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ADDRESSING WORD SPELLING DIFFICULTIES AMONG GRADE 1 LEARNERS: EFFECTIVENESS OF TARGETED SPELLING INTERVENTIONS

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ABSTRACT

The purpose of this study was to identify the effectiveness of targeted intervention to address the word spelling difficulties faced by Grade 1 learners at Sto. Tomas Central Elementary School SPED Center, Tibal-og, Sto. Tomas, Davao del Norte, Philippines. The study aimed to determine the student's level of word spelling difficulties based on their scores on the pre-test and posttest assessment. Using a quantitative descriptive method with interviews, the study assessed the student's progress in word spelling difficulties and their insights about the effectiveness of the targeted intervention. Thirty-eight Grade 1- Tisa students participated in pre-test and post-test assessment using PAT Spelling Skills assessment, and seven participated in in-depth interviews. A researcher-designed pre-test and post-test were used to measure students' spelling proficiency before and after the intervention. Pre-test results indicated that the participants demonstrated below-grade-level proficiency in spelling. After the implementation of the S.C.O.R.E.S., students' post-test scores improved significantly. A paired sample t-test revealed a statistically significant difference between pre-test and post-test scores, $t(27) = 21.1$, $p < .001$, indicating a substantial gain in spelling skills. Moreover, the study demonstrates the effectiveness of the targeted intervention in enhancing learner's word spelling difficulties; interactive and engaging methods, such as spelling bee, coordination with pictures, ordering sound, relay time traveler, engage with letter blocks and spell with sidewalk chalk. The pre-test results revealed that the students' spelling difficulties were below the expected level, indicating very low proficiency. However, the post-test scores showed a marked improvement, with the students' scores rising after implementing the intervention.

KEYWORDS: *Spelling Difficulties, Targeted Intervention, Quantitative-Descriptive, Respondents Philippines*

INTRODUCTION

Spelling is a complex written language skill, which requires a learner to possess a few language abilities, including phonological, morphological, visual memory skills, semantic relationships as well as adequate knowledge of spelling rules (Staden, 2020). As such, learning to spell words correctly is considered an important activity particularly with young children's literacy development (Da Costa, 2021). Therefore, a student must have good spelling proficiency to convey the written message without being distracted (Okyere, 2020).

In Saudi Arabia, Arab students had trouble with spelling, and they tend to have lower success level spelling skills, as well as difficulties in spelling patterns of general and multi-syllabic words It investigates the source of spelling errors of consonants among elementary Arab students by conducting a qualitative study using writing tasks (Al-Jarf, 2020). In Spain, English orthography differs from that of other European languages in terms of complexity and regularity. This difference may impact the development of accurate spelling in English, especially

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when it is learned as a foreign language in school (Tuero et al., 2023). Moreover, in America, the problem of poor spelling is serious. Misspellings are, at least, distracting. More importantly, they can lead to misunderstandings, harm one's credibility, imply that one does not care enough to ensure accuracy, and lead some people to conclude that perhaps one does not care about the quality of even more important matters (Mersand & Griffith, 2021).

In the Philippines, the study of spelling errors and mistakes among Grade III learners in Davao City revealed that several learners exhibit difficulties with spelling in English. These difficulties are attributed to several causes, such as the irregularity of the orthographic system of English and mother tongue interference (Coronado, 2024). Furthermore, in Batangas, teachers believe that a major cause of spelling difficulty is that "pupils can't spell unfamiliar words"-this statement having obtained the highest mean. Limited vocabulary and unfamiliarity were the biggest factors and cause of pupils' inability to spell words. This implies that the remedial teaching given to the pupils was of great help and was effective (Mendoz, 2020). Also, (Sobrepeña, 2020) in Ilio- Ilo City, poor spelling is linked to illiteracy; it hinders one's ability to succeed professionally and causes humiliation for the individual. Since society has taken this stance on spelling, it is essential that students learn to spell in accordance with group conventions. "Misspelling carries with it a sort of stigma, and as long as it does.

In the Division of Davao del Norte, particularly at Sto. Tomas Central Elementary School SPED Center, a noteworthy observation surfaced during the Field Study courses. It became apparent that a considerable number of pupils, particularly those in grade 1 pupils, were encountering difficulties in spelling words that should ideally be within their mastery. This issue hinders not only their ability to perform simple arithmetic tasks but also impacts their overall academic progress in mathematics, setting a foundation for future learning gaps. They also face challenges grappling with spelling rules, patterns, and the application of phonetics. The prevalence of such spelling difficulties among elementary school students signifies a notable hurdle, since there is no doubt that spelling accurately is a basic and an essential skill for every learner, which enables writers to express their thoughts and feelings in a standard manner.

In addition, despite the availability of international studies on spelling difficulties—such as Spelling Problems Among Saudi English Language Undergraduates by Altamimi (2019), Analyzing Spelling Errors Committed by English as a Second Language (ESL) Learners by Muhammad (2023), and The Most Common Spelling Errors Among Learners of English of San Juan Elementary School: Management of Causes and Remedies by Coronado (2024)—there is still a gap in current action research. These studies provide useful insights but do not specifically focus on Grade I learners or offer practical, hands-on activities and interventions.

This study addresses that gap by focusing on the spelling challenges faced by elementary students, particularly in spelling word problems. Many young learners struggle with spelling, which affects their reading and writing skills. If not addressed early, these difficulties can continue and hinder their overall academic progress. This research aims to identify effective strategies to help learners improve their spelling and build a stronger foundation for future learning.

Apart from this, Hamdi (2020) conducted a study entitled: Analysis of spelling errors in the English compositions of students of English as a foreign language, which was published as an article in the International Journal of Humanities and Cultural Studies (IJHCS). The study corresponds to a quantitative investigation of descriptive type that was made with the objective of knowing the types of spelling errors in English.

RESEARCH QUESTIONS

The research questions below were designed to explore the effective strategies on how to address spelling difficulties on Grade 1 learners. PAT Spelling Skills assessments and S.C.O.R.E.S would be a targeted intervention for the learners to address this problem. These questions guided the study in examining how these strategies supported young students in developing their spelling abilities. The research questions that guided this study were the following:

1. What is the level of the learners' spelling proficiency before the use of S.C.O.R.E.S intervention on the spelling skills of Grade 1 pupils?
2. What is the level of learners' spelling proficiency after the S.C.O.R.E.S intervention on the spelling skills of elementary grade pupils?
3. Is there a significant difference between the pretest and post-test results in terms of the spelling difficulties of elementary grade pupils among Grade 1 learners?
4. What insights can be drawn from the implementation of the targeted spelling interventions in addressing word spelling difficulties among Grade 1 learners regarding their effectiveness in enhancing spelling abilities?

PROPOSED INTERVENTION/ACTION PLAN

The *S.C.O.R.E.S.* intervention is designed to strengthen students' foundational spelling skills through fun, hands-on activities. Each component—such as Spelling Bee, Relay Time Traveler, and Spell with Sidewalk Chalk—uses tactile strategies and familiar objects to make learning more engaging. The goal is to improve spelling while building students' confidence, focus, and enthusiasm for literacy.

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Phase	Time Frame	Objective	Activities/Details
Introduction Phase	Week 1 (Day 1)	Conduct baseline assessment	**Day 1:** Pre- Test
Implementation Phase	Week 2 (Day 2-21)	Strengthen students' foundational spelling skills through interactive, hands-on activities.	**Day 2-4:** Spelling Bee **Day 5-6:** Coordination with Pictures **Day 7-9:** Ordering Sounds **Day 10-14:** Relay Time Traveler **Day 15-18:** Engage with Letter Blocks **Day 19- 21:** Spell with Sidewalk Chalk
Assessment Phase	Week 3 (Day 22)	Evaluate impact and reflect	**Day 22:** Post- Test

In this study, we introduced an intervention named S.C.O.R.E.S. designed to strengthen students' foundational spelling skills through interactive, hands-on activities. Each element of S.C.O.R.E.S. represents a specific, tactile learning strategy: Spelling Bee (the group who spells more words correctly wins.), Coordination with Pictures (involves placing pictures of objects in a box), Ordering Sounds (breaking down the word into phonemes), Relay Time Traveler (developing word recognition & phonic), Engage with Letter Blocks (develops time management & focus under pressure), and Spell with Sidewalk Chalk (which builds cognitive flexibility.). By using every day, relatable objects, the intervention made spelling more engaging and accessible. The goal was not only to improve spelling skills but also to foster confidence and enthusiasm in learners through active, enjoyable experiences.

RESEARCH METHODOLOGY

RESEARCH DESIGN

This study used a quantitative one-group pretest-posttest design, a type of pre-experimental approach. It involved assessing the same group of Grade 1 learners before and after the implementation of an intervention. This method allowed the researchers to measure changes in spelling performance by comparing pretest (baseline) and posttest (end-line) results. Unlike true experimental designs, this approach does not include a control group; instead, it focuses on the changes within a single group, attributing observed differences to the intervention (Wamunyima & Nyirenda, 2023).

This methodological approach was appropriate for evaluating the effectiveness of the S.C.O.R.E.S. intervention Spelling Bee, Coordination with Pictures, Ordering Sounds, Relay Time Traveler, Engage with Letter Blocks, and Spell with Sidewalk Chalk. These game-based learning activities were designed to increase learner engagement and improve spelling skills.

The intervention was carried out over one month, with ongoing mentoring and assistance. After the intervention period, the same group of learners completed a post-test. The findings aim to guide future school programs and interventions that support early spelling development.

PARTICIPANTS

In this study, the participants were Grade 1 learners from Sto. Tomas Central Elementary School SPED Center who enrolled in the school year 2024-2025 and demonstrated challenges in spelling proficiency or words. A total of 38 students was purposively selected based on their initial pre-test scores, aligned with this guidance, balancing sample size, practicality and indicating areas of difficulty in spelling words. This study focused on 7-8 years old students who were at a critical stage in building basic spelling words for their future academic progress. The S.C.O.R.E.S method would be implemented as an intervention to help these learners break down complex word problems into manageable steps, enhancing their spelling proficiency. By the end of the study, learners would be expected to demonstrate improved abilities in analyzing, interpreting, and spell words with confidence, supported by the structured steps of the S.C.O.R.E.S approach.

INSTRUMENTS OF THE STUDY

The researchers adapted of spelling assessments that allowed to identify the extent of learner's spelling skills, to diagnose gaps, identify strengths and weaknesses, and to monitor learner progress over time. The instrument was derived from PAT Spelling Skills (2022) designed to support the teacher to select appropriate tests that matched learners' current spelling skills. This structure also helps to give teachers a broad understanding of the spelling needs of their learners. A scale score is a numerical value given to a student whose achievement has been measured by completing an assessment. A student's scale score lies at a point somewhere on the achievement scale, and it indicates that student's level of achievement in that learning area the higher the scale score, the more able the student. The researcher adapted rating scale from online sources to measure the effectiveness of the intervention in enhancing spelling skills. The rating scale was based on the study by Magpatoc et al. (2024), titled *"Enhancing Spelling Proficiency in English Among Grade Seven Learners Through the Implementation of the Cover-Copy-Compare (CCC) Strategy"*. This study served as a foundation for designing tasks that aligned with the learning goals of the intervention.

Quantitative data is the process of making sense of numerical data through mathematical calculations and statistical tests. It helps to identify patterns, relationships, and trends to make

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better decisions (Hotjar, 2018). The significant difference in this context refers to the measurable change in participants' performance from the pre-test to the post-test, assessed through statistical analysis to ensured that the improvement due to the S.C.O.R.E.S intervention is not random but a result of the intervention itself. In analyzing, the researchers employed observation before and after the S.C.O.R.E.S intervention has been implemented. The researchers identify the concept and find the significant difference between the observed performance of the participants during the pre-test and post-test.

Range of Means	Descriptive Equivalent	Interpretation
91-100	Very High	If the measure described in spelling difficulties item is always manifested.
76-90	High	If the measure described in spelling difficulties item is oftentimes manifested.
61-75	Moderate	If the measure described in spelling difficulties item. It is sometimes manifested.
51-60	Low	If the measure described in spelling difficulties item is seldom manifested
0-50	Vey Low	If the measure described in spelling difficulties is rarely manifested.

PROCEDURE

The researchers were utilized assessment before and after the implementation of S.C.O.R.E.S intervention. The pre-test would be measured the average of the learners who are having difficulty with spelling before the implementation. The post-test would be measured the knowledge and development of the learners through giving them the same set of spelling words in pre-test. To gather the necessary data for this research, the following steps were taken by the researchers. First, before starting the study, the researchers requested to the principals of the schools where the participants were enrolled. Then, the researchers administered a pretest to determine the participants' initial spelling difficulties levels. Following the pretest, S.C.O.R.E.S intervention will be introduced, followed by a four-weeks intervention period. At the end of the research process, a post test would be conducted using the same tool to evaluate any improvements in the participants' spelling difficulties levels after the intervention. The data from the pretest and posttest was collected and tabulated.

Quantitative data analysis is the process of making sense of numerical data through mathematical calculations and statistical tests. It helps to identify patterns, relationships, and trends to make better decisions (Hotjar, 2018). The significant difference in this context refers to the measurable change in participants' performance from the pre-test to the post-test, assessed through statistical analysis to ensure that the improvement due to the spelling-based intervention is not random but a result of the intervention itself. In analyzing, the researchers employed observation before and after the S.C.O.R.E.S intervention has been implemented. The researchers identify the concept and find the significant difference between the observed performance of the participants during the pre-test and post-test.

Week 1-2	Week 3-4	Week 5-6	Week 7-8
Focus: Building foundational skills in identifying and manipulating individual sounds in words. • Students learn to break words into phonemes and blend them to form complete words. • Activities emphasize recognizing initial, middle, and ending sounds, which are essential for accurate spelling. • Interactive and gamified approaches, such as sound-based games and matching activities, make the process engaging.	**Focus:** Recognizing and working with simple patterns like rhyming words and word families. • Students identify similarities in spelling and sound among related words. • Emphasis is placed on basic word families and consistent patterns (e.g., -at, -in). • Activities include rhyming games, word puzzles, and creative sorting tasks to reinforce connections.	**Focus:** Exploring more complex spelling patterns, such as vowel combinations, prefixes, and suffixes. • Students deepen their understanding of spelling rules and how different combinations affect word formation. • Activities involve sorting prefixes and suffixes, recognizing vowel team patterns, and engaging in collaborative challenges.	**Focus:** Applying learned spelling skills in meaningful and contextual ways. • Students demonstrate mastery by using their knowledge in creative writing, interactive games, and group activities. • This week integrates all prior skills to enhance both spelling accuracy and fluency. • Culminating activities, such as a Spelling Bee and contextual writing tasks, allow students to showcase progress.

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DATA ANALYSIS

This study employed various statistical tools to ensure a comprehensive and accurate interpretation of the students' spelling difficulties before and after the intervention.

Mean. The mean scores from the pre-test and post-test were used to determine the overall level of students' spelling performance before and after the intervention at Sto. Tomas Central Elementary School SPED.

Standard Deviation. This was used to measure the variability of students' scores. A decrease in standard deviation from pre-test to post-test indicated more consistent spelling performance across learners, suggesting reduced gaps in proficiency.

Paired T-Test. This test compared pre- and post-test scores to determine if the improvement in spelling was statistically significant and attributable to the intervention.

Cohen's d. This measured the effect size of the intervention, showing how meaningful the improvement in spelling skills was in practical terms.

Coding. This breaks down qualitative data into specific labels or categories, allowing for the identification of patterns and themes related to the intervention's impact on students' spelling.

Data Reduction. This simplifies and condenses the coded data into key categories, making it easier to focus on the most meaningful insights

Thematic Analysis. This identifies and interprets overarching themes, providing a deeper understanding of how the intervention influenced students' spelling performance.

ETHICAL CONSIDERATIONS

Ethical guidelines and standards in research are essential and to ensure that respondents are not harmed or deceived, that they have been informed regarding what participation entails, that they have agreed to participate, and that they have been assured that the confidentiality of their responses and their participation will be maintained. At the core, this helped shape the true aims of the study, such as knowledge, truth, and avoidance of error and promoted values essential to collaborative work, such as trust, accountability, mutual respect, and fairness. To ensure ethical research, this study followed and respected the principles of research ethics. These principles respect a person's autonomy, beneficence and non-maleficence, justice, informed consent, confidentiality and data protection, integrity, and conflict of interest (Hendricks, 2013).

In this study, strict ethical guidelines were followed in accordance with the principles outlined in the Belmont Report (2010). The principles include respecting participants' autonomy, allowing informed decisions about their involvement. Beneficence and non-maleficence ensured the researchers prioritized participants' welfare by maximizing benefits and minimizing harm. Justice guaranteed fair treatment and prevented exploitation. Informed consent was obtained from all participants, confirming their understanding of the study and their rights. Confidentiality and data protection were strictly maintained to protect personal information. Integrity was upheld by honest reporting and managing conflicts of interest, enhancing both participant protection and the study's credibility.

RESULTS AND DISCUSSIONS

Presented in this chapter are the results or data obtained in the study and discussion regarding the effectiveness of spelling targeted intervention to address spelling difficulties in elementary school students. The chapter presents the data on the level of spelling skills among students in pre-test; the level of spelling skills students in post-test; and significant difference of the pretest and post-test scores of the students.

Research Objective No.1: What is the level of spelling skills of Grade 1 learners before implementing the "S.C.O.R.E.S." Intervention?

Presented in Table 1 are the results of the pretest, indicating the performance level of 38 students in the experimental group in vocabulary problems. The overall average score for the group was 5.37. The highest score was achieved by one student, representing 18.4% of the total. In contrast, the lowest score was recorded by four students, making up 2.6% of the group. The most frequently occurring score was obtained by seventeen students, accounting for 2.6% of the total. These results indicate a diverse range of performance levels within the group, with a notable concentration of students around the most frequent score. The mean percentage score shown in the table above is 5.37 and the standard deviation was 2.32%, which indicates low performance by the students in the pretest. These measures show that the spelling skills of the students did not meet expectations.

Before the intervention was implemented, as detailed in Table 1, the pretest score was 5.37, which is classified as low. This indicates that the students' spelling abilities were below expectations. The low score suggests that fourth graders have limited exposure to the spelling, making it challenging for them to understand unfamiliar words. To support the findings, Felicia (2024) emphasizes the challenges faced by elementary learners in mastering spelling due to a variety of cognitive and educational factors. The students who struggle with spelling often lack a clear understanding of the morphemic structure of words, which includes prefixes, suffixes, and root words.

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Table 1. Frequency of the Pre-test Scores

Score	Frequency	Percentage
0	1	2.6%
1	1	2.6%
2	1	2.6%
3	6	15.8%
4	5	13.2%
5	6	15.8%
6	4	10.5%
7	7	18.4%
8	4	10.5%
9	2	5.3%
10	1	2.6%
Total	**38**	**100%**
Mean Percentage Score		**53.68%**
Description		**Low**
Standard Deviation		**2.32%**

Moreover, these findings were supported by the study of Librea et al. (2023) highlight that elementary teachers face challenges in teaching spelling due to students' cognitive issues like memory, phonological processing, and difficulty applying spelling rules. They stress the need for explicit, adaptive phonics instruction that systematically teaches sound-letter relationships and helps improve phonological skills.

Furthermore, according to Luciano et al. (2023) argue that poor spelling in elementary students stems from inadequate syllabi that overlook spelling rules. As a result, learners often depend on their native language, which hinders their English spelling. A lack of exposure to
English language skills also worsens this issue. Addressing these gaps through focused instruction can enhance spelling abilities.

EL-Hibir and Taha (2020) found that English spelling errors are due to the mismatch between pronunciation and writing, as well as mother tongue interference. Unlike native speakers, learners may misapply English spelling rules. They identify three main issues: memorizing individual words, pronunciation errors, and mismatched spelling-sound correspondences.

Research Question No. 2: What is the level of learners' spelling proficiency after the S.C.O.R.E.S intervention on the spelling skills of elementary grade pupils?

Table 2 reveals a significant improvement in the spelling abilities of the students after the "S.C.O.R.E.S." intervention, with an overall mean score of 11.45, indicating its effectiveness. Educational Core highlights that interactive tools like letter blocks enhance spelling by supporting letter awareness and orthographic knowledge. This also aligns with prior research by Oladele (2024) that hands-on approach allows students to physically manipulate letters and sounds, reinforcing their learning through multi-sensory engagement helps students recognize and apply spelling rules, thus enhancing their long-term retention and application of spelling skills.

The post-test results show improved spelling proficiency among the 38 students in the experimental group after the S.C.O.R.E.S. intervention, with a mean score of 11.45 and an average percentage of 81.77%. The highest score (14) was achieved by five students (13.2%), while the lowest (8) was scored by one student (2.6%). The most common score was 11, achieved by ten students (26.3%), indicating a clustering around this performance level and the standard deviation was 1.55%. These results highlight overall improvement in spelling fluency and confirm the effectiveness of the intervention.

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Table 2. Frequency of the Post-test Scores

Score	Frequency	Percentage
8	1	2.6%
9	3	7.9%
10	6	15.8%
11	10	26.3%
12	9	23.7%
13	4	10.5%
14	5	13.2%
Total	**38**	**100%**
Mean Percentage Score		**81.77%**
Description		**High**
Standard Deviation		**1.55%**

Previous and recent research supports the effectiveness of structured strategies in improving spelling difficulties. For instance, Esposito (2022) emphasize that mastering spelling holds significant importance for children's writing development. The National Curriculum in England reinforces this by providing year-specific spelling lists for primary education. Despite this focus, little is known about teachers' perspectives and methods for teaching spelling in primary schools. This study addresses that gap by examining teachers' experiences and instructional strategies to improve understanding of effective spelling instruction.

Additionally, Viador et al. (2025) stated that spelling is a vital skill for literacy development, requiring learners to understand spelling strategies, rules, and concepts. This study examined the impact of a spelling game relay on the spelling skills of 60 fifth-grade pupils (30 control, 30 experimental) enrolled in the 2023–2024 school year. Using words from grade 5 textbooks, the spelling game relay was both the intervention and assessment tool. Results showed the game significantly improved the pupils' spelling proficiency.

In connection with the result, Witzel et al. (2024) digital game-based intervention programs represent a powerful tool for improving reading, whereas evidence for using digital tools to improve spelling is scarce. To fill this gap, we developed an adaptive digital game-based intervention that combines teaching phonological processing, graphene-phoneme correspondence, and orthographic and morphological rules.

Research Question No. 3: Is there a significant relationship between the pretest and post-test results in terms of spelling proficiency of elementary grade pupils among Grade 1 learners?

As shown in Table 3, the significance difference between pre-test and post-test scores to evaluate the intervention's effectiveness, t (37) = 21.1, p <.001. Since the p-value was (p<.001) below the conventional alpha level of 0.05, indicating a highly significant difference. Moreover, the effect size represented by Cohen's d = 3.42, suggested a substantial practical impact of the intervention. These findings strongly supported the conclusion that the targeted intervention approach significantly enhanced the spelling skills of the Grade 1 students.

These findings confirm a statistically significant improvement in students' spelling difficulties following the targeted intervention. The substantial increase in mean scores, along with the high mean difference and low SE difference, provides strong evidence of the intervention's effectiveness.

Table 3. Significant Difference Between the Pre-test and Post-test Scores

Paired Samples T-Test

		Student's t statistic	df	p	Mean difference	SE difference		Effect Size
Pre-test	Post-test	21.1	37	<.001	6.08	0.288	Cohen's d	3.42

In conclusion, the targeted intervention demonstrates a meaningful positive impact on students' spelling difficulties. Based on these results, educators are encouraged to consider integrating the intervention into their instructional practices to enhance spelling difficulties of the learners inside the classroom.

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This result is supported by the study of Blachowicz and Fisher (2020) revealed the value of frequent spelling exercises in reinforcing vocabulary learning. Repeated exposure to new words helps strengthen students' memory and understanding. This consistent practice supports the integration of new terms into their existing language skills. As a result, students become more confident and accurate in using vocabulary in various contexts.

Similarly, Depth of Processing Theory stated by Craik and Tulving (2021) mentioned that students engaging with words on a deeper level result in stronger memory traces, making the word simpler to recall later. This is because deeper processing involves more detailed encoding, making it easier to recall words later. As students better understand word meanings, their comprehension and use of vocabulary improve. Repeated exposure further supports this by helping learners grasp a word's nuances, connotations, and appropriate usage in different contexts.

Additionally, Chakkalathy and Mahamuni (2022) investigated the impact of activity-based learning strategies, including breaking words, word journals, personal dictionaries, and dictation, on students' spelling skills. The study reported significant improvements in spelling proficiency post-intervention, aligning with the findings of enhanced spelling skills following targeted interventions.

Research Question No. 4: What insights can be drawn from the implementation of the targeted spelling interventions in addressing word spelling difficulties among Grade 1 learners regarding their effectiveness in enhancing spelling abilities?

To answer this research question, in-depth interviews were conducted with the participants. Probing questions were asked to elicit their responses regarding their insights, observation and experiences with the impact of the targeted spelling intervention in improving spelling proficiency among grade 1 students. The major themes and sample statements for research question number 4 are presented in Table 4. Participants shared their responses about their own experiences and observation of the intervention. From the participants' responses, five major themes emerged: (1) enhancing spelling skills through gamification, (2) the role of collaborative activities in improving spelling difficulties, (3) development of language and literacy foundations, (4) increased motivation and confidence, (5) making spelling interactive and enjoyable.

Table 4
The Insights of Grade 1 Learners from the Implementation of the Targeted Spelling Interventions

Emerging Themes	Supporting Statements
Enhancing Spelling Skills Through Gamification	• "I used to think spelling was hard, but the games helped me to learn. I like spelling more now because I can do it." (IDI-01) • "I liked spelling time because teacher used spelling interventions like letter blocks and spelling bee. It helped me to learn, and the games helped me a lot." (IDI-02) • "Spelling practice helped me get better at spelling words. We played games and used sounds to learn. I feel happy because I can spell more words now." (IDI-04) • "I used to spell words wrong, but now I can spell more words right. The games helped me a lot." (IDI-05) • "I liked when we used pictures and clapped the sounds. It made me want to try harder. Now I love spelling, and I am not scared anymore." (IDI-06) • "The spelling games made it easier for me to remember words. I used to get nervous during spelling, but now I feel excited, teacher." (IDI-06) • "The spelling activities helped me because they made learning easier. When I didn't know how to spell a word, I would practice again and again until I got it right." (IDI-07)
The Role of Collaborative Learning in Spelling Improvement	• "We did spell in small groups and that helped me to focus. I liked working with my friends. It made learning fun and not scary." (IDI-03) • "The teacher cheered for us when we spelled words right. That made me feel happy and proud. I wanted to keep spelling more words." (IDI-04) • "We can spell with friends and play together. Teacher can give stickers when we do well." (IDI-06)
Learning Strategies on How to Analyze Possible Word Spelling	• "Now I try to sound out words when I write during our normal class. I don't give up like I used to. I use what I learned in you, teacher." (IDI-01) • "The spelling intervention showed me how words work. I know that good spelling helps people understand my writing." (IDI-02) • "Now I try to spell words by myself before asking for help. I use the sounds and rules we learned. I feel more confident in class." (IDI-03) • "When I see a difficult word, I break it into sounds. I learned that in our spelling lessons. It helps me in everything we do in class." (IDI-04) • "In class, I use the new spelling rules we practiced. It helps me spell better

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	during reading time. I like learning how to spell big words." (IDI-06)
Increased Motivation and Confidence	• "The intervention helped me learn how to break words into smaller parts. I used to get stuck on difficult words, but now I can spell them. I feel happy and proud when I finish spelling tasks." (IDI-01) • "The games helped me remember words better. I don't get frustrated when I spell words wrong because I know how to fix them." (IDI-02) • "At first, I couldn't spell many words, but the intervention helped me learn step by step. I feel good when I finish spelling tasks now." (IDI-03) • "I used to be scared of spelling tests, but now I practice with the sounds we learned. I feel more ready when it's time to spell." (IDI-04) • "Before, I didn't like spelling because it was hard. But the fun activities helped me learn. Now, I can spell better and feel proud when I finish my work." (IDI-05) • "I want more spelling games. I like colorful pictures and fun songs." (IDI-05) • "The spelling games made it easier for me to remember words. I used to get nervous during spelling, but now I feel excited, teacher." (IDI-06) • "Before, I didn't like spelling, but now, I want to try more and get better at it." (IDI-07)
Suggestions for Making the Program More Interactive	• "If we could use colorful pens to write words, that might make spelling more fun. Writing the words in different colors could help us remember better." (IDI-01) • "Maybe we could have more spelling contests or challenges in class. Competing in a fun way might make us try harder and feel excited about spelling." (IDI-02) • "Sometimes teacher we could use storybooks with the spelling words in them. It would be fun to read books and learn to spell the words we see." (IDI-03) • "It would be nice to have rewards for trying our best in spelling. Small rewards or stickers could make spelling even more exciting and motivate us to do well." (IDI-04) • "I try to spell words correctly when we do activities in class. I remember the fun games we played. It makes me work harder on spelling." (IDI-05)

Enhancing Spelling Skills Through Gamification

The study found that the intervention effectively improved students' spelling difficulties, with one key theme being the enhancement of spelling skills through gamification. After using spelling games, students showed better ability to hear, identify, and work with sounds in words. This aligns with Rahmawati et al. (2023), who found that gamified spelling games improved vocabulary mastery in first-grade students, and Panmei and Waluyo (2023), who highlighted the benefits of gamification in English vocabulary instruction at higher education levels, suggesting its broad applicability.

The Role of Collaborative Learning in Spelling Improvement

Another emerging theme was the impact of collaborative learning on spelling improvement. Students benefited from sharing ideas, practicing together, and supporting each other. This mirrors Albuquerque and Martins (2020), who found that collaborative activities in kindergarten significantly improved spelling, and Lantaco et al. (2022), whose M.I.S. Walk Project showed that kinesthetic and collaborative methods boosted spelling accuracy and confidence.

Learning Strategies on How to Analyze Possible Word Spelling

The third theme was learning strategies for analyzing word spelling, where students developed essential skills in speaking, listening, reading, and writing. Stahl et al. (2020) emphasize the value of repeated word exposure for reinforcing memory and usage, while Williams and Christina (2025) categorize spelling difficulties into linguistic and personal factors, highlighting the progression from basic symbol use to advanced spelling strategies involving pattern recognition and error correction.

Increased Motivation and Confidence

Additionally, the fourth theme was the increased motivation and confidence. Students became more interested in learning and felt surer of themselves when spelling and using language. The findings were further supported by the study of McColloch (2024) who investigated the impact of invented spelling instruction on literacy achievement and writing motivation among kindergarten students. The results indicated significant improvements in both conventional spelling and writing motivation, highlighting the positive effects of such interventions on young learners' engagement and confidence in writing. Likewise, Iniesta and Serrano (2020) this comprehensive program aimed to enhance writing skills in primary school children through various activities, including

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spelling interventions. The study found that participants showed increased motivation and confidence in their writing abilities and demonstrating the effectiveness of structured interventions.

Suggestions for Making the Program More Interactive

Lastly, the fifth theme was suggestions for making the program more interactive. Spelling activities were made fun and engaging, helping students enjoy learning through games, teamwork, and hands-on tasks. This result aligns with the study of Avellanoza and Garcia (2022) the study explored the effectiveness of the "Chute and Ladder" game in enhancing the spelling skills of Grade 5 learners. The interactive nature of the game was found to significantly improve students' spelling performance, highlighting the importance of incorporating interactive elements in spelling interventions. Moreover, according to the research of Reginal (2022) this action research investigated the use of interactive teaching games to improve spelling competence among learners. The study found that the interactive nature of the games significantly increased the level of spelling competence of the learners, indicating that interactive methods can be effective in spelling instruction.

CONCLUSION

This study examined the effectiveness of the "Spelling with the S.C.O.R.E.S Intervention" in improving the spelling difficulties of Grade 1 students. The intervention addressed observed challenges in basic letter and sound, short and high frequency words and polysyllabic, less common words in constructing their ideas by facilitating active, structured learning within a setting that encourages positive behavioral development. Before the intervention the students exhibited very low in spelling skills as indicated by their pre-test score ranging from 8 to 10 with an overall mean of 26.85. They struggled particularly in the letter and sound in constructing their ideas.

Following the targeted intervention implementation, significant improvement was observed in their spelling difficulties. Post test scores showed marked increased, with scores ranging from 10 to 15 with an overall mean of 57.25, indicating high proficiency. The students demonstrated substantial growth across all previously challenging areas, achieving mean scores categorized as high in letter skills, short, high frequency words and polysyllabic, less common words in constructing their ideas.

Statistically analysis using a paired t-test confirmed a significant difference between pre-test and post-test scores $t(37) = 21.1$, $p < 0.001$. The result highlights the effectiveness of S.C.O.R.E.S intervention in enhancing spelling difficulties of Grade 1 learners. These results strongly suggest that the step-by-step, visual, and guided nature of the S.C.O.R.E.S strategy enabled learners to approach spelling difficulties with greater confidence, accuracy, and consistency.

In conclusion, the implementation of the S.C.O.R.E.S. in addressing spelling difficulties in elementary school students specifically grade-1 learners reveals a multifaceted approach and effective strategies employed to enhance spelling proficiency. Key themes identified include enhancing spelling skills through gamification, the role of collaborative learning in spelling improvement, learning strategies on how to analyze possible word spelling, increased motivation and confidence and suggestions for making the program more interactive. These themes underscore the complex interplay of cognitive, psychological, and educational factors influencing students' spelling abilities.

RECOMMENDATIONS

Based on findings from this action research on addressing Grade 1 spelling difficulties, several key recommendations are offered to enhance the intervention's effectiveness and sustainability. These focus on gamification, collaboration, strategic word analysis, motivation, confidence-building, and interactivity.

Consistently integrating gamified activities—like spelling bingo, digital puzzles, and interactive bees—can boost engagement and motivation. Teachers should incorporate these into regular routines to make practice enjoyable and consistent. Collaborative learning, through group games and peer quizzes, fosters knowledge retention and social interaction. Strategically mixed-ability groupings allow stronger spellers to support their peers.

Spelling instruction should also emphasize decoding strategies such as phoneme-grapheme mapping, syllable segmentation, and recognizing patterns, supported by visual aids like phonics charts. To build confidence and motivation, teachers should celebrate progress, showcase student work, and use tools like journals or progress charts to help learners take ownership of their growth.

Lastly, for continued growth and sustainability, it is suggested to make the spelling program more interactive by integrating multimedia and technology. Tools such as interactive whiteboards, spelling apps, and animated videos can diversify learning modalities and cater to different learning styles. Involving parents through take-home spelling games and online platforms can also reinforce learning outside the classroom and strengthen the school-home connection.

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