The Effects of Conjunction Proficiency on the Reading Comprehension of Grade 2 Pupils in Selected Elementary Schools in Cabiao, Nueva Ecija

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Abstract	Article Info
Conjunctions are essential for textual cohesion and comprehension, yet explicit instruction is often limited in Philippine classrooms. This study examined the relationship between Grade 2 pupils' conjunction proficiency and reading comprehension. A descriptive-correlational design was employed with 114 pupils from seven elementary schools in Cabiao, Nueva Ecija. Conjunction proficiency was assessed using a validated researcher-made questionnaire ($\alpha = 0.863$ for understanding; $\alpha = 0.784$ for recognition/application), while reading comprehension scores were drawn from the *Oplan: Bawat Batang Kabyawenyo Pre-Reading Assessment.* Results showed that pupils were at the Developing level in conjunction proficiency (WM = 2.44) and at the Instructional level in reading comprehension (WM = 1.59). Spearman's rho indicated no significant correlation ($p > 0.05$), with effect sizes showing weak associations. Findings suggest that conjunction skills alone do not strongly predict comprehension and must be integrated with vocabulary, inferencing, and text exposure. This study contributes to early literacy research by situating conjunction use within the *Matatag Curriculum and Bawat Bata Bumabasa initiatives.* It highlights the need for balanced instructional strategies that combine grammar with broader literacy skills to strengthen early reading outcomes.	

INTRODUCTION

Conjunction proficiency is an essential linguistic skill for Grade 2 learners, supporting their ability to connect ideas and build logical meaning from texts. According to Halliday and Hasan's (1976) Cohesion Theory, conjunctions function as cohesive devices that help readers interpret relationships between sentences and ideas. Similarly, Gunnerud et al. (2022) identified conjunction proficiency as a predictor of reading comprehension in early grades, though its influence diminishes as students progress to higher-order skills. These theoretical perspectives show that conjunctions serve as bridges between decoding and comprehension.

The 2022 PISA results reveal that only 24% of Filipino students reach minimum reading proficiency, far below the OECD average of 74%. Despite improvements from 2018 to 2022, the Philippines remains among the lowest-ranked countries. These findings highlight the urgency of strengthening foundational reading skills in the early grades. Conjunction use—though often overlooked—plays a key role in textual cohesion, cause-effect reasoning, and contrast comprehension (Fisher & Frey, 2018; Cheng & Lee, 2018). Yet explicit instruction in conjunctions remains limited, leading to fragmented understanding (Santos & Ramos, 2019).

This study is anchored in both *cohesion theory* and *cognitive models of reading development*, emphasizing that language skills such as vocabulary, syntax, and cohesive devices interact to influence comprehension. Investigating conjunction proficiency in rural Philippine schools provides valuable insights into how these skills support literacy development under the *DepEd Matatag Curriculum and Bawat Bata Bumabasa initiative.*

THEORETICAL FRAMEWORK

This study is grounded in Gunnerud et al.'s (2022) model, which highlights six factors influencing reading comprehension: listening comprehension, vocabulary, morphology, conjunctions, socioeconomic background, and decoding. This research focuses on conjunction proficiency, a foundational skill that enables young readers to link ideas and construct coherent texts. Its predictive value diminishes by Grade 5 as comprehension tasks become more complex. The Text Cohesion and Coherence Theory (Halliday & Hasan, 1976) further emphasizes that cohesive devices like conjunctions help readers recognize relationships between ideas, infer meaning, and connect information. Together, these frameworks underscore the importance of mastering conjunctions in early grades to foster strong reading comprehension.

LITERATURE REVIEW

Existing research underscore the importance of conjunctions in strengthening reading comprehension. Local studies (Agustin & Belarmino, 2024; Santos & Ramos, 2019) highlights that gaps in grammar instruction, particularly in conjunction use, still remain a barrier to early literacy development in the Philippines. International evidences also support these findings. In Taiwan and China, Liao and Wang (2017) and Peng (2022) showed that explicit teaching of connectors significantly improve ESL/EFL learners' comprehension, while Carter and Lee (2020) in the UK reported similar gains in both expository and narrative texts.

Instructional strategies has also been widely examined. Archer and Hughes (2011) emphasized structured modeling, guided practice, and immediate feedback as effective methods, while Devine (2024) confirmed that direct instruction—through approaches such as sentence combining and role play—still remains as one of the most powerful interventions for struggling readers. Regionally, Kumar and Singh (2017) in India and Pangestu et al. (2021) in Indonesia both observed that while recognition of conjunctions often develop early, application in authentic contexts lags behind, limiting cohesion in writing and comprehension. Global findings consistently affirms that higher conjunction proficiency enhances textual cohesion and overall reading performance (Chen & Li, 2020; Johnson & Rapp, 2021).

Nevertheless, research also reveal limitations. Hassan and Osman (2020) found that learners in the Middle East often recognized conjunctions but struggled to apply them effectively, resulting to fragmented comprehension. Similarly, Nguyen (2019) in Vietnam noted that non-native speakers frequently encounters difficulties with complex academic texts requiring advanced conjunction use. These challenges mirrors the

Philippine context, where young learners may identify basic connectors but fail to employ them meaningfully in reading and writing tasks.

Building on these perspectives, the present study integrate the dimensions of conjunction understanding, recognition, and application into a single framework, situating the investigation within the Philippine literacy context. By doing so, it aims to address both local instructional gaps and the broader international evidences linking conjunction proficiency to comprehension outcomes.

OBJECTIVES OF THE STUDY

Specifically, this study sought to:
1. Determine the level of Grade 2 pupils' conjunction proficiency in terms of understanding, recognition, and application.
2. Identify the reading comprehension levels of Grade 2 pupils in selected elementary schools.
3. Examine the relationship between pupils' conjunction proficiency and their reading comprehension levels.

METHODOLOGY

This study employed a quantitative-correlational research design to investigate the relationship between conjunction proficiency and reading comprehension of Grade 2 pupils. The methodology consisted of the following components:

Research Design

A descriptive-correlational approach was utilized to determine the extent to which pupils' proficiency in conjunctions is related to their reading comprehension performance.
This design allowed the researcher to gather quantitative data and analyze the strength and direction of relationships between the two variables.

Participants and Sampling Procedure

The respondents were 114 Grade 2 pupils taken from seven public elementary schools in Cabiao, Nueva Ecija, namely: Concepcion Elementary School, Maligaya Elementary School, San Fernando Sur Elementary School, Jose Rico Cruz Elementary School, San Roque Elementary School, Cabiao Central School, and Sta. Rita Elementary School.

A quota sampling technique were employed to ensure the inclusion of learners performing at the instructional and frustration levels based on the *Oplan: Bawat Batang Kabyawenyo Pre-Reading Assessment*. These pupils are considered as ideal participants since they represent learners most in need of targeted literacy support.

Table 1

Names of Schools	Population	Male	Female
Concepcion Elementary School	18	11	7
Sta. Rita Elementary School	30	16	14
San Roque Elementary School	22	11	11
Jose Rico Cruz Elementary School	10	6	4
Maligaya Elementary School	12	9	3
Cabiao Central School	14	9	5
San Fernando Sur Elementary School	8	5	3
Total	**114**	**67**	**47**

Frequency Distribution of the Respondents According to Population

Research Instruments

Two instruments were used in this study:

1. Researcher-made Questionnaire on Conjunction Proficiency – a 5-point Likert scale instrument that is design to assess pupils' understanding, recognition, and application of conjunctions.

   It was undergone expert validation by language specialists, Grade 2 teachers, and master teachers in English. Pilot testing establishes the internal consistency reliability, with Cronbach's alpha coefficients of 0.863 for Conjunction Understanding and 0.784 for Recognition and Application, which indicate good and acceptable reliability, respectively.

   The Likert scale was used to interpret the questionnaire responses, reflecting the quality and depth of the respondents' conjunction proficiency.

Scale	Weighted Mean	Interpretation
5	4.21 – 5.00	Outstanding
4	3.41 – 4.20	Very Good
3	2.61 - 3.40	Good
2	1.81 – 2.60	Developing
1	1.00 – 1.80	Needs Improvement

Table 2

Reliability Analysis

	Cronbach's Alpha	**No. of Items**	**Reliability**
Conjunction Understanding	0.863	4	Good
Conjunction Application and Recognition	0.784	4	Acceptable

Legend: (≥ 0.90) – Excellent; (0.80–0.89) – Good; (0.70–0.79) – Acceptable; (0.60–0.69) – Questionable; (0.50–0.59) – Poor; (< 0.50) – Unacceptable

2. Reading Comprehension Scores– was obtained from the official records of the *Oplan: Bawat Batang Kabyawenyo Pre-Reading Assessment.* These scores serve as secondary data for triangulating comprehension levels across the participating schools. A 3-point Likert scale were used as the basis in interpreting key aspects of the secondary data, specifically about the respondents' levels of reading comprehension.

   The **three-point scale's range and interpretation are indicated below:**

Scale	Weighted Mean	Interpretation
3	2.50 – 3.00	Independent
2	1.50 – 2.49	Instructional
1	1.00 – 1.49	Frustration

Ethical Considerations

Ethical clearance was secured from the University Research Ethics Center (UREC). Written permission was also obtained from the Schools Division Superintendent of Nueva Ecija and the District Supervisor of Cabiao, while coordination was made with the respective school heads. Informed consent from parents/guardians and assent from pupils was obtained. Participation is voluntary, and confidentiality of responses are strictly maintained.

Data Gathering Procedure

Data collection was conducted from March 3 to 26, 2025. Questionnaires were administered with the assistance of classroom teachers to ensure comprehension and accurate responses of pupils. Teachers also provide reading comprehension scores from official school records. Completed instruments are retrieved and encoded for analysis.

Data Analysis

Descriptive statistics (weighted mean) was used to determine pupils' proficiency levels in conjunction use and their reading comprehension levels. Spearman's rho correlation coefficient was applied to examine the relationship between the two variables. Results are interpreted at a 0.05 level of significance. Effect sizes were also considered in interpreting the strength of the correlation, providing a clearer understanding of the practical significance of the findings. All statistical analysis were performed using Jamovi software.

Decision Rule

Based on the statistical analysis, the decision rule was applied using the 0.05 level of significance. When the computed p-value is found to be less than or equal to 0.05, the null hypothesis (Ho) stating that there is no significant correlation were rejected. This indicates the presence of a significant correlation between the variables under study. Conversely, when the p-value are greater than 0.05, the null hypothesis was not rejected, which means that no significant correlation exists between the variables.

RESULTS & DISCUSSION

This part presents the gathered data, statistical outcomes and conclusions, supported by interpretation, implications, and theoretical bases.

1. Level of the respondents' conjunction proficiency in terms of:

Table 3

Level of the respondents' conjunction proficiency in terms of Conjunction Understanding

Conjunction Understanding	WM	VI
1. Understand sentences with "but"	2.32	Developing
2. Understand sentences with "and".	2.72	Good
3. Understand when "but" is used to show a contradiction or conflict in a sentence.	2.55	Developing
4. Understand sentences with "or".	2.58	Developing
Overall	2.542	Developing

Legend: (4.21-5.00) 5-Outstanding; (3.41-4.20) 4-Very Good; (2.61-3.40) 3-Good; (1.81-2.60) 2-Developing; (1.00-1.80) 1- Needs Improvement

Table 3 shows an overall weighted mean of 2.54, placing pupils' conjunction understanding in the "Developing" range. They performed better with additive and alternative conjunctions (*and* = 2.72, *or* = 2.58) but struggled with contrastive ones (*but* = 2.32). This supports Fisher and Frey (2018), who highlight the role of cohesive devices in comprehension, and underscores the need for explicit instruction in interpreting contrastive connectors to strengthen reading skills.

Table 4

Level of the respondents' conjunction proficiency in terms of Conjunction Recognition and Application

Conjunction Recognition and Application	WM	VI
1. Recognize the function of "but" in a sentence.	2.17	Developing
2. Recognize the function of "or" in a sentence.	2.31	Developing
3. Easily add "and", "but", or "or" to their writing	2.31	Developing
4. Think of their own examples using "and," "but," and "or,".	2.53	Developing
Overall	2.33	Developing

Legend: (4.21-5.00) 5-Outstanding; (3.41-4.20) 4-Very Good; (2.61-3.40) 3-Good; (1.81-2.60) 2-Developing; (1.00-1.80) 1- Needs Improvement.

Table 4 shows that respondents obtained an overall weighted mean of 2.33, placing them in the "Developing" range (1.81–2.60). This indicates that Grade 2 pupils in Cabiao are still acquiring basic skills in recognizing and applying conjunctions. The lowest score was in recognizing but (WM = 2.17), while slightly higher results appeared in recognizing or (WM = 2.31), inserting conjunctions (WM = 2.31), and generating examples (WM = 2.53). These findings align with Kumar and Singh (2017), Hassan and Osman (2020), and Chen and Li (2020), who emphasize that learners often identify conjunctions but struggle to apply them meaningfully. Hence, instruction should move beyond rule-based drills toward authentic tasks like storytelling and guided writing to strengthen both grammatical competence and comprehension.

Conjunction Proficiency

Table 5

Overall Description of Respondents' Conjunction Proficiency in terms of Conjunction Understanding and Conjunction Recognition and Application

Conjunction Proficiency	WM	VI
1.1 Conjunction understanding	2.54	Developing
1.2 Conjunction recognition and application	2.33	Developing
Overall	2.44	Developing

Legend: 4.21–5.00 = Outstanding, 3.41–4.20 = Very Good, 2.61–3.40 = Good, 1.81–2.60 = Developing, and 1.00–1.80 = Needs Improvement.

Table 5 above shows that Grade 2 pupils scored 2.54 in understanding and 2.33 in recognition and application, both in the "Developing" range. This suggests they are beginning to grasp conjunctions like *and*, *but*, and *or*, but still struggle to use them effectively in sentences. Similar to Chen and Li (2020) and Hassan and Osman (2020), the findings reveal that pupils can often identify conjunctions but fail to apply them meaningfully. Smith et al. (2021) further stress the importance of consistent, explicit instruction. Overall, the results point to a gap between awareness and application, highlighting the need for targeted, real-life practice through activities like storytelling, guided writing, and classroom dialogue.

Reading Comprehension

Table 6

Respondents' Reading Comprehension Levels by School

Reading Comprehension	WM	VI

1. Concepcion	1.94	Instructional
2. San Roque	1.73	Instructional
3. Sta. Ines	1.90	Instructional
4. San Fernando Sur	1.00	Frustration
5. Sta. Rita	1.73	Instructional
6. Central	1.36	Frustration
7. Maligaya	1.50	Instructional
Overall	1.59	Instructional

Legend: 2.50-3.00=Independent; 1.50-2.49=Instructional; 1.00-1.49=Frustration

Table 6 shows an overall weighted mean of 1.59, placing pupils' reading comprehension at the Instructional level—able to read with teacher support but not independently. Concepcion (1.94) and Sta. Ines (1.90) scored higher, while San Fernando Sur (1.00) and Cabiao Central (1.36) fell under the Frustration level. The other schools remained within the Instructional range (1.50–1.73). These results, drawn from the Oplan: Bawat Batang Kabyawenyo Assessment, highlight learners' dependence on guided practice and the need for stronger interventions and teacher support.

Conjunction Proficiency and Reading Comprehension

Table 7

Correlation Between Conjunction Proficiency and Respondents' Reading Comprehension Level

Reading Comprehension	Conjunction proficiency	Spearman Rho (ρ)	P-value	Decision	Conclusion
	Conjunction Understanding	0.169	0.073	Accept Ho	Not Significant
	Conjunction Recognition and Application	0.147	0.118	Accept Ho	Not Significant
	Overall Conjunction Proficiency	**-0.165**	**0.0955**	**Accept Ho**	**Not Significant**

Table 7 indicates no significant correlation between conjunction proficiency and reading comprehension, as all p-values exceeded **0.05.** This means that knowing conjunctions does not necessarily translate to better comprehension. The weak correlation suggests that teaching conjunctions in isolation is insufficient; they must be integrated into richer, context-based reading activities. This aligns with observations and prior studies (Cheng & Lee, 2018; Fisher & Frey, 2018; Santos & Ramos, 2019; Brown & Lee, 2019; Kumar & Singh, 2017), which emphasize embedded instruction over discrete grammar lessons.

CONCLUSIONS

This study examined the link between Grade 2 pupils' conjunction proficiency and reading comprehension. Results showed that pupils were at the *Developing* level in conjunction use and at the *Instructional* level in comprehension. No significant correlation was found, suggesting that conjunction skills alone do not strongly predict reading outcomes.

The study contributes to early literacy research by highlighting the need to integrate conjunction instruction with broader skills such as vocabulary, inferencing, and text exposure. Within the **Matatag Curriculum** and **Bawat Bata Bumabasa**, these findings emphasize the importance of balanced literacy strategies that connect grammar instruction with overall comprehension development.

RECOMMENDATIONS

1. Strengthen daily Conjunction Role Match activities and weekly Sentence Combining Challenges to further improve pupils' mastery of "and," "but," and "or" in meaningful contexts.
2. Strengthen partnerships with universities and NGOs by expanding reading clinics and tutoring programs that provide struggling readers with sustained assistance.
3. Future researchers may use larger samples, higher grade levels, or qualitative methods to further explore conjunction use and comprehension.

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