

The Impact of Rotation Model on Minimizing Inflectional Morphemes Errors in English Writing: A Comparative Study of Error Analysis^{*}

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Abstract—The study aims to analyze 12th-grade students' writing errors related to inflectional morphemes. In addition, the research measures efficacy of the Rotation Model (RM) and the Grammar Translation Method (GTM) in minimizing writing errors among learners of English. Comparative studies are rare to find the effectiveness of two teaching models in the context of error analysis. Eighty-two samples were taken into consideration for randomize sampling. The present research is divided into two groups; the experimental group, consisting of 41 participants, provided with instruction via RM, and the control group, also comprising 41 individuals, being taught through GTM. Pre and post-test treatment data were collected and analyzed with the help of SPSS 22. The results revealed common errors with inflectional morphemes among both groups. Additionally, the mean values for each type of error were significantly minimized due to the post-instruction of RM compared to the GTM. The study's findings largely devoted to pedagogical improvement among ESL learners' writing. The findings are reviewed concerning future research directions and instructional strategies.

Index Terms—rotation model, blended learning, inflectional morphemes errors, English writing errors

I. INTRODUCTION

English as a second language (ESL) writing is often considered a challenging skill to master, mainly due to the complex nature of English grammar (Cumming, 2013; Grabe & Kaplan, 2014; Usama, 2023). The study aims to examine the common errors related to inflectional morphemes made by a group exposed to the Rotation Model (RM) compared to a control group with grammar translation method (GTM) treatment in order to measure the efficacy of RM in enhancing ESL learners' writing and minimizing errors. Inflectional morphemes in English, as defined by Crystal and Alan (2023) are affixes that provide grammatical information to root words without altering their meaning or lexical category, such as '-s' for plurals, '-s' for possession, '-ing' for progressive, '-s' for third person singular present, '-ed' for past tense, '-en' for past participles, '-er' for comparative adjectives, and '-est' for superlatives, and these morphemes have a crucial role in English language learning and teaching due to their importance in achieving grammatical accuracy (Selinker, 1972; Aronoff, 1976).

Kim et al. (2014) have drawn attention to the positive impact of Rotation Model (RM) practices on the writing performance of ESL learners. Furthermore, the studies (Morris, 2018; Belazi & Ganapathy, 2021; Nagy, 2018; Xiangze & Abdullah, 2023; Muhayyang et al., 2021; Wang et al., 2021) have shown the benefits of RM in improving various aspects of writing. However, none of these studies have focused explicitly on ESL learners' writing errors and the effectiveness of RM in reducing errors. Notably, a significant research gap exists regarding analyzing ESL learners' writing errors following the implementation of RM within the theoretical framework of Error Analysis. To bridge this gap, we propose a study that involves an experimental group receiving RM intervention and a control group with GTM. The research aims to identify common errors in ESL learners' writing and determine whether the experimental group exhibits significantly different error frequencies than the control group. The present research explores understanding of

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ESL learners' writing errors and explores the pedagogical implications of RM in ESL education, with a particular emphasis on language development areas. The findings of this study hold practical significance for teaching second languages by shedding light on what needs to be taught and effective learning techniques. The study also foregrounds the challenges and issues of today's classroom pedagogy as well as to grasp the nuances of English language as lingua franca (Alam, 2023; Alam & Hameed, 2023).

II. LITERATURE REVIEW

A. Rotation Model: Blended Learning Approach

According to Garrison and Kanuka (2004) and Horn and Staker (2017), the Rotation Model is a special kind of blended learning that integrates traditional classroom with virtual mode and digital media. This approach enables students to move between several stations that offer a variety of tasks, including online components (Jeffrey et al., 2014; Staker & Horn, 2012). It is an excellent example of combining digital resources and in-person interactions. According to Tucker (2012) and Sawchuk (2019), in its conventional version, students follow a set schedule and alternate between stations where they usually participate in teacher-led teaching, group projects, and individualized online learning. According to Gardner (2011) and Fleming (2001), this methodical approach provides a comprehensive combination of instructional techniques that accommodate the various learning styles of students. The studies (Means et al., 2009; Picciano et al., 2012) indicated that RM enhances academic performance and boosts student engagement. Students become active, self-directed learners who set their own learning pace instead of being passive consumers of information (Zimmerman, 2002; Schunk, 2012).

Moreover, this particular model provides support for effective management of the classroom by making pairs and smaller groups of students. This division allows teachers to focus on individual needs and implement strategies for differentiation (Tomlinson, 2014; Subban, 2006). In addition, it promotes an environment that is focused and devoted to outcome based learning procedures (Fredricks et al., 2004) while simultaneously allowing for data-driven instruction through the use of analytics provided by online learning platforms (Sclater, 2017). Nevertheless, criticisms have been raised, including concerns regarding reliance on technology, the presence of a digital divide, and issues related to equity (Selwyn, 2016; Cuban, 2001). Furthermore, the model requires significant initial investments in both technology and teacher training (Bernard et al., 2014). The Rotation Model presents an intriguing aspect of blended learning as it combines the advantages of digital technology with the irreplaceable value of face-to-face instruction. Its structured and adaptable approach caters to various learning styles, encourages active learning, and facilitates personalized instruction driven by data. However, ongoing research and refinement are necessary to address equity and access concerns.

B. Impact of Rotation Model to Improve ESL Learners' Writing

The Station Master Model has emerged as an impressive educational framework that enhances English writing skills. Since its beginning, many studies have been undertaken to examine the efficiency of this model across different dimensions, from grammatical correctness to creative expression. Morris (2018) and Belazi and Ganapathy (2021) were among the pioneers who empirically assessed the Rotation Model. Smith and colleagues concentrated on middle school students and reported significant improvements in sentence structure. Various studies have delved into specific grammatical aspects. For instance, Nagy (2018) and Xiangze and Abdullah (2023) investigated how the model positively impacts grammatical accuracy. While Nagy (2018) focused on the correct usage of tenses, Xiangze and Abdullah (2023) found a noticeable improvement in subject-verb agreement among learners. In contrast, Muhayyang et al. (2021) and Wang et al. (2021) focused on qualitative aspects, such as coherence and logical structuring of arguments. Their findings indicate that university students who utilized the model in their writing courses exhibited a discernible improvement in creating logically coherent arguments. However, the Station Master Model has not been exempt from criticism. Studies carried out by Smalls (2019) and Alamri et al. (2021) propose alternative perspectives indicating that the model could inhibit the creative aspects of writing. According to their research, the model's rigid structure could limit students' ability to develop their unique writing styles. Nevertheless, a subsequent study by Zhao and Liao (2021) challenged this criticism, stating that personal writing styles could thrive with less rigidity if the model is implemented. Additional research has further explored the applicability of the Station Master Model among different demographic groups. Moreover, as educational systems increasingly adopt online platforms, scholars like Anthony et al. (2022), Raza et al. (2021) have examined the model's effectiveness in virtual learning environments. Both studies offer empirical evidence that the model's effectiveness is not restricted by the medium of instruction, providing a hopeful direction for future investigation. In addition, specific analyses have been initiated to investigate the adaptability of the design. A recent study by Larsari et al. (2023) demonstrates that the Station Master Model can be successfully integrated with other pedagogical frameworks, leading to compounded improvements in writing skills. Similarly, Zamri and Narasuman (2023) indicate that the model may enhance writing skills in professional settings, expanding its applicability beyond educational institutions.

C. Background of Error Analysis

The differentiation between errors and mistakes in the acquisition of language holds significant importance in the realm of pedagogical strategies. Mistakes, which learners themselves frequently correct, pertain to performance,

whereas errors, which indicate systemic deficiencies in competence, are typically beyond the ability of learners to self-correct unless they are at an advanced level (Corder, 1982; Çetereisi & Bostancı, 2018; Keshavarz, 2015). These mistakes may be broadly classified as interlingual errors, being influenced by the first language (L1), and intralingual errors, which arise from incomplete knowledge of the second language (L2) (Brown, 2007; Keshavarz, 2015). In written work, mistakes are further divided into global and local categories, with the former rendering the text incomprehensible and the latter allowing for interpretation based on the surrounding context (Keshavarz, 2012). Error Analysis (EA) emerged as a response to the limitations of Contrastive Analysis (CA), with a focus on errors as integral components of the language learning process (Barkhuizen & Ellis, 2005; Keshavarz, 2015). EA offers educators a systematic methodology for comprehending students' errors, thereby facilitating the customization of teaching materials and methods (Lightbown & Spada, 2006).

D. Inflection Morphemes Errors in ESL Learners' Writing

Recent research has examined the inaccuracies present in the writing skills of learners in ESL context from diverse linguistic backgrounds, specifically focusing on inflectional morphology. Al-Saidat (2012) discovered that individuals whose first language is Arabic primarily made developmental and interlingual errors regarding inflection morphemes. Similarly, the studies conducted by Made Pramestia Dewi et al. (2021) and Sunandar (2022) revealed that Indonesian native speakers also encountered difficulties with inflection morphemes due to both intralingual and interlingual influences. Florianus and Syamsi (2021) emphasized that first-year university students struggled with subject-verb agreement and past participles due to the interference of both intralingual and interlingual factors. Terzioğlu and Bensen (2020) conducted a study encompassing a broader student demographic and determined that morphological errors were prevalent, with 44.2% attributed to interlingual causes and 55.8% attributed to intralingual causes. Manihuruk (2022) and Gardner et al. (2021) further corroborated that inaccuracies in inflectional morphemes were widespread, particularly concerning using present and past tense inflections across various native language backgrounds.

III. AIMS OF THE STUDY

The primary objectives of this research are to (i) analyze the committed error related to inflectional morpheme by both groups (experimental and control group) and (ii) investigate the comparative efficacy of the Rotation Model and the Grammar-Translation Method in enhancing English writing in terms of minimizing errors related to inflectional morpheme among 12th-grade students. The participants, who are native Hindi speakers and have acquired English as a second language, are students enrolled in a 12th-grade program. Considering the imperative to employ the most efficient instructional approaches in educational settings, this study aims to discern which method the Rotation Model or Grammar Translation Method is more effective in general English writing development.

IV. RESEARCH QUESTIONS

This investigation is critical as its findings may inform curriculum decisions in secondary education, thereby affecting students' future academic and professional prospects. Specifically, the research questions posed are:

- Do the ESL learners commit common errors related to inflectional morphemes in their writing skills?
- Which instructional methodologies, the Rotation Model or Grammar-Translation Method, results in superior English writing for 12th-grade students when administered for an identical instructional time?

V. METHODOLOGY

A. Participants and Sampling

In this research study, a random sampling method was employed, resulting in the participation of 72 individuals. These participants were divided into two groups: an experimental group of 41 individuals and a control group comprising 41 participants. Their ages ranged from 16 to 19 years, with a gender distribution of 41 males and 41 females. The selection criteria focused on senior secondary students who had completed advanced English language courses and had substantial English experience. All participants were native speakers of Hindi and residents of Lucknow, Uttar Pradesh, India.

B. Treatment

In an experimental study, the researcher was devoted to target inflectional morphemes to experimental group participants. The intervention lasted eight weeks and was conducted five days a week, each lasting 90 minutes. The rationale for choosing this duration and frequency was based on previous research suggesting that consistent, focused instruction is necessary to improve language learning significantly (Lightbown & Spada, 2006). Figure 1 shows the process for teaching ESL writing using a multiple-stage.

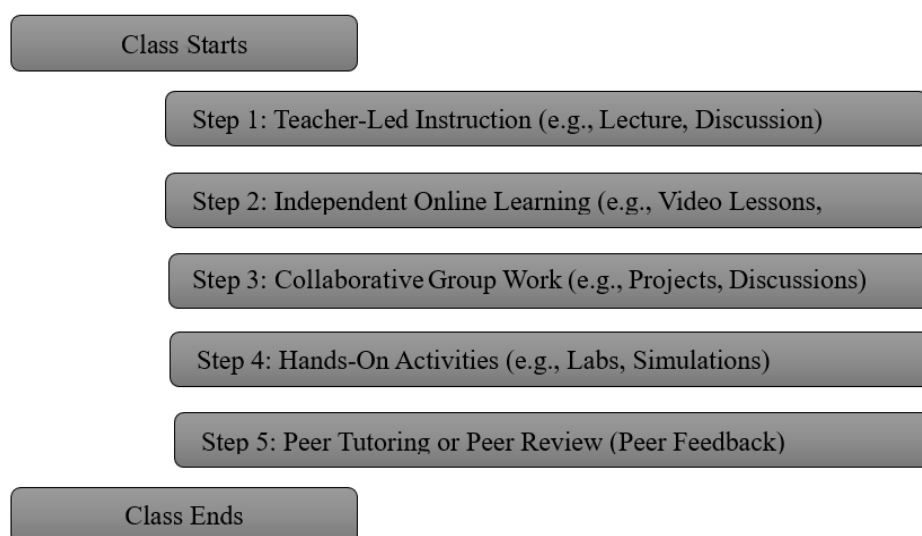


Figure 1. Study Procedure

In an experimental classroom setting, the Rotation Model is employed to facilitate a rich, multidimensional learning experience that caters to an array of learning styles and preferences. The session kicks off with step-1, a teacher-led instructional phase where foundational knowledge is imparted. Here, the teacher had used various deductive methods and guided discussions, to ensure that students fully grasp the lesson's core concepts. Following this, student's transition to step-2, a zone dedicated to independent online learning. Equipped with computers and other digital devices, students delve into self-paced activities ranging from watching instructional videos to completing interactive quizzes, reinforcing and augmenting the direct instruction they received earlier.

Next, students move to Step 3, which fosters collaborative learning through small group activities. In this step, peers engage in discussions, solve problems, and work on projects directly related to the lesson's content. This promotes subject matter understanding and soft skills like teamwork and communication. Step 4 shifts the focus to active, hands-on learning experiences. Students can internalize knowledge through experiential learning activities by conducting experiments, working on practical applications of what they have learned, or exploring creative projects.

In some variations of this model, there is a Step-5 designed for peer tutoring or peer review. Here, students have the opportunity to teach or review each other's work. This station serves as an effective reinforcement tool, helping to solidify learning by encouraging students to articulate their understanding of the lesson's content. The session is concluded at the end of the regular class period, leaving students with a holistic educational experience that has engaged them through multiple educational methods and learning styles.

The Grammar-Translation Method (GTM) was used in the control group, a traditional approach rooted in the study of classical languages (Cook, 2008). GTM emphasizes explicit grammar rules and translation exercises, focusing primarily on written language skills rather than oral competence (Richards & Rodgers, 2014; Larsen & Freeman, 2014). Activities typically involve translating sentences between the native and target languages, often based on a set curriculum lacking real-world context (Celce & Murcia, 2001). This teacher-centric, lecture-based method limits student interaction and is criticized for neglecting essential speaking and listening skills (Nation & Macalister, 2010; Hinkel, 2015). The GTM thus serves as a conventional baseline for comparing modern, interactive methods like those that the Rotation Model used in the experimental group (Kumaravadivelu, 2006).

C. Data Collection and Analysis Procedures

In the present study, data were collected over forty days (eight weeks) from respondent group pre and post treatment. The medium of data collection was essays composed (word limit 100-150) on two distinct topics, which were used before and after the treatment, generated using Microsoft Word on individual computing systems. Using ancillary reference instruments, such as dictionaries, was strictly prohibited to maintain uniformity and minimize external influences. Also, Microsoft Word's automated spelling and grammatical corrections features were deliberately disabled. The Error Analysis (EA) methodology, initially proposed by Corder (1981), was employed to identify and categorize language errors within the essays. The collected data underwent preliminary analysis using the Grammarly software to focus on errors related to inflectional morphemes. This tool has been empirically supported to be particularly efficacious in assessing the writing skills learners (Almusharraf & Alotaibi, 2021, 2022). Subsequently, the identified errors were classified and tagged according to Dulay et al. (1982) Surface Structure Taxonomy. Criteria for inclusion, exclusion, and the designation of false information were rigorously followed. The SPSS software, version 22, was used

for statistical analysis. Repeated measures test was used which served as the main statistical procedure for both experimental and control groups across different test instances

VI. RESULTS OF THE STUDY

Employing a three-way ANOVA on the frequency of errors with 8 inflectional morphemes ('-s' for plurals, '-s' for possession, '-ing' for progressive, '-s' for third person singular present, '-ed' for past tense, '-en' for past participles, '-er' for comparative adjectives, and '-est' for superlatives) 2 groups (experimental, control) $\times$ 2 groups (experimental, control) 2 tests (pre, post), the results of the study presented a significant effect of inflectional morphemes, $F(1, 40) = 109.181$, $P = .001$, $\eta^2 p = .961$. The value for errors related to inflectional morphemes of '-ed' for past tense, '-s' for plurals, '-s' for third person singular present, '-ing' for progressive than '-s' for possession, '-en' for past participles, '-er' for comparative adjectives, and '-est' for superlatives (Fig. 2). In addition, the analysis opened a significant main effect on 2 groups, (experimental, control), $F(1, 40) = 145.210$, $P = .001$, $\eta^2 p = .797$, shown the results that experimental group was found with a lesser mean value of errors rather than control group (Fig. 3). Furthermore, the statistical analysis revealed significant main effect on 2 tests (pre, post), $F(1, 40) = 83.900$, $P = .001$, $\eta^2 p = .694$, entailed the results that learners have minimized the errors across tests (pre-post-tests) (Fig. 4).

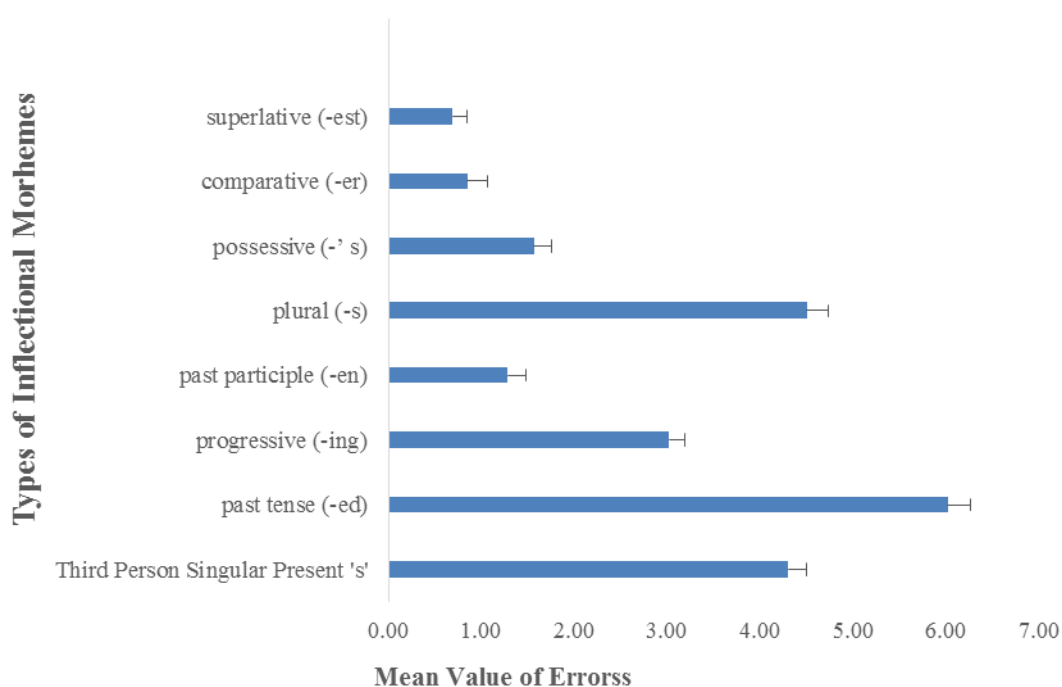


Figure 2. Mean Value of Errors

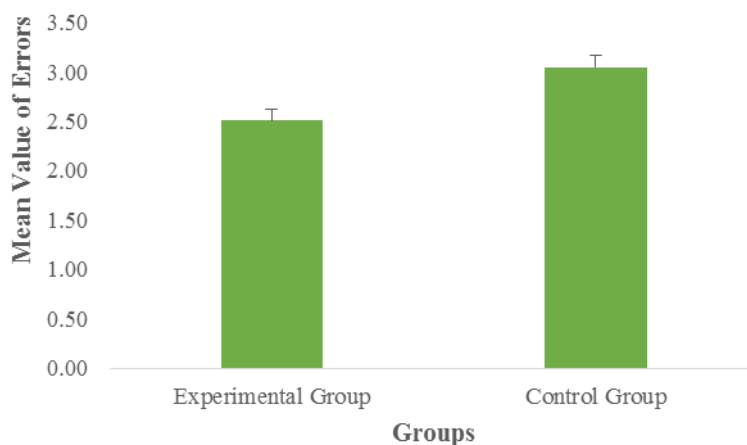


Figure 3. Group Variations

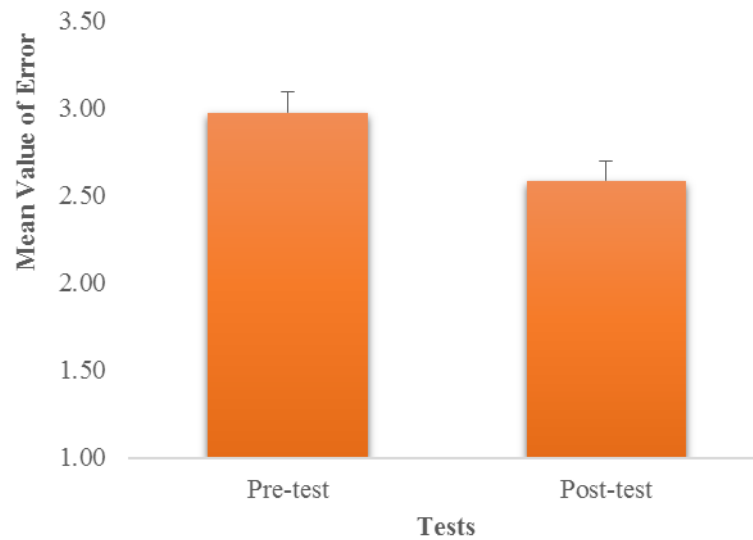


Figure 4. Tests and Their Mean Value

There was also a two-way significant interaction between 8 inflectional morphemes ('-s' for plurals, '-s' for possession, '-ing' for progressive, '-s' for third person singular present, '-ed' for past tense, '-en' for past participles, '-er' for comparative adjectives, and '-est' for superlatives) $\times$ 2 groups (experimental, control), $F(1, 40) = 8.450$, $P = .001$, $\eta^2 p = .656$, revealed the results that mean value of errors was less than control group for each type of inflectional morphemes (Fig. 5). Additionally, there was a two-way significant interaction between 8 inflectional morphemes ('-s' for plurals, '-s' for possession, '-ing' for progressive aspect, '-ed' for past tense, '-en' for past participles, '-er' for comparative adjectives, and '-est' for superlatives) $\times$ 2 tests (pre, post), $F(1, 40) = 4.287$, $P = .002$, $\eta^2 p = .492$, resulted that mean value of error for each type of inflectional morphemes was minimized after the intervention (Fig. 6). In addition, there was a two-way significant interaction between 2 groups (experimental, control) $\times$ 2 tests (pre, post), $F(1, 40) = 148.628$, $P = .001$, $\eta^2 p = .801$, revealed the results that the rotation model reduced the mean value of errors for each type of inflectional morpheme rather than grammar translation for control group (Fig. 7).

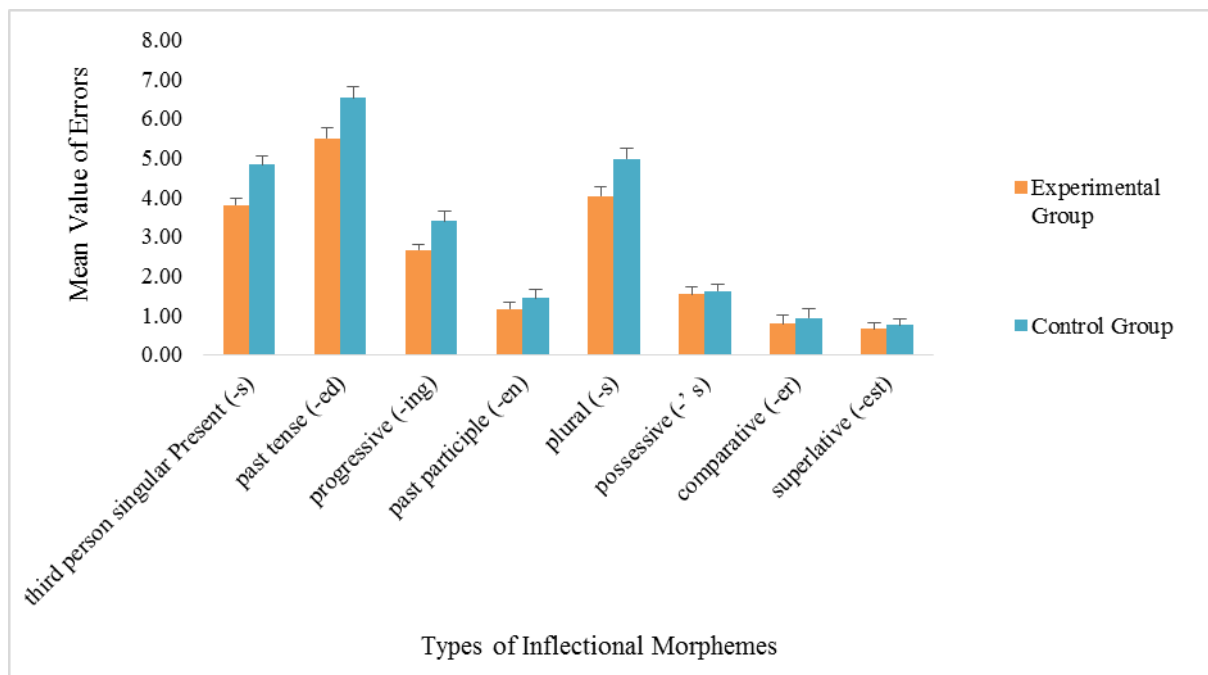


Figure 5. Types of Inflectional Morphemes



Figure 6. Comparisons Between Pre-Test and Post-Test

Lastly, three-way interaction between 8 types of inflectional morphemes $\times$ 2 groups (experimental, control) $\times$ 2 tests (pre, post) was significant, $F(1, 40) = 7.795$, $P = .001$, $\eta^2 p = .643$, revealing the results that both of groups made common errors in writing (Table 1). Additionally, it infers that each type of error was decreased highly after the intervention of the rotation model for the experimental group compared to grammar-translation for the control group (Table 1, below).

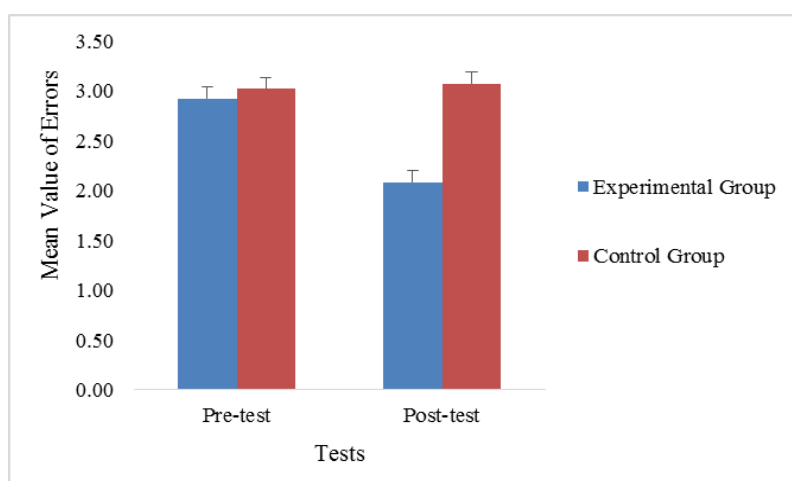


Figure 7. Mean Values of Errors

The table under scrutiny serves as an empirical lens through which one can evaluate the efficacy of instructional interventions, gauging their impact on the accuracy of using inflectional morphemes in English. This assessment is based on mean values and standard deviations of eight types of inflectional morpheme, comparing control and experiment, pre and post intervention.

TABLE 1
COMPARATIVE ANALYSIS OF ERRORS RELATED TO INFLECTIONAL MORPHEME BETWEEN EXPERIMENTAL AND CONTROL GROUPS: INSIGHTS FROM PRETEST AND POST-TEST METRICS

S. No.	Types of Inflectional Morpheme Errors	Experimental Group				Control Group			
		Pretest		Posttest		Pretest		Posttest	
		M	SD	M	SD	M	SD	M	SD
1.	third person singular present (-s)	4.37	0.23	3.21	0.17	4.82	0.24	4.82	0.24
2.	past tense (-ed)	6.11	0.30	4.89	0.28	6.45	0.27	6.61	0.29
3.	progressive (-ing)	3.13	0.21	2.16	0.18	3.39	0.23	3.39	0.23
4.	past participle (-en)	1.34	0.21	0.95	0.15	1.42	0.22	1.42	0.22
5.	plural (-s)	5.11	0.29	2.95	0.28	4.84	0.28	5.11	0.27
6.	possessive ('s)	1.68	0.19	1.37	0.22	1.61	0.19	1.61	0.19
7.	comparative (-er)	0.92	0.23	0.63	0.21	0.92	0.23	0.92	0.23
8.	superlative (-est)	0.74	0.16	0.55	0.15	0.74	0.16	0.74	0.16

Types of Common Inflectional Morpheme Errors between Two Groups

1. Third-Person Singular Present (-s): At the outset, the experimental group has a mean score of 4.37. Remarkably, this reduces to 3.21 post-intervention, representing a decline in the frequency of errors. In contrast, the control group, starting at 4.82, shows no improvement, as evidenced by an identical mean score in the post-test. The decrease in mean for the experimental group suggests that the instructional intervention effectively reduced errors in third-person singular present morphemes.

2. Past Tense (-ed): The experimental group commences with a mean score of 6.11. Following the instructional intervention, the group's mean score drops to 4.89. Conversely, it was found that the control group's mean increases slightly from 6.45 to 6.61. This widening performance gap underscores the intervention's efficacy for the experimental group in diminishing errors associated with past tense morphemes.

3. Progressive (-ing): Initially, the experimental group showed a mean score of 3.13. This figure drops to 2.16 following the intervention. On the other hand, the control group's mean remains static at 3.39. The reduction in the experimental group's mean score indicates a positive instructional impact, specifically in lessening errors related to the progressive morpheme.

4. Past Participle (-en): Starting with a mean score of 1.34, the experimental group demonstrates notable improvement, decreasing its mean to 0.95. The control group maintains a consistent mean score of 1.42, signaling no change. The decline in the experimental group's mean suggests that the intervention successfully addressed errors related to the past participle.

5. Plural (-s): The experimental group's mean score experiences a substantial drop, from an initial 5.11 to 2.95 post-intervention. This is in stark contrast to the control group, which sees a minor improvement in mean scores from 4.84 to 5.11. The experimental group's significant reduction in errors confirms the effectiveness of the intervention in this morpheme type.

6. Possessive ('s): The experimental group begins with a mean score of 1.68, reducing it to 1.37 post-intervention. Meanwhile, the control group's mean remains stable at 1.61. The reduction in the experimental group's mean score again points to the efficacy of the instructional intervention for this specific type of inflectional morpheme error.

7. Comparative (-er): Both groups initially share a mean score of 0.92. Post-intervention, the experimental group reduces its mean to 0.63, whereas the control group retains its mean score. This data indicates the intervention's effectiveness in reducing errors related to comparative morphemes for the experimental group.

8. Superlative (-est): With identical starting mean scores of 0.74, the experimental group improves to 0.55 post-intervention. The control group exhibits no change, maintaining its initial mean. Once again, this supports the argument that the intervention effectively reduced superlative morpheme errors for the experimental group.

VII. DISCUSSION

In a recent investigation involving both experimental and control groups of ESL learners, it was found that they frequently made errors with inflectional morphemes, namely third-person singular present (-s), past tense (-ed), progressive (-ing), past participle (-en), plural (-s), possessive (-'s), comparative (-er), and superlative (-est). However, third-person singular present (-s) errors often originate from the lack of a similar structure in Hindi, resulting in L1 interference, as highlighted by Kachru (2006). This concurs with previous studies (Kazazoglu, 2020; Eng & Lim, 2020; Gayo & Widodo, 2018), which identified L1 interference as a predominant error source among ESL learners. The use of the past tense (-ed) marker was also problematic, echoing findings by Ahmad (1996), Jinny (2019), Alam et al. (2023), and Alam and Usama (2023), mainly because Hindi lacks a direct past tense suffix. Additionally, plural (-s) errors occurred due to the Hindi practice of following numbers with singular nouns (Kachru, 2006). The control group made fewer possessive (-'s) errors than the experimental group, indicating intralingual influences. Moreover, the experimental group showcased more progressive (-ing) errors due to intralingual factors. Errors with comparative (-er) and superlative (-est) markers arose when students applied Hindi postpositions unfamiliar with English, leading to interlingual errors, as explained by Kachru (2006). These observations underscore the role of the learner's first language in inflectional morpheme error patterns in ESL contexts. Moreover, numerous research supports the idea of using different sorts of practical eclectic praxis can be used to curtail errors of students in real life contexts (Alam et al., 2022; Alam et al., 2020; Alam, 2022; Alam et al., 2023; Alam, 2023; Mahant et al., 2023). Productive skills of language like writing needs real life practice which can only be provided through communicative strategies or activities that can provides platforms to students to practice language skills (Alam et al., 2023).

The research also found that RM significantly enhanced students' ESL writing skills by minimizing inflectional morpheme errors, evidenced by the post-test results for the experimental group. This finding aligns with numerous studies (Morris, 2018; Belazi & Ganapathy, 2021; Nagy, 2018; Xiangze & Abdullah, 2023; Muhayyang et al., 2021; Wang et al., 2021; Raza et al., 2021) highlighting RM's positive influence positively by improving ESL writing. Additionally, RM notably enhanced students' grammatical accuracy, which (Larsari et al., 2023; Zimmerman, 2002) attributed to heightened metalinguistic awareness. This approach augments writing skills and language learning (Zamri & Narasuman, 2023; Means et al., 2009), emphasizing error correction, as proposed by (Picciano et al., 2012; Subban, 2006), facilitates better grammar and communication in ESL writing. RM can also promote autonomy in students and

encourage self-directed learning in ESL classrooms (Smalls, 2019; Alamri et al., 2021; Zhao & Liao, 2021; Anthony, 2022).

VIII. CONCLUSION

The study meticulously evaluates the effect of instructional interventions on the accuracy of using inflectional morphemes in English. The findings are consistently illuminating by examining the pretest and post-test scores of an experimental and control group across eight types of inflectional morpheme errors. The experimental group displayed a marked reduction in errors across all eight categories post-intervention. This consistent decline in mean scores is particularly striking when juxtaposed against the control group, which either retained its original error rates or exhibited a minor increase. Specifically, the most pronounced improvements in the experimental group were observed in the use of plural (-s) morphemes, followed by substantial reductions in errors associated with past tense (-ed), third person singular present (-s), progressive (-ing), and past participle (-en) morphemes. Additionally, the errors pertaining to possessive (-'s), comparative (-er), and superlative (-est) morphemes were also significantly reduced in the experimental group, albeit to a slightly lesser degree. The control group's unaltered or slightly augmented error rates underscore the efficacy of the instructional intervention implemented in the experimental group. In essence, the empirical evidence gleaned from this study decisively attests to the positive impact of instructional interventions on enhancing morphological accuracy, suggesting its potential utility in pedagogical settings aimed at improving English language proficiency.

This study holds relevance as it has the potential to alter pedagogical paradigms, directing educators, policymakers, and curriculum designers toward the most efficient methods for English language instruction at the high or senior secondary school level who are at a crucial juncture in their educational journey, the findings of this research can serve as a robust basis for optimizing language instruction to meet both academic and real-world communication needs. The study's extent is somewhat limited due to the small number of participants selected from only one senior secondary school in an urban region of India. For future studies, it would be beneficial to consider a larger, more varied group of participants to strengthen the validity of the results. Additionally, this study focuses solely on inflectional morphemes. Future research should include other aspects of linguistics to broaden our understanding of linguistic patterns.

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