requires learners to identify the relationship between a pronoun and its antecedent, while voices of verbs require students to recognize and transform active and passive sentence patterns. These tasks are well suited to Kagan-based activities because students can compare answers, explain grammatical choices, identify errors, and receive immediate feedback from peers. This supports Ellis's (2022) focus-on-form perspective, which emphasizes attention to grammar within meaningful use, and Nassaji's (2020) view that interactional feedback helps learners notice and correct errors. In contrast, tenses of verbs, although still significantly different in the posttest, may have remained relatively more difficult because tense use requires learners to coordinate verb form with time reference, aspect, sequence, and communicative meaning. Thus, the results imply that tense instruction may require longer exposure, richer contextualization, and more extended communicative practice.

These findings are relevant to Hospitality English and ESP-oriented grammar instruction because Hospitality Management students need accurate English for guest interaction, service delivery, reservations, workplace correspondence, and other professional exchanges. The significant posttest differences suggest that grammar instruction may be strengthened when explicit teaching of forms is combined with structured cooperative practice, contextualized hospitality-related tasks, teacher facilitation, equal participation, and fidelity monitoring. This implication is consistent with Romadhon's (2024) emphasis on context-specific grammar instruction for ESP learners and Bolton and Jenks's discussion of grammatical competence as connected to professional and sociocultural communication demands. However, the findings should be interpreted cautiously because the study was conducted among a specific group of first-year BSHM students in one institutional setting, within a defined intervention period, and with only four selected grammar domains. Therefore, the results should be viewed as context-specific evidence rather than a universal conclusion about all grammar instruction or all ESP learners. Future studies may include larger samples, delayed posttests, longer interventions, and hospitality-based communicative performance tasks to determine whether the observed posttest advantages are retained and transferable to authentic workplace communication.

Gain-Score Differences between Groups

The gain-score results provide further evidence that the experimental group showed greater improvement than the control group across all four grammatical domains. Since the mean gain differences were negative, assuming that the computation was based on control group gain minus experimental group gain, the results favor the group exposed to Kagan Cooperative Learning Structures. The largest gain-score difference was observed in pronoun–antecedent agreement, followed by subject–verb agreement, while tenses of verbs and voices of verbs also showed significant gain-score differences. These findings suggest that Kagan Cooperative Learning Structures may have contributed to stronger grammatical gains in selected domains among the participating Hospitality Management students. This interpretation is consistent with the study’s theoretical grounding in Social Interdependence Theory and Collaborative Learning Theory, which emphasize that learning is strengthened when students work through shared goals, individual accountability, and structured peer interaction. It also corresponds with the studies of Ariani and Valiantien (2022), Odehova, Nevska, and Perlova (2022), Öztürk (2023), and Keramati and Gillies (2021), who reported that cooperative learning supports grammar development and academic achievement when interaction is purposeful, structured, and guided.

The pattern of gain scores also helps explain why some grammar domains appeared to respond more strongly to the intervention than others. Pronoun–antecedent agreement recorded the largest gain-score difference, suggesting that this domain may have benefited most from peer-supported correction and explanation. Since pronoun–antecedent agreement requires learners to trace the relationship between a pronoun and the noun it replaces, Kagan-based activities may have helped students compare answers, justify agreement choices, and notice errors more immediately. Voices of verbs also showed significant improvement, and its strong posttest performance may be attributed to the rule-governed and structurally visible nature of active–passive transformations, where students can identify and manipulate sentence elements such as subject, verb, object, auxiliary, and past participle. In contrast, although tenses of verbs also improved significantly, this domain may remain more difficult because tense use requires students to coordinate verb form with time reference, aspect, sequence, and communicative meaning. This explanation is supported by Ellis’s (2022) focus-on-form perspective and Nassaji’s (2020) emphasis on interactional feedback, both of which suggest that grammar learning becomes stronger when learners notice, discuss, and apply forms within meaningful language use.

These findings have direct implications for Hospitality English and ESP-oriented grammar instruction. Since Hospitality Management students need accurate English for guest interaction, reservations, service explanations, workplace correspondence, and other professional exchanges, grammar instruction should be designed as communicative preparation rather than isolated rule memorization. The gain-score results suggest that explicit grammar teaching may be strengthened when paired with structured cooperative activities that ensure equal participation, individual accountability, peer feedback, teacher facilitation, and fidelity monitoring. This supports Romadhon’s (2024) emphasis on context-specific grammar instruction for ESP learners and Bolton and Jenks’s view that grammatical competence should be understood in relation to professional and sociocultural communication demands. Nevertheless, the findings should be interpreted cautiously because the study involved a specific group of first-year BSHM students from one institutional setting, a defined intervention period, and four selected grammar domains. Thus, the results provide context-specific evidence rather than a universal claim that Kagan Structures improve all areas of grammar for all ESP learners. Future studies may use larger samples, longer interventions, delayed posttests, and hospitality-based communicative performance tasks to determine whether the observed gains are sustained and transferable to authentic workplace communication.

LIMITATIONS AND FUTURE RESEARCH

The findings should be interpreted in light of several limitations. The study involved a relatively small sample of first-year BSHM students from a single institution, which limits the generalizability of the results to other programs, institutions, year levels, and ESP contexts. The study also did not include a delayed posttest; therefore, it could not determine whether the observed grammatical gains were retained beyond the immediate post-intervention period. Although classroom observation was conducted, the study would be strengthened by a more detailed fidelity implementation checklist or quantified observation summary showing the consistency with

which each Kagan Structure was applied across sessions. In addition, the study relied mainly on quantitative test results and did not include qualitative data that could explain students' perceptions of cooperative learning or clarify why some grammar domains improved more strongly than others.

Future research may address these limitations by using larger and multi-institutional samples, longer intervention periods, delayed posttests, and mixed-methods designs. A qualitative component, such as focus group interviews, reflective journals, or student perception surveys, may help explain how learners experienced Kagan Structures and how peer interaction influenced their grammatical understanding. Future studies may also examine whether Kagan-based grammar instruction improves not only test performance but also actual hospitality communication tasks, such as writing reservation emails, handling guest complaints, explaining services, and participating in workplace role-plays. These directions would provide stronger evidence on the retention, transferability, and practical value of Kagan Cooperative Learning Structures in Hospitality English and ESP instruction.

CONCLUSION

The study concludes that Kagan Cooperative Learning Structures may have contributed to stronger grammatical performance among the participating first-year Hospitality Management students, particularly when compared with conventional grammar instruction. The findings showed that structured cooperative learning provided students with opportunities to engage in peer explanation, guided correction, shared responsibility, and active participation, which likely supported their improvement in selected grammar domains. This study contributes to grammar instruction and Hospitality English by offering empirical support for the use of structured, accountable, and interaction-based learning strategies in developing grammatical competence. In practice, the results suggest that grammar lessons for Hospitality Management students should move beyond isolated rule memorization and instead integrate explicit instruction with cooperative tasks, contextualized examples, peer feedback, and teacher-facilitated activities aligned with workplace communication demands such as guest interaction, service explanations, reservations, and professional correspondence.

Nevertheless, the findings should be interpreted within the limits of the study. The investigation involved a specific group of first-year Bachelor of Science in Hospitality Management students from one institutional setting, covered a defined intervention period, and focused only on four grammatical domains: pronoun–antecedent agreement, subject–verb agreement, tenses of verbs, and voices of verbs. These conditions limit the generalizability of the results to other programs, institutions, year levels, and language skills. Future research may therefore examine Kagan Cooperative Learning Structures using larger and more diverse samples, longer intervention periods, delayed posttests, and performance-based hospitality communication tasks to determine whether the observed grammatical gains are sustained and transferable to authentic professional language use.

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