

Beyond Frequency: English Conjunction Use and Language Proficiency in Rural Ugandan Secondary Schools

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ABSTRACT

English language proficiency is central to learners' academic participation in multilingual education systems, particularly in rural public schools where exposure to English may be uneven. This study examined the relationship between the use of English conjunctions and language proficiency among lower-secondary learners in selected public secondary schools in Ruhinda County, Mitooma District, Uganda. Guided by Systemic Functional Linguistics, the study adopted a cross-sectional mixed-methods design involving 269 Senior Three students and 15 English language teachers. Data were collected through student questionnaires, semi-structured teacher interviews, and documentary review of students' written work. Descriptive statistics, linear regression, thematic analysis, and content analysis were used to examine patterns of conjunction use and their association with language proficiency. The quantitative findings showed a strong positive association between reported frequency of conjunction use and learners' reported language proficiency. However, qualitative and documentary evidence indicated that frequent use alone did not sufficiently represent proficiency. Many learners relied heavily on basic coordinating conjunctions such as "and", "but", and "or", while subordinating and correlative conjunctions were used with less confidence and accuracy. The findings suggest that the use of conjunctions is a meaningful marker of English language development when interpreted alongside accuracy, functional appropriateness, and syntactic variety. The study contributes to equitable and culturally responsive grammar pedagogy by showing the need to move beyond mechanical sentence joining toward meaning-oriented instruction that supports coherent academic communication in rural multilingual classrooms.

Keywords: English conjunctions, language proficiency, grammar pedagogy, rural secondary schools, multilingual classrooms, Uganda; Systemic Functional Linguistics.

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INTRODUCTION

English language proficiency remains central to students' academic participation in multilingual education systems where English functions as both a subject and a medium of instruction. In English-medium learning contexts, students' academic participation is closely shaped by their ability to manage language-related demands across classroom interaction, writing, and subject learning.¹ In Uganda, this issue is particularly important for secondary-school learners because English is widely used as the language of instruction. In contrast, many learners continue to experience difficulties with grammar, classroom communication, and academic language use.² Opportunities to use English beyond the classroom may also be unevenly distributed, and recent research on out-of-school English exposure suggests that learners' access to informal language practice can vary considerably and may be associated with academic performance.³ From an equity perspective, difficulties in English academic communication are therefore not merely individual language deficits; they also reflect differences in learners' linguistic environments, classroom exposure, instructional support, and access to sustained literacy practice.⁴

One linguistic resource that supports academic communication is the use of conjunctions. Conjunctions connect words, phrases, clauses, and sentences, enabling learners to express addition, contrast, cause, condition, sequence, and alternative meanings. In written and spoken discourse, they contribute to cohesion and coherence by helping learners organize ideas logically. Recent studies on second-language writing have shown that cohesive devices, including conjunctions, are important for textual organization and writing development.⁵ However, frequent use of conjunctions does not necessarily indicate higher language proficiency. Corpus-based evidence suggests that EFL learners may overuse familiar conjunctions while underusing or misusing more complex forms, which indicates the need to examine conjunction use beyond frequency counts alone.⁶ Learners may rely heavily on common coordinating conjunctions such as *and*, *but*, and *or*, while using subordinating and correlative conjunctions less accurately or less flexibly. For this reason, the use of

¹ Adem Soruç et al., "Students' Academic Language-Related Challenges in English Medium Instruction: The Role of English Proficiency and Language Gain," *System* 103 (December 2021): 102651, <https://doi.org/10.1016/j.system.2021.102651>.

² Derrick Kibumba, Proscovia Daphine Okello, and Muhammad Sulaiman Isa, "Grammatical Skills and English Language Proficiency among Secondary School Students in Mukono District, Uganda," *Discover Education* 5, no. 1 (March 11, 2026): 181, <https://doi.org/10.1007/s44217-026-01174-w>.

³ Linh Tran and Imma Miralpeix, "Out-of-School Exposure to English in EFL Teenage Learners: Is It Related to Academic Performance?," *Education Sciences* 14, no. 4 (April 10, 2024): 393, <https://doi.org/10.3390/educsci14040393>.

⁴ Limin Yuan, Fan Fang, and Guangwei Hu, "Are Students Prepared and Supported for English Medium Instruction in Chinese Higher Education to Promote Educational Equality?," *System* 125 (October 2024): 103423, <https://doi.org/10.1016/j.system.2024.103423>.

⁵ Mahmoud Abdi Tabari and Mark D. Johnson, "Exploring New Insights into the Role of Cohesive Devices in Written Academic Genres," *Assessing Writing* 57 (July 2023): 100749, <https://doi.org/10.1016/j.asw.2023.100749>; Arwa Saleh Alawerdy and Fahd Shehail Alalwi, "Enhancing English as a Foreign Language University Students' Writing through Explicit Instruction of Conjunctions as Cohesive Devices: An Experimental Study," *Frontiers in Psychology* 13 (November 28, 2022), <https://doi.org/10.3389/fpsyg.2022.1053310>.

⁶ Abdulaziz B Sanosi, "Revisiting Cohesion in Academic Writing: A Corpus-Based Analysis of EFL Learners' Use of Conjunctions," *Indonesian Journal of Applied Linguistics* 14, no. 1 (May 31, 2024): 64–78, <https://doi.org/10.17509/ijal.v14i1.70418>.

conjunctions needs to be understood not only in terms of frequency but also in terms of accuracy, functional appropriateness, and syntactic variety.⁷

Previous studies have shown that cohesive devices are associated with learners' writing quality, discourse organization, and syntactic development. Automated and corpus-based analyses of L2 writing have demonstrated that cohesive features vary across task conditions and are important for understanding how learners organize written discourse.⁸ Studies of adolescent L2 academic writing have also shown that limited syntactic variety and underuse of sophisticated subordination are associated with weaker writing quality.⁹ However, much of this work has focused on broad patterns of cohesion or on learner writing in contexts that differ from rural Ugandan public secondary schools. Research on rural Ugandan classrooms has highlighted the complexity of English-medium instruction in multilingual settings and the unequal status of English and local languages within school spaces.¹⁰ Less attention has been given to how lower-secondary learners in rural, multilingual settings use conjunctions across classroom-based writing and oral activities, and how teachers interpret these patterns in relation to language proficiency. This gap is important because a purely frequency-based view may overestimate learners' competence when conjunctions are used mechanically, repetitively, or without clear semantic control. Recent work on conjunction use and connective-based cohesion indicates that frequency should be interpreted alongside variation, discourse function, and meaning-sensitive use.¹¹

The present study addresses this gap by examining the relationship between the use of English conjunctions and language proficiency among lower-secondary learners in selected public secondary schools in Ruhinda County, Mitooma District, Uganda. The study is framed by Systemic Functional Linguistics, which views grammar as a meaning-making resource rather than a set of isolated rules. From an SFL perspective, language choices are understood as resources through which speakers and writers construct meaning in relation to social and educational contexts.¹² This framing is appropriate for investigating conjunctions because their educational value lies not only in grammatical correctness but also in their role in helping learners build coherent, contextually meaningful discourse. Recent debates on SFL-informed

⁷ Abdi Tabari and Johnson, "Exploring New Insights into the Role of Cohesive Devices in Written Academic Genres"; Alawerdy and Alalwi, "Enhancing English as a Foreign Language University Students' Writing through Explicit Instruction of Conjunctions as Cohesive Devices: An Experimental Study."

⁸ Mahmoud Abdi Tabari, Mark D. Johnson, and Mahsa Farahanynia, "Automated Analysis of Cohesive Features in L2 Writing: Examining Effects of Task Complexity and Task Repetition," *Assessing Writing* 58 (October 2023): 100783, <https://doi.org/10.1016/j.asw.2023.100783>.

⁹ Undarmaa Maamuujav, Carol Booth Olson, and Huy Chung, "Syntactic and Lexical Features of Adolescent L2 Students' Academic Writing," *Journal of Second Language Writing* 53 (September 2021): 100822, <https://doi.org/10.1016/j.jslw.2021.100822>.

¹⁰ Medadi E. Ssentanda, "'Matayo Is What in English?' On Experiences of English Medium Instruction in Rural Ugandan Classrooms," *Per Linguam* 40, no. 1 (2024), <https://doi.org/10.5785/40-1-1065>.

¹¹ Xiaofei Lu and Renfen Hu, "Sense-Aware Connective-Based Indices of Cohesion and Their Relationship to Cohesion Ratings of English Language Learners' Written Production," *Studies in Second Language Acquisition* 46, no. 3 (July 21, 2024): 644–62, <https://doi.org/10.1017/S0272263124000202>; Marzieh Safari and Fatemeh Mahdavidar, "The Evolving Trajectory of Conjunction Use in the ELT Research Articles," *Frontiers in Research Metrics and Analytics* 9 (November 28, 2024), <https://doi.org/10.3389/frma.2024.1337836>.

¹² Mary J. Schleppegrell and Teresa Oteiza, "Systemic Functional Linguistics," in *The Routledge Handbook of Discourse Analysis*, 2nd Edition (London: Routledge, 2023), 156–69, <https://doi.org/10.4324/9781003035244-13>.

literacy pedagogy also suggest that such approaches are valuable for examining how classroom language practices support reading, writing, and meaning-making, although more context-specific empirical evidence is still needed.¹³

The study contributes to educational research in three ways. First, it offers empirical evidence from rural public secondary schools, a context that remains underrepresented in research on English language pedagogy. Recent research on rural Ugandan classrooms has shown that English-medium instruction is shaped by multilingual realities, uneven language exposure, and classroom practices that require more context-sensitive investigation.¹⁴ Second, the study shifts attention from the quantity of conjunction use to the relationship between frequency, accuracy, and functional diversity. Third, it provides pedagogical insights for equitable and culturally responsive grammar instruction, particularly in classrooms where learners' multilingual backgrounds shape how they acquire and use English for academic purposes. Rather than claiming that conjunction frequency causes language proficiency, the study investigates how patterns of conjunction use are associated with learners' English language proficiency and what these patterns suggest for sustainable classroom practice. The study was guided by the following research question: How are the frequency, accuracy, and functional use of English conjunctions associated with lower-secondary learners' language proficiency in selected public secondary schools in Ruhinda County, Mitooma District, Uganda?

METHOD

This study employed a cross-sectional mixed-methods design to examine the relationship between the use of English conjunctions and language proficiency among lower-secondary learners in rural public secondary schools. The design was appropriate because the study captured learners' reported use of conjunctions, teachers' observations, and evidence from students' written work at a single point in time. As cross-sectional designs do not establish temporal ordering or causality, the study examined patterns of association rather than causal effects.¹⁵ A convergent mixed-methods approach was used. Quantitative data from student questionnaires were combined with qualitative data from teacher interviews and documentary review. This integration enabled a comparison among learners' self-reported practices, teachers' classroom-based perspectives, and written evidence of actual language use, yielding a more nuanced understanding of the study's problem.¹⁶

¹³ Beverly Derewianka et al., "What Counts as 'Evidence' in Literacy Education?," *The Australian Journal of Language and Literacy* 47, no. 3 (December 26, 2024): 299–316, <https://doi.org/10.1007/s44020-024-00071-9>; Clarence Green, Iain Giblin, and Jean Mulder, "A Systematic Narrative Synthesis Review of the Effectiveness of Genre Theory and Systemic Functional Linguistics for Improving Reading and Writing Outcomes within K-10 Education," *The Australian Journal of Language and Literacy* 47, no. 2 (August 16, 2024): 203–23, <https://doi.org/10.1007/s44020-024-00060-y>.

¹⁴ Ssentanda, "Matayo Is What in English? On Experiences of English Medium Instruction in Rural Ugandan Classrooms."

¹⁵ Edsaúl Emilio Pérez-Guerrero et al., "Methodological and Statistical Considerations for Cross-Sectional, Case-Control, and Cohort Studies," *Journal of Clinical Medicine* 13, no. 14 (July 9, 2024): 4005, <https://doi.org/10.3390/jcm13144005>.

¹⁶ Pat Bazeley, "Conceptualizing Integration in Mixed Methods Research," *Journal of Mixed Methods Research* 18, no. 3 (July 7, 2024): 225–34, <https://doi.org/10.1177/15586898241253636>; Sergi Fàbregues et al., "Toward a Framework for Appraising the Quality of Integration in Mixed Methods Research," *Journal of Mixed Methods Research* 18, no. 3 (July 30, 2024): 270–80, <https://doi.org/10.1177/15586898241257555>.

The study was conducted in selected government-aided public secondary schools in Ruhinda County, Mitooma District, Uganda. The setting was selected because rural public secondary schools provide an important context for examining English language learning in multilingual environments where learners' exposure to English may vary across home, school, and community contexts. The target population comprised Senior Three students and English language teachers from five selected public secondary schools. Senior Three students were selected because learners at this level are expected to have developed foundational competence in English grammar and to use conjunctions in both written and spoken communication. The five schools were anonymized as School A, School B, School C, School D, and School E to protect institutional identities.

Table 1. Population and sample distribution by school

School code	Senior Three student population	Proportional student sample	English teacher population	Teacher participants	Total participants
School A	160	52	3	3	55
School B	155	51	3	3	54
School C	180	59	3	3	62
School D	170	56	3	3	59
School E	155	51	3	3	54
Total	820	269	15	15	284

Note: Student participants were selected using proportionate stratified random sampling across the five schools. All English language teachers in the participating schools were included through total population sampling, given the small number of eligible teachers and their direct involvement in English language instruction.

The student population across the five schools was 820. Using Slovin's formula with a 5% margin of error, a sample of 269 Senior Three students was obtained. In addition, all 15 English language teachers from the participating schools were included because of their direct experience in teaching grammar, assessing learners' writing, and observing students' oral and written use of English.

Student participants were selected using proportionate stratified random sampling. Each school was treated as a stratum, and the number of students selected from each school was proportionate to its Senior Three enrolment. Gender was also considered within schools to support balanced representation. This procedure was appropriate because stratified sampling improves representation when a population consists of meaningful subgroups.¹⁷ English language teachers were selected through total population sampling because the number of eligible teachers was small and all were directly involved in English language instruction in the selected schools. Including all eligible teachers helped capture the full range of teacher perspectives available in the study context.¹⁸

¹⁷ Sirwan Khalid Ahmed, "How to Choose a Sampling Technique and Determine Sample Size for Research: A Simplified Guide for Researchers," *Oral Oncology Reports* 12 (December 2024): 100662, <https://doi.org/10.1016/j.oor.2024.100662>; Rufai Iliyasu and Ilker Etikan, "Comparison of Quota Sampling and Stratified Random Sampling," *Biometrics & Biostatistics International Journal* 10, no. 1 (February 25, 2021): 24–27, <https://doi.org/10.15406/bbij.2021.10.00326>.

¹⁸ Ahmed, "How to Choose a Sampling Technique and Determine Sample Size for Research: A Simplified Guide for Researchers"; Azzam Zrineh, Maysa Al-Usta, and Abdallah Alwawi, "Sampling Methods and Sample Size Determination in Clinical Research: An Educational Review," *Journal of General and Family Medicine* 27, no. 1 (January 2, 2026),

Data were collected from three sources: student questionnaires, semi-structured teacher interviews, and documentary review of students' written work. The questionnaire collected quantitative data on learners' awareness, frequency, perceived accuracy, and perceived proficiency in using English conjunctions. It consisted of closed-ended items measured on a five-point Likert scale, ranging from 1 = strongly disagree to 5 = strongly agree, and focused on coordinating, subordinating, and correlative conjunctions in written and oral communication.

Semi-structured interviews were conducted with English language teachers to explore their perspectives on students' conjunction use, common grammatical challenges, instructional practices, and perceived links between conjunction use and language proficiency. The documentary review examined students' compositions, grammar exercises, summary-writing scripts, written English tests, and classroom assignments. This review focused on conjunction frequency, accuracy, functional appropriateness, and variety in authentic school-based writing tasks.

The research instruments were reviewed by experts in educational research and English language education to assess their relevance, clarity, and alignment with the study objectives. Content validity was established using the Content Validity Index (CVI), which is commonly used to estimate expert agreement on item relevance and suitability.¹⁹ Of the 32 questionnaire items reviewed, 27 were retained as valid, yielding a CVI of 0.844, indicating acceptable content validity.

Reliability was assessed through a pilot study conducted in a public secondary school within the same district but outside the main sample. The internal consistency of the questionnaire was examined using Cronbach's alpha, a widely used index for estimating the consistency of multi-item instruments.²⁰ The overall reliability coefficient was 0.823, indicating good internal consistency, and section-level coefficients also met acceptable thresholds.

Before data collection, permission was obtained from the relevant institutional and district authorities. The researchers then contacted the headteachers of the selected schools to explain the study's purpose, procedures, and ethical safeguards. Eligible students were identified with the assistance of English language teachers and selected using the sampling procedure described above.

<https://doi.org/10.1002/jgf2.70096>.

¹⁹ Azwani Masuwai, Hafizhah Zulkifli, and Mohd Isa Hamzah, "Evaluation of Content Validity and Face Validity of Secondary School Islamic Education Teacher Self-Assessment Instrument," *Cogent Education* 11, no. 1 (December 31, 2024), <https://doi.org/10.1080/2331186X.2024.2308410>; Wirda Nawawi, Bity Salwana Alias, and Wan Mohd Khairul Wan Isa, "A Validity and Reliability of Instrument to Evaluate the Principal Technology Leadership: A Pilot Study," *International Journal of Evaluation and Research in Education (IJERE)* 13, no. 6 (December 1, 2024): 4093, <https://doi.org/10.11591/ijere.v13i6.27282>.

²⁰ Philip Dorsah, "The Use of Cronbach's Alpha Reliability in Educational Research: A Systematic Review," *European Journal of Contemporary Education and E-Learning* 4, no. 2 (February 23, 2026): 39–50, [https://doi.org/10.59324/ejceel.2026.4\(2\).04](https://doi.org/10.59324/ejceel.2026.4(2).04).

Questionnaires were administered during regular school sessions and collected immediately after completion to support consistent administration and minimize incomplete responses.²¹ Teacher interviews were conducted at agreed-upon times and in private locations to minimize disruption to teaching duties. Semi-structured interviews allowed the researchers to follow a common guide while giving teachers space to explain their classroom experiences in detail.²² Students' written work was reviewed using a structured checklist focused on conjunction type, frequency, accuracy, placement, and functional use in context. This procedure supported a systematic review of classroom documents and enabled comparison between reported conjunction use and actual written evidence.²³

Quantitative questionnaire data were analysed using descriptive and inferential statistics. Frequencies, percentages, means, and standard deviations were used to summarise students' reported patterns of conjunction use and perceived language proficiency. Pearson correlation and linear regression were then applied to examine the strength and direction of the association between conjunction use and language proficiency. Because the study used a cross-sectional design, the regression results were interpreted as evidence of statistical association rather than causal influence.²⁴

Qualitative data from teacher interviews were analysed thematically. Interview responses were read repeatedly to identify recurring patterns related to students' use of conjunctions, overuse of basic connectors, challenges with subordinating and correlative conjunctions, and relevant instructional practices.²⁵ Documentary data from students' written work were analysed through content analysis, focusing on conjunction type, frequency, accuracy, placement, and contribution to textual coherence.²⁶

The final stage involved integrating quantitative, interview, and documentary findings. This integration enabled comparison between students' self-reported practices, teachers' classroom-based observations, and written evidence of actual language use. Such integration is central to mixed-methods research because it supports a more coherent interpretation of complex educational phenomena.²⁷

²¹ Malcolm Koo and Shih-Wei Yang, "Questionnaire Use and Development in Health Research," *Encyclopedia* 5, no. 2 (May 16, 2025): 65, <https://doi.org/10.3390/encyclopedia5020065>.

²² Gabriela Quintela Do Carmo et al., "Going Beyond Adaptation: An Integrative Review and Ethical Considerations of Semi-Structured Interviews With Elementary-Aged Children," *International Journal of Qualitative Methods* 23 (January 15, 2024), <https://doi.org/10.1177/16094069241247474>.

²³ Tanja Moilanen et al., "Developing a Feasible and Credible Method for Analyzing Healthcare Documents as Written Data," *Global Qualitative Nursing Research* 9 (January 7, 2022), <https://doi.org/10.1177/23333936221108706>.

²⁴ Pérez-Guerrero et al., "Methodological and Statistical Considerations for Cross-Sectional, Case-Control, and Cohort Studies."

²⁵ Virginia Braun and Victoria Clarke, "Toward Good Practice in Thematic Analysis: Avoiding Common Problems and Be(Com)ing a Knowing Researcher," *International Journal of Transgender Health* 24, no. 1 (January 25, 2023): 1–6, <https://doi.org/10.1080/26895269.2022.2129597>; David Byrne, "A Worked Example of Braun and Clarke's Approach to Reflexive Thematic Analysis," *Quality & Quantity* 56, no. 3 (June 26, 2022): 1391–1412, <https://doi.org/10.1007/s11135-021-01182-y>.

²⁶ Mitchell Nicmanis, "Reflexive Content Analysis: An Approach to Qualitative Data Analysis, Reduction, and Description," *International Journal of Qualitative Methods* 23 (January 4, 2024), <https://doi.org/10.1177/16094069241236603>.

²⁷ Bazeley, "Conceptualizing Integration in Mixed Methods Research"; Fàbregues et al., "Toward a Framework for Appraising the Quality of Integration in Mixed Methods Research."

The study followed established ethical procedures for research involving school participants. Approval was obtained before data collection, and permission was sought from the district education office and the participating schools. Participants were informed about the purpose of the study, the voluntary nature of participation, and their right to withdraw at any stage. Written informed consent was obtained from participating teachers and students. For students under 18, parental or guardian consent was obtained in accordance with ethical requirements. Where necessary, explanations were provided in a language familiar to participants to ensure understanding. The identities of schools and participants were anonymized, and all data were coded and stored securely. Digital data were protected, and hard-copy materials were kept in a secure location accessible only to the research team.

RESULTS AND DISCUSSION

Results

This section presents the quantitative and qualitative findings on the relationship between English conjunction use and learners' language proficiency. The results are organized in four parts: students' reported patterns of conjunction use, the statistical association between conjunction use and language proficiency, teachers' qualitative accounts, and documentary evidence from students' written work.

1. Students' reported patterns of conjunction use

Descriptive statistics indicated that students generally reported frequent use of conjunctions in writing and classroom communication. As shown in Table 2, the mean scores ranged from 3.38 to 4.00, suggesting moderate to high agreement across the questionnaire items. The highest mean was recorded for teacher encouragement of conjunction use in writing ($M = 4.00$, $SD = 1.05$), followed by frequent practice in using conjunctions ($M = 3.90$, $SD = 1.09$) and students' conscious effort to use more conjunctions in essays ($M = 3.85$, $SD = 1.13$).

Table 2. Students' reported use of English conjunctions

Statement	Valid N	Mean	SD
I use conjunctions in almost every sentence I write.	228	3.78	1.13
I often link my ideas using conjunctions.	227	3.82	1.11
I write better when I use conjunctions frequently.	229	3.76	1.12
I rarely use correlative conjunctions in writing.	226	3.38	1.27
Frequent practice has improved my use of conjunctions.	227	3.90	1.09
I notice that my classmates often use more conjunctions than I do.	227	3.52	1.22
My teachers encourage the use of conjunctions when writing.	227	4.00	1.05
I consciously try to use more conjunctions when writing essays.	227	3.85	1.13

The pattern of responses suggests that students recognized the use of conjunctions as a familiar and encouraged feature of English learning. Students reported using conjunctions to link ideas and improve the flow of their writing. However, the relatively lower mean for the item on correlative conjunctions ($M = 3.38$, $SD = 1.27$) suggests that students were less confident in using paired conjunctions such as “*either...or*” and “*neither...nor*”, or used them

less frequently than basic coordinating conjunctions such as “and”, “but”, and “or”. This item also had the largest standard deviation, suggesting greater variation among students in their familiarity with more complex conjunction forms.

The descriptive findings, therefore, indicate that students were not only aware of conjunctions but also reported deliberate attempts to use them in essays. At the same time, the variation across items suggests that learners' use of conjunctions was uneven. Basic and commonly taught conjunctions appeared to be more familiar, whereas more complex or less frequently practiced conjunction types remained challenging.

2. Association between conjunction use and language proficiency

A linear regression analysis was conducted to examine the association between reported frequency of English conjunction use and learners' language proficiency. The model showed a strong positive association between the two variables, $R = 0.709$. The coefficient of determination indicated that reported conjunction use accounted for 50.3% of the variance in learners' reported language proficiency, $R^2 = 0.503$, adjusted $R^2 = 0.498$.

Table 3. Regression model for conjunction use and language proficiency

Model	R	R ²	Adjusted R ²	Standard error of estimate
1	0.709	0.503	0.498	0.735

The model was statistically significant, $F(1, 226) = 189.80$, $p < .001$. The regression coefficient was also statistically significant, $B = 0.763$, $SE = 0.055$, $\beta = 0.709$, $t = 13.78$, $p < .001$.

Table 4. Regression coefficient for reported conjunction use

Predictor	B	SE	β	t	p
Reported frequency of conjunction use	0.763	0.055	0.709	13.78	< .001

These results suggest that students who reported more frequent use of conjunctions also tended to report higher levels of English language proficiency. However, because the study used a cross-sectional design, the regression result should be interpreted as evidence of statistical association rather than a causal effect. The finding indicates that conjunction use is a meaningful marker of language proficiency in this context, but it does not establish that frequent conjunction use directly produces higher proficiency.

3. Teachers' perspectives

Teacher interviews provided a more nuanced account of the quantitative pattern. Teachers generally agreed that students used conjunctions frequently, particularly in speech and basic writing tasks. However, they also noted that frequent use was not always accompanied by grammatical accuracy, semantic appropriateness, or syntactic variety. Three themes were identified from the interview data.

3.1 Frequency as an indicator of participation rather than full competence

Teachers observed that learners who frequently used conjunctions were often more willing to participate in oral tasks and classroom discussions. In this sense, the use of conjunctions appeared to reflect communicative engagement. However, teachers cautioned that frequent use did not always indicate deeper grammatical control. Some learners used conjunctions as fillers or as a strategy to continue speaking, especially with familiar connectors such as *and*, *so*, and *but*. This pattern suggests that frequency may signal confidence or engagement, but not necessarily advanced proficiency.

3.2 Overuse of basic conjunctions and reduced coherence

Teachers also reported that students often overused a limited range of coordinating conjunctions. In writing, this produced long, repetitive sentences that were difficult to follow. Students sometimes linked several ideas using *and*, *or*, *but* without showing the intended logical relationship between clauses. As a result, the text appeared longer but not necessarily clearer. This finding qualifies the questionnaire results by showing that frequency alone is insufficient; the quality and function of conjunction use are equally important.

3.3 Instructional emphasis on sentence joining

A further theme concerned classroom instruction. Teachers indicated that learners were often taught to join sentences using basic conjunctions, especially in earlier grades. While this practice helped students recognize conjunctions, it may also have encouraged mechanical sentence joining. Less attention appeared to be given to the semantic functions of conjunctions, such as expressing contrast, condition, concession, sequence, or cause. Teachers therefore identified a need for instruction that goes beyond frequency and supports students in selecting conjunctions based on meaning and context.

4. Content analysis

Content analysis of the interview responses supported the thematic findings. As shown in Table 5, the most frequently reported pattern was students' repeated use of coordinating conjunctions. Teachers also identified overuse without grammatical control and limited use of subordinating conjunctions as recurring issues.

Table 5. Content analysis of teacher interview responses

Category	Description	Frequency
Frequent use of coordinating conjunctions	Repeated use of <i>and</i> , <i>but</i> , and <i>or</i>	34
Limited use of subordinating conjunctions	Infrequent or uncertain use of forms such as <i>because</i> , <i>although</i> , and <i>while</i>	19
Overuse without grammatical control	Excessive use of conjunctions with errors in structure or meaning	27
Frequency linked to oral fluency	Teachers' comments connecting conjunction use with spoken confidence	15
Frequency linked to writing proficiency	Teachers' comments connecting conjunction use with written coherence	18
Instructional reinforcement of frequency	Teaching practices designed to increase conjunction use	22

These results show that teachers viewed the use of conjunctions as pedagogically important, but they did not treat frequency as sufficient evidence of proficiency. Instead, their responses emphasized the need to examine how conjunctions were used in context.

5. Documentary evidence

The documentary review provided further evidence of students' actual use of conjunctions in classroom-based writing. Five document types were reviewed: student compositions, grammar exercises, written English tests, summary writing scripts, and classroom assignments.

Table 6. Documentary review of students' written work

Document type	Relevant aspects observed
Student compositions	Frequent use of coordinating conjunctions; limited use of subordinating and correlative forms
Grammar exercises	High frequency of conjunction use; mixed accuracy; overreliance on <i>and</i> , <i>but</i> , and <i>because</i>
Written English tests	Incorrect conjunction use; confusion between additive and causal relationships
Summary writing scripts	Weak cohesion; minimal use of varied conjunctions; limited syntactic variety
Classroom assignments	Common errors in conjunction placement; limited awareness of function and logic

The documentary evidence showed that students relied heavily on basic conjunctions, particularly *and*, *but*, and *because*. Subordinating conjunctions were used less consistently, while correlative conjunctions were largely absent from the reviewed texts. Some students used conjunctions correctly in sentence-joining exercises, but this accuracy did not always transfer to extended writing tasks such as compositions, summaries, and tests.

The written documents also revealed a gap between mechanical knowledge and functional use. For example, students could often identify or insert conjunctions in controlled grammar exercises, but they struggled to use them to organize ideas coherently in longer texts. Errors included redundancy, inappropriate choice of conjunctions, incomplete causal relationships, and weak transitions between ideas. These patterns suggest that students' proficiency was not simply related to how often they used conjunctions, but to whether they could use them accurately and meaningfully.

6. Findings Integration

Across the quantitative and qualitative data, the study found a consistent relationship between English conjunction use and language proficiency. Students who reported more frequent use of conjunctions also tended to report higher language proficiency, and teachers recognized conjunctions as important for spoken and written communication. However, the interview and documentary findings showed that frequency alone did not adequately represent learners' competence.

The integrated findings suggest that the use of conjunctions serves as a visible marker of language development, but its pedagogical value depends on accuracy, variety, and

contextual appropriateness. In this rural multilingual school context, learners appeared to benefit from teacher encouragement and repeated practice. However, they also required more explicit support in using subordinating and correlative conjunctions to express more complex relationships between ideas. The results therefore point to the importance of grammar instruction that treats conjunctions not as isolated connectors, but as meaning-making resources for coherent academic communication.

Discussion

This study examined the relationship between the use of English conjunctions and language proficiency among lower-secondary learners in rural public secondary schools in Ruhinda County, Mitooma District, Uganda. The findings show a strong positive association between reported frequency of conjunction use and learners' reported language proficiency. However, the qualitative and documentary evidence complicates this pattern by showing that frequency alone does not adequately represent linguistic competence. The use of conjunctions becomes educationally meaningful when accompanied by accuracy, functional appropriateness, and syntactic variety.

The findings are consistent with previous research showing that cohesive devices are important for writing quality, discourse organization, and second-language development. Abdi Tabari and Wind (2025) associated cohesive-device development with second-language writing development,²⁸ while Alawerdy and Alalwi (2022) showed that explicit instruction in conjunctions can support learners' awareness of cohesion in writing.²⁹ The present study extends this evidence by showing how the use of conjunctions is perceived and practiced in rural multilingual Ugandan classrooms, where exposure to English beyond school may be uneven and where teacher guidance plays an important role in making cohesion visible as part of academic communication.

A central contribution of the study is its distinction between conjunction frequency and functional mastery. Learners' frequent use of basic connectors appeared to reflect familiarity with common forms rather than advanced control of academic discourse. This pattern is consistent with Sanosi's (2024) finding that EFL learners often overuse additive conjunctions and with Lu and Hu's (2024) argument that connective-based cohesion should be interpreted through meaning-sensitive indices rather than frequency alone.³⁰ The present study adds that this tendency may be reinforced by classroom practices that emphasize sentence joining without sufficient attention to semantic relationships between ideas.

²⁸ Mahmoud Abdi Tabari and Attila M. Wind, "Dynamic Development of Cohesive Devices in English as a Second Language Writing," *International Review of Applied Linguistics in Language Teaching* 63, no. 1 (March 26, 2025): 433–69, <https://doi.org/10.1515/iral-2022-0205>.

²⁹ Alawerdy and Alalwi, "Enhancing English as a Foreign Language University Students' Writing through Explicit Instruction of Conjunctions as Cohesive Devices: An Experimental Study."

³⁰ Sanosi, "Revisiting Cohesion in Academic Writing: A Corpus-Based Analysis of EFL Learners' Use of Conjunctions"; Lu and Hu, "Sense-Aware Connective-Based Indices of Cohesion and Their Relationship to Cohesion Ratings of English Language Learners' Written Production."

The limited use of subordinating and correlative conjunctions is particularly important because these forms require learners to manage more complex relationships among clauses. Maamuujav et al. (2021) showed that syntactic and lexical features are important indicators of adolescent L2 academic writing, while Abdi Tabari et al. (2023) demonstrated that cohesive features in L2 writing vary according to task demands.³¹ In the present study, learners appeared more comfortable with coordinating conjunctions than with forms expressing concession, condition, contrast, and causality. This may explain why some students could complete controlled sentence-joining exercises but struggled to produce coherent extended writing.

The findings also support a Systemic Functional Linguistics perspective, which views grammar as a resource for meaning-making rather than a set of isolated rules. From this perspective, conjunctions help learners organize experience, construct logical relations, and develop coherent texts. Recent SFL scholarship similarly emphasizes that language choices should be understood as resources for constructing meaning in social and educational contexts.³² The documentary evidence in this study showed that students' writing was weakened not simply by the absence of conjunctions, but by limited control over how conjunctions shaped meaning. Confusion between additive and causal relationships, for example, suggests that learners may know conjunction forms without fully understanding their discourse functions.

The comparison between students' self-reports and teachers' accounts reveals an important pedagogical tension. Students tended to associate more frequent use of conjunctions with better writing, whereas teachers evaluated proficiency in terms of clarity, coherence, and appropriateness. This finding is consistent with research showing that cohesion and syntactic complexity are central to the evaluation of L2 writing quality, particularly when learners are required to organize extended academic texts.³³ The study therefore suggests that learners need support not only in using conjunctions more often, but in selecting them according to meaning, audience, and text type.

The rural multilingual setting adds further significance to these findings. In contexts where learners' exposure to English outside school may be limited, classroom-based grammar instruction becomes central to equitable academic participation. Studies of English-medium instruction in multilingual classrooms show that learners' academic participation is shaped by English proficiency, classroom language practices, and access to meaningful instructional support.³⁴ Students' difficulties with complex conjunctions should therefore be understood

³¹ Maamuujav, Olson, and Chung, "Syntactic and Lexical Features of Adolescent L2 Students' Academic Writing"; Abdi Tabari, Johnson, and Farahanynia, "Automated Analysis of Cohesive Features in L2 Writing: Examining Effects of Task Complexity and Task Repetition"; Abdi Tabari and Wind, "Dynamic Development of Cohesive Devices in English as a Second Language Writing."

³² Schleppegrell and Oteíza, "Systemic Functional Linguistics."

³³ Lu and Hu, "Sense-Aware Connective-Based Indices of Cohesion and Their Relationship to Cohesion Ratings of English Language Learners' Written Production"; Maamuujav, Olson, and Chung, "Syntactic and Lexical Features of Adolescent L2 Students' Academic Writing."

³⁴ Ssentanda, "'Matayo Is What in English?' On Experiences of English Medium Instruction in Rural Ugandan Classrooms"; Soruç et al., "Students' Academic Language-Related Challenges in English Medium Instruction: The Role of English Proficiency and Language Gain."

not simply as individual grammatical weakness, but as evidence of the need for more explicit, equitable, and context-sensitive grammar pedagogy.

Overall, the study contributes to previous research by showing that the use of conjunctions is a meaningful marker of English language development only when interpreted alongside accuracy, variety, and functional appropriateness. The strong statistical association found in the study should not be taken as evidence that frequent use of conjunctions directly causes higher proficiency. Rather, it suggests that learners who engage more actively with conjunctions may also demonstrate stronger awareness of textual organization. The qualitative and documentary findings refine this interpretation by showing that proficiency is most visible when conjunctions are used to produce coherent, semantically precise, and syntactically varied discourse.

Implications for Practice

The findings suggest that teachers should design instruction in conjunction with the meanings students need to express in classroom communication. Rather than asking learners to add more connectors, teachers can guide them to decide whether a sentence or paragraph requires addition, contrast, cause, condition, concession, sequence, or choice. This meaning-oriented approach is consistent with research showing that connective-based cohesion should be interpreted in terms of discourse function and semantic relations, not frequency alone.³⁵

Classroom practice should also give greater attention to subordinating and correlative conjunctions. Since learners appeared more familiar with basic coordinating conjunctions such as *and*, *but*, and *or*, teachers can use comparison tasks that contrast forms such as *but*, *although*, and *however*, or paired structures such as *either...or* and *neither...nor*. Explicit instruction in conjunctions has been shown to support learners' awareness of cohesion in writing, particularly when conjunctions are taught as functional resources rather than isolated grammar items.³⁶

Writing activities should include revision-focused tasks. Students can be asked to identify repeated connectors, reduce redundancy, separate run-on sentences, and replace vague connectors with more precise ones. Such activities are relevant because adolescent L2 writing quality is associated with syntactic variety, clause control, and the ability to express relationships between ideas clearly.³⁷ Oral storytelling, pair discussions, and classroom presentations can also be used to practice logical sequencing, provided that feedback focuses on clarity and coherence rather than fluency alone.

³⁵ Lu and Hu, "Sense-Aware Connective-Based Indices of Cohesion and Their Relationship to Cohesion Ratings of English Language Learners' Written Production."

³⁶ Alawerdy and Alalwi, "Enhancing English as a Foreign Language University Students' Writing through Explicit Instruction of Conjunctions as Cohesive Devices: An Experimental Study."

³⁷ Maamuujav, Olson, and Chung, "Syntactic and Lexical Features of Adolescent L2 Students' Academic Writing."

At the school level, low-cost professional support can strengthen this approach. Collaborative lesson planning, shared rubrics, and short teacher workshops can help English teachers develop common strategies for teaching conjunctions through authentic writing and speaking activities. SFL-informed and genre-based literacy pedagogies have been shown to support reading and writing development by making language choices more visible to teachers and learners.³⁸ Such support is particularly relevant in rural Ugandan classrooms, where English-medium instruction is shaped by multilingual realities and uneven opportunities for learners to use English beyond school.³⁹ In this sense, meaning-oriented conjunction instruction aligns with JERP's concern for equitable, culturally responsive, and sustainable educational development by providing structured language support without treating multilingual learners' difficulties as individual deficits.

Limitations and Future Research

Several limitations should be considered when interpreting the findings. The cross-sectional design limits the extent to which the study can explain changes in learners' use of conjunctions over time. Although the regression analysis showed a strong positive association between reported conjunction use and reported language proficiency, this relationship should not be interpreted as causal because cross-sectional studies do not establish temporal ordering or causal direction.⁴⁰ Future longitudinal studies could examine how learners' use of coordinating, subordinating, and correlative conjunctions develops across grade levels and relates to changes in writing quality and oral proficiency.

Part of the quantitative data relied on students' self-reported practices and perceptions, which may not fully represent actual language use. Future research could combine questionnaires with direct language assessments, writing scores, or corpus-based analysis of student texts to provide a more robust measure of proficiency. Corpus-based and automated analyses of cohesive features have been shown to provide useful evidence for examining how learners organize written discourse across different task conditions.⁴¹ The study was also conducted in five selected public secondary schools in one rural district in Uganda. The findings should therefore be interpreted as contextually grounded rather than broadly generalizable to all Ugandan secondary schools or other multilingual education systems. Further studies across different districts, school types, and urban–rural contexts would help determine whether similar patterns of conjunction use occur under different instructional conditions.

³⁸ Green, Giblin, and Mulder, "A Systematic Narrative Synthesis Review of the Effectiveness of Genre Theory and Systemic Functional Linguistics for Improving Reading and Writing Outcomes within K-10 Education."

³⁹ Ssentanda, "Matayo Is What in English? On Experiences of English Medium Instruction in Rural Ugandan Classrooms"; Medadi E Ssentanda, "Which Language(s) Matter(s) the Most? Exploring the 'Schoolscapes' of Rural Primary Schools in Uganda," *South African Journal of African Languages* 42, no. 1 (January 2, 2022): 17–30, <https://doi.org/10.1080/02572117.2022.2039441>.

⁴⁰ Pérez-Guerrero et al., "Methodological and Statistical Considerations for Cross-Sectional, Case–Control, and Cohort Studies."

⁴¹ Abdi Tabari, Johnson, and Farahanyia, "Automated Analysis of Cohesive Features in L2 Writing: Examining Effects of Task Complexity and Task Repetition."

The study focused specifically on conjunctions and did not evaluate an instructional intervention. Future research could examine how the use of conjunctions interacts with other linguistic features, such as lexical diversity, clause complexity, paragraph organization, and genre awareness. Intervention studies could also investigate the extent to which guided writing, sentence-combining activities, peer review, oral storytelling, or teacher modeling support learners' accurate and purposeful use of conjunctions. Such studies would extend prior evidence that explicit instruction in conjunctions as cohesive devices can support learners' writing development⁴² and adapt grammar pedagogy to culturally responsive and multilingual classroom contexts.

CONCLUSION

This study examined the relationship between the use of English conjunctions and language proficiency among lower-secondary learners in rural public secondary schools in Ruhinda County, Mitooma District, Uganda. The findings show that learners who reported more frequent use of conjunctions also tended to report higher language proficiency. However, frequency alone was not a sufficient indicator of competence. Conjunction use was educationally meaningful when it was accompanied by accuracy, functional appropriateness, and syntactic variety. The qualitative and documentary findings showed that many learners relied heavily on basic coordinating conjunctions such as *and*, *but*, and *or*, while subordinating and correlative conjunctions were used less confidently. This suggests that learners may recognize conjunctions as sentence-linking devices but still need support in using them as meaning-making resources for coherent and logically organized discourse.

The study contributes to English language pedagogy by showing that grammar instruction in rural multilingual classrooms should be explicit, contextualized, and meaning-oriented. From an equity and culturally responsive perspective, learners' difficulties with complex conjunctions should be understood in relation to differences in English exposure, classroom resources, multilingual language practices, and opportunities for sustained academic writing. Sustainable improvement in academic English, therefore, requires classroom practices that develop accurate, varied, and purposeful use of conjunctions.

DECLARATIONS

Ethical approval was obtained before data collection, and permission to conduct the study was secured from the relevant district education authorities and participating schools. Written informed consent was obtained from teachers and student participants; for students below 18 years of age, parental or guardian consent was also obtained. The manuscript does not contain personally identifiable information, and all schools and participants were anonymized. This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors. The authors declare no conflict of interest. The data are not publicly available because they contain school-based and participant-related information.

⁴² Alawerdy and Alalwi, "Enhancing English as a Foreign Language University Students' Writing through Explicit Instruction of Conjunctions as Cohesive Devices: An Experimental Study."

However, anonymized data may be made available from the authors upon reasonable request and subject to ethical approval. The authors were responsible for study conception and design, data collection, analysis, interpretation, manuscript preparation, and approval of the final version. Generative AI-assisted tools were used only to support language refinement, structural organization, and academic clarity; the authors reviewed and approved all AI-assisted content and remains responsible for the accuracy and integrity of the manuscript.

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