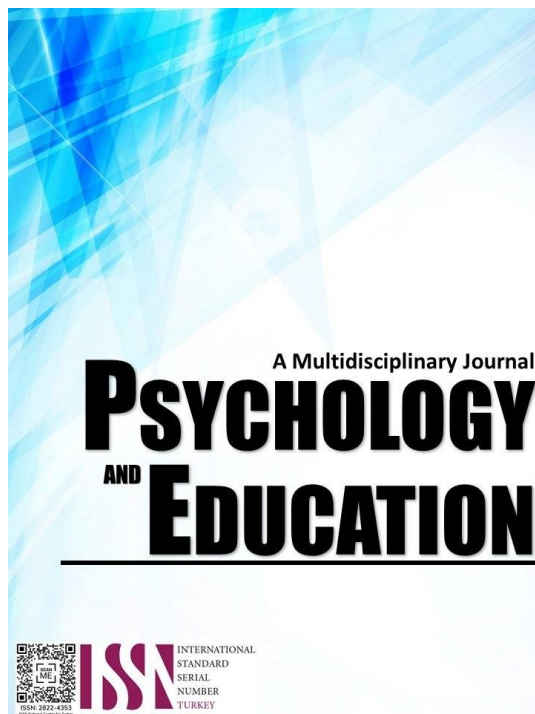


TRANSITION WORDS IN THE RESEARCH OUTPUT OF THE SENIOR HIGH SCHOOL STUDENTS



PSYCHOLOGY AND EDUCATION: A MULTIDISCIPLINARY JOURNAL

Volume: 33

Issue 6

Pages: 627-635

Document ID: 2025PEMJ3188

DOI: 10.70838/pemj.330602

Manuscript Accepted: 02-19-2025

Transition Words in the Research Output of the Senior High School Students

Mark Anthony Y. Rodriguez*

For affiliations and correspondence, see the last page.

Abstract

This study explores the usage of transitional markers in the 25-research outputs of the senior high school from North Central Mindanao College in Maranding, Lala, Lanao del Norte. The study aimed to explore the inaccurately and accurately used transitional markers. The study employed qualitative research design, and conducted content analysis on the research output of the students to determine the accuracies and inaccuracies on the usage of the transitional markers. Findings revealed that students generally excel in using basic transitional markers. Conclusive terms such as "Lastly" and "Therefore" are used effectively to summarize discussions, while "Because" is aptly employed to indicate reasons. Markers for adding information, like "Additionally" and "Also," and those for contrasting ideas, such as "However" and "But," are used correctly, enhancing the clarity and richness of the text. However, more complex markers, including "Thus" and "Consequently," show varied accuracy, with "Thus" often misapplied. Inaccuracies were most prevalent, with markers like "Thus" and "Therefore" used incorrectly in conclusions and "Meanwhile" in contrasting ideas. Elaborative markers "Also" and "In addition" were frequently misused, and inferential markers "Hence" and "Thus" showed significant inaccuracies. These challenges suggest a need for targeted instruction to improve the correct application of these transitional tools. It was concluded that while students possess a foundational competence in using transitional markers, there is a clear requirement for further guidance on more sophisticated markers. An intervention lesson exemplar was developed to address these inaccuracies and enhance the overall quality of students' writing.

Keywords: *transitional markers, research output, senior high school*

Introduction

Writing remains an essential skill for Senior High School (SHS) students, serving as a cornerstone that enhances research and communication abilities while fulfilling the Most Essential Learning Competencies (MELCs) outlined in the curriculum. Effective writing stands as a fundamental requirement for academic success, particularly in research, scientific literature, papers, and journals (Rahmawati et al., 2019). Clearly and coherently articulating thoughts and ideas in writing plays an indispensable role in academic and professional endeavors.

The MELCs for SHS students emphasize critiquing different patterns of development in writing. This standard highlights the importance of structuring written content logically and coherently. Mastery of information selection, organization, and development remains crucial in meeting these criteria. Students must effectively use transitional markers, commonly known as transitional words or phrases, to achieve coherence and cohesion in writing. These markers serve as integral components that align with the broader goals of the curriculum.

Transitional markers play a pivotal role in guiding the reader through written content by signaling relationships between ideas, sentences, and paragraphs. These markers facilitate smooth transitions throughout the text, ensuring a seamless flow of the narrative (Yuvayapan & Bilginer, 2020). Creating well-structured and organized text remains essential for SHS students to communicate thoughts and ideas effectively. Writing that lacks transitional markers often appears disjointed and difficult to follow, diminishing the overall impact of the message.

Many SHS students may not have had ample practice or mastery of transitional words and phrases during Junior High School (JHS). Assessing their current proficiency in identifying and using signals of coherence in writing remains a critical step for educators and curriculum designers. Determining the baseline competency level allows them to implement strategies and interventions that effectively enhance students' writing skills while aligning with the MELCs.

Writing serves as a foundational skill in both academic and professional settings. Mastering transitional markers ensures coherence and cohesion in writing, reinforcing students' ability to meet MELC standards, particularly in critiquing different development patterns. These markers help guide readers through well-structured narratives. Many students may not have fully grasped this skill during JHS, making proficiency assessment and targeted strategies crucial for their writing development (Rahmawati et al., 2019).

Fraser (1999) categorized transitional words and phrases into six types: conclusive, reason, elaborative, contrastive, inferential, and exemplifier transitions. Conclusive transitions signal the conclusion or summary of a piece of writing or a specific argument. Phrases like "in conclusion" and "to sum up" provide a sense of closure, helping readers recognize the author's final thoughts. These transitions consolidate key points and ideas, marking the end of an argument or discussion.

Reason transitions establish cause-and-effect relationships in writing. Students use transitional words like "because" and "due to" to clarify the reasons behind specific actions, events, or situations. These transitions promote a deeper understanding of logical

connections between concepts and arguments. Elaborative transitions enhance writing richness and coherence by introducing additional information or details. Words like "and" and "moreover" expand upon previously stated ideas, reinforcing arguments and providing supporting evidence. These transitions contribute to the completeness and overall clarity of written content.

Contrastive transitions highlight differences, opposing viewpoints, or alternative perspectives. Students use words such as "but" and "however" to present counterarguments or contrasting evidence. These transitions enable readers to grasp the complexities and nuances of the topic. Inferential transitions demonstrate logical inferences or consequences based on the information or arguments presented. Phrases like "therefore" and "consequently" help readers understand cause-and-effect relationships, reinforcing comprehension of the implications and outcomes of students' statements.

Many students encounter challenges in crafting academic assignments, particularly in research writing (Rezeki, 2018). Non-native English speakers struggle with limited vocabulary and grammatical errors, leading to unclear ideas and poor cohesion (Yuvayapan & Bilginer, 2020). These challenges highlight the necessity of applying different writing techniques, especially those involving transitions, to enhance writing skills and produce clear, coherent academic papers.

Transitions serve as essential devices that connect ideas, making writing more cohesive and understandable (Giddi, Kpeglo, & Fosu, 2022). These devices function as bridges between sentences, paragraphs, and sections, guiding readers through the flow of ideas and showing relationships between different parts of a paper (Alsarairah & Suryani, 2020). Effective use of transitional words significantly improves cohesion and enhances the overall clarity of written content (Poudel, 2018). Research writing, in particular, heavily relies on transitions to ensure a smooth and logical presentation of ideas.

Studies indicate a positive correlation between students' knowledge of transition words and their reading comprehension skills (Anwar et al., 2022). However, research has also identified difficulties students face in correctly using transitions (Mackiewicz & Thompson, 2018). These challenges appear in various contexts, including trainee teachers in Ghana (Giddi, Kpeglo, & Fosu, 2022), English as a Foreign Language (EFL) students (Ariyanti, 2021; Hama, 2021), and senior high school students in the Philippines (Yasto, 2022). Many students struggle with proper placement, omission, spelling, and grammar of transitional devices, leading to writing that lacks coherence and flow (Hassoon, 2019).

Research also reveals that students often lack a clear understanding of the purpose and usage of transitional words (Lumbangaol, 2022). This deficiency hinders their ability to incorporate transitions effectively, particularly when connecting sentences and elaborating on their thoughts (Khadaifi, 2021; Yousuf Ahmed, 2019). On the other hand, specific transitional devices, such as references, have positively impacted writing scores (Liang-Itsara, 2018). These findings underscore the necessity of mastering transitional words in research writing to enhance clarity and coherence.

Existing literature highlights students' struggles with transitional words and phrases, but it lacks a detailed analysis focusing on senior high school students' practical research output. Addressing this gap remains crucial in understanding the specific transitional words and phrases these students commonly employ. Examining their research writing offers valuable insights into the real-world application of transitional devices in academic contexts.

This research aimed to bridge the divide between theoretical knowledge and practical implementation. Previous studies identified difficulties in using transitions correctly and understanding their purpose, but few have explored their application in senior high school students' research writing. Investigating this aspect will provide a clearer picture of the transitional devices students frequently use or struggle with when producing practical research output.

Research Questions

This study explored the transitional words and phrases used by the students in their practical research output of the senior high school during the school year 2022 - 2023 at Maranding, Lala, Lanao del Norte. Specifically, it sought to answer the following questions:

1. What are the transitional words and phrases accurately used in the practical research outputs based on the following categories:
 - 1.1. conclusive;
 - 1.2. reason;
 - 1.3. elaborative;
 - 1.4. contrastive;
 - 1.5. inferential; and
 - 1.6. exemplifier?
2. What transitional words and phrases are inaccurately used in practical research outputs?
3. Based on the results, what activity sheets can be developed to enhance the least mastered transition markers?

Methodology

Research Design

This study utilized a qualitative research design to explore the usage of transitional words and phrases in Senior High School research

outputs, focusing on their accurate and inaccurate application. Through content analysis, the study systematically examined the specific transitional words used in the introduction section of these research projects, ensuring a structured evaluation of their function and effectiveness. Content analysis, as a research method, enables researchers to derive consistent and accurate conclusions from texts concerning their usage contexts (Krippendorff, 2004), making it highly suitable for this investigation. This approach aligned with the study's primary objective of identifying and analyzing the different types of transitional elements employed in students' research outputs, providing valuable insights into their writing proficiency and coherence.

Respondents

The study analyzed language data from 25 practical research outputs of senior high school students across the STEM, ABM, GAS, and HUMSS Academic Strands at North Central Mindanao College in the Division of Lanao del Norte, focusing on Chapters 1 and 5 to examine the usage of transitional words and phrases. To ensure authenticity, the scanned documents underwent a plagiarism test through Turnitin, with a 25% acceptability threshold. The research outputs contained diverse transitional words categorized under Fraser's (1999) classifications, including conclusive, reason, elaborative, contrastive, inferential, and exemplifier transitions. The selection process involved extensive pre-reading and in-depth analysis to confirm the presence of sufficient transitional words and phrases. Research outputs from multiple academic strands were selected to ensure diverse language representation, with a focus on introduction and conclusion sections where transitional words play a crucial role. The researcher served as the primary data collection tool, utilizing expertise in language analysis and qualitative techniques such as reading, categorizing, and interpreting transitional words. Practical research outputs functioned as another key instrument, particularly in analyzing students' introduction and conclusion sections. As a descriptive-qualitative study, the researcher played a central role in data collection and analysis, aligning with Croker's (2009) assertion that qualitative research facilitates direct data collection and builds upon previous studies through systematic examination and observation.

Procedure

The study began with identifying a representative sample of practical research outputs from senior high school students at North Central Mindanao College, encompassing various academic strands (STEM, ABM, GAS, and HUMSS) to ensure diverse research topics and writing styles. After selection, the study isolated and extracted only Chapter 1 (Introduction) and Chapter 5 (Conclusion) from each document, allowing a focused examination of transitional words and phrases. An initial review confirmed the presence of sufficient transitional elements before applying Fraser's (1999) categorization framework. The research systematically coded and categorized the transitions using a structured coding guide to ensure consistency. Coded data were meticulously entered into a structured digital database or spreadsheet for organization and analysis, and plagiarism checks were conducted to ensure data integrity. To enhance reliability and validity, three language experts specializing in content analysis and transitional language conducted a blind validation of a subset of the coded data, offering independent insights and feedback. After validation, qualitative data analysis techniques were employed to identify patterns, trends, and variations in the types and frequency of transitional words and phrases across different academic strands.

Data Analysis

The data preparation process involved the systematic collection, coding, and organization of research outputs, ensuring a well-structured dataset with relevant contextual information. Utilizing Fraser's (1999) framework, the study categorized transitional words and phrases into conclusive, elaborative, contrastive, inferential, and exemplifier transitions, with examples provided to clarify the classification process. The analysis then examined the frequency and distribution of these transitional elements across the introduction and conclusion sections of research outputs, identifying patterns and variations in usage across academic strands. The qualitative analysis focused on selected transitional elements, illustrating their contextual application within introduction sections through excerpts from research outputs, highlighting their role in coherence and organization. Findings from the blind validation by language experts were integrated, summarizing their input and identifying areas of agreement and discrepancies with the initial coding. The discussion further explored trends in transitional language usage across academic strands, assessing whether specific disciplines exhibited distinct preferences or frequencies in employing particular types of transitions. Finally, the study interpreted these findings to draw meaningful conclusions about the role and effectiveness of transitional words and phrases in enhancing coherence and organization in senior high school students' research output.

Results and Discussion

The Accurately Used Transitional Markers

Table 1 examines the usage and accuracy of conclusive transitional markers in senior high school research, emphasizing their role in guiding readers through final arguments. Markers like "Lastly" (7 occurrences, 100% accuracy), "Overall," and "In essence" were used accurately, effectively structuring conclusions and summarizing key points. "Hence" (6 occurrences, 100% accuracy) and "As a result" (2 occurrences, 100% accuracy) were also used effectively to indicate logical conclusions and cause-effect relationships, enhancing coherence. However, "Thus" (55.6% accuracy) and "Therefore" (70% accuracy) showed occasional inaccuracies, suggesting potential challenges in their application.

Table 1. *Accurately Used Transitional Markers in terms of Conclusive Markers*

<i>Used Conclusive Markers</i>	<i>Frequency of Occurrence</i>	<i>Accurately used</i>	<i>Percentage</i>
In essence	1	1	100.0
Overall	2	2	100.0
Lastly	7	7	100.0
Thus	9	5	55.6
Therefore	10	7	70.0
Hence	6	6	100.0
So	1	0	0.0
As a result	2	2	100.0
In conclusion	1	1	100.0
Total	39	32	82.05

Table 1 examines the usage and accuracy of conclusive transitional markers in senior high school research, emphasizing their role in guiding readers through final arguments. Markers like "Lastly" (7 occurrences, 100% accuracy), "Overall," and "In essence" were used accurately, effectively structuring conclusions and summarizing key points. "Hence" (6 occurrences, 100% accuracy) and "As a result" (2 occurrences, 100% accuracy) were also used effectively to indicate logical conclusions and cause-effect relationships, enhancing coherence. However, "Thus" (55.6% accuracy) and "Therefore" (70% accuracy) showed occasional inaccuracies, suggesting potential challenges in their application.

The findings highlight the importance of accurate transitional marker usage to ensure logical flow and cohesion in research writing. While most markers were employed correctly, the occasional misapplication of certain markers underscores the need for targeted instructional support in academic writing. These results suggest that refining the use of transitional markers can improve clarity and argumentation, enhancing the overall effectiveness of students' research outputs.

Table 2. *Accurately Used Transitional Markers in terms of Reason Markers*

<i>Used Reason Markers</i>	<i>Frequency of Occurrence</i>	<i>Accurately used</i>	<i>Percentage</i>
In light of	1	1	100.0
As a result	3	3	100.0
resulting in	2	2	100.0
because of	3	2	66.67
Consequently	1	1	100.0
Because	12	10	83.33
for this reason	1	1	100.0
for the reason	1	1	100.0
But	1	1	100.0
due to	4	3	75.0
Additionally	1	1	100.0
Moreover	2	2	100.0
Therefore	1	1	100.0
Since	5	2	40.0
so that	4	3	75.0
such that	1	1	100.0
in order to	3	2	66.67
Thus	3	0	0.0
Total	49	37	75.10

These findings indicate that students generally employ reason markers well to establish causality, contributing to the clarity and persuasiveness of their writing. However, minor inconsistencies suggest the need for further refinement. Strengthening proficiency in these transitional markers, along with elaborative markers like "and" and "moreover," can enhance the overall coherence and logical progression of students' research writing, improving their ability to communicate ideas effectively.

Table 3. *Accurately Used Transitional Markers in terms of Elaborative Markers*

<i>Used Elaborative Markers</i>	<i>Frequency of Occurrence</i>	<i>Accurately used</i>	<i>Percentage</i>
additionally	17	17	100.0
such as	8	8	100.0
first Second	2	2	100.0
Also	40	34	85.0
moreover	15	14	93.33
as a result	1	1	100.0
not only... but also...	6	6	100.0
and	1	1	100.0
in addition	12	11	91.67

as well as	8	8	100.0
furthermore	8	8	100.0
likewise	1	1	100.0
Lastly	6	4	66.67
generally	1	1	100.0
meanwhile	2	1	50.0
Next	1	1	100.0
Then	1	1	100.0
Total	50	39	78.0

Table 3 analyzes the use of elaborative markers in senior high school students' research, focusing on their frequency and accuracy. Markers like "Additionally" (17 occurrences, 100% accuracy), "Such as" (8 occurrences, 100% accuracy), and "Moreover" (15 occurrences, 93.33% accuracy) were frequently and effectively used, demonstrating strong proficiency in expanding ideas and providing examples. Other markers, including "Not only... but also..." (6 occurrences, 100% accuracy) and "In addition" (12 occurrences, 91.67% accuracy), further showcased students' ability to enhance the depth and coherence of their writing.

While most markers were used accurately, slight inconsistencies were noted with "Also" (85% accuracy) and "Lastly" (66.67% accuracy), suggesting areas for improvement in precise usage. Despite these minor issues, students generally demonstrated a strong ability to structure and elaborate on their ideas effectively. Mastery of these elaborative markers contributes to well-organized and comprehensive writing, enhancing clarity and the overall quality of research papers.

Table 4. Accurately Used Transitional Markers in terms of Contrastive markers

Used Contrastive Markers	Frequency of Occurrence	Accurately used	Percentage
On the other hand	9	6	66.67
However	35	33	94.29
rather than	1	1	100.0
Yet	1	1	100.0
But	7	7	100.0
Although	4	4	100.0
Despite	1	1	100.0
Nevertheless	2	2	100.0
Meanwhile	3	0	0.0
Conversely	1	1	100.0
Nonetheless	1	1	100.0
Total	65	57	87.69

Table 4 examines the use of contrastive markers in senior high school students' research, focusing on frequency and accuracy. "However" was the most frequent marker (35 occurrences, 94.29% accuracy), showing students' strong grasp of contrastive transitions. Markers like "But" (100% accuracy) and "Although" (100% accuracy) were consistently used correctly, demonstrating proficiency in basic contrastive transitions. Less common markers, such as "Rather than," "Yet," and "Nevertheless," were used accurately, indicating an understanding of their function despite limited frequency.

However, some inaccuracies were found, particularly with "On the other hand" (66.67% accuracy) and "Meanwhile" (0% accuracy), suggesting a need for refinement in distinguishing proper contexts for contrast. Despite these issues, the overall use of contrastive markers was strong, with students effectively presenting opposing viewpoints to improve argument clarity. Further refinement in using less frequent markers could enhance the depth and logical flow of research writing.

Table 5. Accurately Used Transitional Markers in terms of Inferential Markers

Used Inferential Markers	Frequency of Occurrence	Accurately used	Percentage
Thus	4	2	50.0
Hence	5	2	40.0
So	2	2	100.0
Consequently	3	3	100.0
Therefore	1	1	100.0
Total	15	10	66.67

Table 5 examines the use of inferential markers in senior high school students' research, focusing on frequency and accuracy. Markers such as "So," "Consequently," and "Therefore" demonstrated high accuracy, with each achieving 100%, reflecting students' strong ability to establish clear cause-and-effect relationships. "So" effectively conveyed the consequences of time constraints on academic performance, "Consequently" linked teenage dating to the increasing importance of romantic relationships, and "Therefore" marked a logical conclusion for future research directions. These findings indicate students' solid grasp of inferential markers in drawing conclusions.

However, markers like "Thus" (50% accuracy) and "Hence" (40% accuracy) were less accurately used, suggesting areas for

improvement in ensuring clarity when indicating logical consequences. The inaccuracies highlight the need for additional guidance to help students use inferential markers effectively, strengthening the logical flow and coherence of their writing. Enhancing their proficiency in inferential transitions will support more logically structured and persuasive academic discourse.

Table 6. Accurately Used Transitional Markers in terms of Exemplifier Markers

<i>Used exemplifier Markers</i>	<i>Frequency of Occurrence</i>	<i>Accurately used</i>	<i>Percentage</i>
such as	14	13	92.86
for instance	2	2	100.0
Total	16	15	93.75

Table 6 examines the use of exemplifier markers in senior high school students' research, highlighting their frequency and accuracy. The marker "such as" was used 14 times, with 13 accurate applications, indicating students' strong proficiency in integrating examples into their writing. This ability to effectively provide concrete examples, such as illustrating observational and experimental designs, enhances the clarity and persuasiveness of their arguments. "For instance," used twice with perfect accuracy, further demonstrates students' competence in reinforcing their claims with specific examples, such as explaining the academic benefits of Facebook.

The overall high accuracy rate for exemplifier markers suggests that students effectively use these transitions to clarify and strengthen their arguments. The correct application of markers like "such as" and "for instance" enhances the credibility and coherence of academic writing, ensuring that abstract concepts are grounded in concrete examples. This skill contributes to clearer communication and improves the overall quality of research writing.

The Inaccurately Used Transitional Markers

Table 7. Inaccurately Used Transitional Markers in Terms of Conclusive Markers

<i>Used Conclusive Markers</i>	<i>Frequency of Occurrence</i>	<i>Inaccurately used</i>	<i>Percentage</i>
Thus	9	4	44.44
Therefore	10	3	30.0
Total	19	7	36.84

Table 7 examines the inaccuracies in using conclusive markers, particularly "Thus" and "Therefore," in senior high school students' research writing. "Thus" appeared nine times, with four inaccuracies, often due to redundancy or awkward phrasing. For example, using "Thus" alongside another conclusive marker created unnecessary repetition, while improper placement disrupted the flow. These issues suggest that students may struggle with selecting appropriate markers, leading to a lack of logical progression in their writing. Similarly, "Therefore" was used ten times, with three inaccuracies, where its placement did not establish a clear cause-and-effect relationship, affecting the coherence of the argument.

The frequent misuse of "Thus" and "Therefore" highlights a need for improved understanding of their distinct functions. Misapplying these markers can disrupt the clarity and cohesion of conclusions, making it difficult for readers to follow the logical progression. These errors indicate that students may require additional instruction on how to apply transitional markers effectively, ensuring their writing flows smoothly and arguments are presented persuasively. Targeted support on the appropriate use of conclusive markers could significantly enhance students' ability to construct clear and coherent conclusions in their academic writing.

Table 8. Inaccurately Used Transitional Markers in terms of Reason Markers

<i>Used Reason Markers</i>	<i>Occurrence</i>	<i>Inaccurately used</i>	<i>Percentage</i>
because of	3	1	33.33
Because	12	2	16.37
due to	4	1	25.0
Since	5	3	60.0
so that	4	1	25.0
in order to	3	1	33.33
Thus	3	3	100.0
Total	34	12	35.29

Table 8 analyzes the inaccuracies in using reason markers in senior high school students' research writing. While most markers were applied correctly, some exhibited notable errors. "Because" was generally used accurately, though occasional misapplications suggest that students need to strengthen the logical connections between their reasoning. Similarly, markers like "Due to," "So that," and "In order to" showed a high rate of accuracy, with minimal errors. However, "Since" presented a greater challenge, as students often confused its temporal and causal meanings, resulting in unclear reasoning. These inaccuracies can disrupt the logical flow of arguments, affecting overall coherence.

A major issue was observed with "Thus," which was consistently misused, indicating a lack of understanding of its function as a conclusive marker. In several cases, students incorrectly applied "Thus" as a reason marker, leading to ambiguity. This suggests a need for targeted instruction to help students better understand how different markers contribute to logical progression in writing. Improving students' proficiency in these transitions could enhance their ability to create well-structured explanations and conclusions, thereby

improving the clarity and persuasiveness of their research writing.

Table 9. Inaccurately Used Transitional Markers in terms of Elaborative Markers

<i>Used Elaborative Markers</i>	<i>Frequency of Occurrence</i>	<i>Inaccurately used</i>	<i>Percentage</i>
Also	40	6	15.0
Moreover	15	1	6.67
In addition	12	1	8.33
Lastly	6	2	33.33
Meanwhile	2	1	50.0
Total	75	11	14.67

Table 9 examines the use of elaborative markers in senior high school students' research writing, focusing on both frequency and inaccuracies. "Also" was the most frequently used marker, appearing 40 times, with 15% of its applications being inaccurate. This suggests that while students understand its role in adding information, they sometimes misuse it, often leading to redundancy and a lack of clarity. Similarly, markers like "Moreover" and "In addition" showed occasional misuse, pointing to a need for stronger logical connections between ideas to maintain coherence.

The markers "Lastly" and "Meanwhile" exhibited higher inaccuracy rates, with 33.33% and 50% of their instances being incorrect. Misuses of "Lastly" often resulted in redundancy, while "Meanwhile" was sometimes applied incorrectly, blurring its elaborative or temporal function. These patterns suggest that students may benefit from further instruction on how to use transitional markers effectively, ensuring clear and cohesive connections between ideas in their writing. Strengthening their understanding of these markers could enhance the overall structure and clarity of their academic work.

Table 10. Inaccurately Used Transitional Markers in terms of Contrastive Markers

<i>Used Contrastive Markers</i>	<i>Frequency of Occurrence</i>	<i>Inaccurately used</i>	<i>Percentage</i>
On the other hand	9	3	33.33
However	35	2	5.71
Meanwhile	3	3	100.0
Total	47	8	17.02

Table 10 analyzes the use of contrastive markers in senior high school students' research writing, focusing on both frequency and inaccuracies. "On the other hand" appeared nine times, with three instances of misuse, suggesting confusion about its role in introducing contrasting viewpoints. This often disrupted the flow of ideas by presenting unrelated points instead of maintaining a clear contrast. Similarly, "Meanwhile" was used three times, all inaccurately, demonstrating significant misunderstanding of its function, which led to a breakdown in coherence.

Although "However" was mostly used correctly, two inaccuracies indicate occasional lapses in clarity when establishing contrast. These errors highlight that even familiar markers can be misapplied, affecting the logical progression of ideas. Overall, the findings suggest that while students generally understand the function of contrastive markers, they need more guidance to ensure their correct usage, helping to maintain coherence and logical relationships between ideas in their writing.

Table 11. Inaccurately Used Transitional Markers in terms of Inferential Markers

<i>Used Inferential Markers</i>	<i>Frequency of Occurrence</i>	<i>Inaccurately used</i>	<i>Percentage</i>
Thus	4	2	50.0
Hence	5	3	60.0
Total	9	5	55.5

Table 11 examines the use of inferential markers in senior high school students' research writing, revealing challenges in their correct application. "Thus" was used four times, with a 50% inaccuracy rate, indicating difficulty in establishing clear logical connections. The misuse often resulted in unclear cause-and-effect relationships, suggesting that students struggle with effectively signaling inferences in their writing. This highlights a need for more focused instruction on using inferential markers to strengthen the coherence and clarity of their arguments.

Similarly, "Hence" was used five times, with a 60% inaccuracy rate, indicating an even greater challenge in conveying logical conclusions. Misuse of this marker often weakened the connection between cause and effect, making the overall argument less structured. These findings suggest that targeted instruction is essential to help students improve their use of inferential markers, ensuring that their writing maintains clear reasoning and logical progression.

Table 12. Inaccurately Used Transitional Markers in terms of Exemplifier Markers

<i>Used exemplifier Markers</i>	<i>Frequency of Occurrence</i>	<i>Inaccurately Used</i>	<i>Percentage</i>
such as	14	1	7.14
Total	14	1	7.14

Table 12 analyzes the use of exemplifier markers in senior high school students' research outputs, revealing minimal inaccuracies. The marker "such as" was used 14 times, with only one instance of incorrect usage, resulting in a 7.14% inaccuracy rate. This suggests that

students generally have a strong understanding of its function in providing examples, though occasional misapplications do occur.

The isolated misuse of "such as" highlights a minor challenge in distinguishing when to use it for illustration versus clarification. While the overall accuracy is high, further refining students' understanding of exemplifier markers could enhance clarity and improve the effectiveness of their writing.

Conclusions

The study reveals a mixed proficiency landscape among senior high school students in using transitional markers in their academic writing. While students demonstrate competence with simple markers like "Lastly" and "Because," they face challenges with more complex markers such as "Thus" and "Therefore." The underutilization of markers like "So" suggests hesitation, possibly due to concerns over formality. The study emphasizes the importance of mastering these markers to ensure logical progression and coherence in research papers. However, the results also highlight a risk posed by artificial intelligence, which could affect the authenticity of students' research outputs, particularly in maintaining logical flow and persuasiveness.

To address these challenges, the study recommends that research advisers provide clear guidance and feedback, integrate transitional marker lessons into the curriculum, and emphasize the importance of authenticity in academic work. Furthermore, teachers should offer practical exercises and constructive feedback to help students improve their usage of transitional markers. Students are encouraged to practice independently and seek peer and teacher feedback, while future research should explore the potential impact of AI on academic integrity. Language experts are also urged to develop training and resources to support the effective teaching of transitional markers in writing.

References

- Alsaraireh, M. Y., & Suryani, I. (2020). Examining language use in higher education research. *Science International (Lahore)*, 32(5), 561-566. doi: 10.1013/5316; CODEN: SINTE 8.
- Anwar, M., Ahad, M., Anwar, C., Asaad, H., Hasan, M., & Omanee, B. (2022). Correlation and Prediction of Students' Level of Reading Comprehension through Their Perception of the Application of Transition Words. *Education Research International*, 2022, 1-9. <https://doi.org/10.1155/2022/2082982>
- Ariyanti, A. (2021). EFL Students' Use of Transition Signals in Essay Writing. *Indonesian Journal of EFL and Linguistics*. 6. 285. 10.21462/ijefl.v6i1.390.
- Assous, M. (2023). A contrastive study of the use of discourse markers by English learners and native speakers. *International Journal of Education and Information Technologies*. <https://doi.org/10.46300/9109.2023.17.1>
- Giddi, E., Kpeglo, S. B., & Fosu, J. (2022). Examining the challenges experienced by trainee teachers in the use of transitional devices to achieve cohesion in writing in St. Francis and St. Teresa's Colleges of Education, Ghana. *Research Journal in Advanced Social Sciences*, 3(1). <https://royalliteglobal.com/rjass/article/view/735>
- Hama, Farhad. (2021). An Investigation into the Difficulties of Using Transitional Words in Kurdish EFL Students' Writing at the University Level. *UKH Journal of Social Sciences*. 5. 107-117. 10.25079/ukhjss.v5n1y2021.pp107-117.
- Hassoon, F. K. (2019). An Investigation of EFL Under Graduate Students' Achievements in Identifying and Using Transitional Expressions.
- Khadafi, M. (2021). An Analysis of Linking Words on Students' Thesis of the 59th Graduation at English Education Study Program of STKIP PGRI Sumatera Barat. *Horizon*, 1, 83-90. <https://doi.org/10.22202/horizon.v1i1.4699>
- Liang-Itsara, A. (2018). Cohesive Devices and Academic Writing Quality of Thai Undergraduate Students. *Journal of*
- Lumbangaol, R. (2022). The using of linking words to enhance students' writing ability at Universitas Potensi Utama. *Journal MELT (Medium for English Language Teaching)*, 7(1), 1-13. <https://doi.org/10.22303/melt.7.1.2022.01-13>
- Mackiewicz, J. and Thompson, I., 2018. Talk about writing: The tutoring strategies of experienced writing center tutors. Routledge.
- Mahendra, M. W., & Dewi, N. P. R. P. (2017). The Use of Transition Signals in Efl Academic Writing Context: A Corpus Study. *IAIN Tulungagung Research Collections*, 9(1), 87-100
- Poudel, A. P. (2018). Academic Writing: Coherence and Cohesion in Paragraph. *Journal of Education and Practice*, 9(1), 23-29.
- Rahmawati, I. N., Syafradin, S., & Widiastuti, R. (2019). Teaching narrative writing using freaky fables game: An experimentation. *English Education: Jurnal Tadris Bahasa Inggris*, 12(2), 147-155.
- Rezeki, Y. S. (2018). Analysis of EFL students' citation practices and problems in academic writing. *International Journal of Educational Best Practices*, 2(1), 62-72. <https://doi.org/10.31258/ijebp.v2n1.p62-72ra>
- Yasto, A. A. (2022). Senior high school students' common errors in practical research 1 in the schools division of Laguna. *EPRA*



International Journal of Multidisciplinary Research, 8(11), 187-198. Retrieved from <http://eprajournals.net/index.php/IJMR/article/view/1129>

Yousuf Ahmed, F. E. (2019). Errors of Unity and Coherence in Saudi Arabian EFL University Students' Written Paragraph: A Case Study of College of Science & Arts, Tanumah, King Khalid University, Kingdom of Saudi Arabia. *European Journal of English Language Teaching*, [S.l.], feb. 2019. ISSN 25017136. <https://oapub.org/edu/index.php/ejel/article/view/2281>. doi:10.46827/ejel.v0i0.2281

Yuvayapan, F. & Bilginer, H. (2020). Identifying the needs of postgraduate students: The firststep of academic writing courses. *Journal of Language and Linguistic Studies*, 16(2),595-611. <https://doi.org/10.17263/jlls.759260>

Affiliations and Corresponding Information

Mark Anthony Y. Rodriguez

Lala Proper Integrated School

Department of Education – Philippines