# STUDENTS' BEHAVIORAL ENGAGEMENT AND OVERRELIANCE ON GRAMMARLY FEEDBACK: A NARRATIVE INQUIRY

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**Abstract:** Grammarly is a platform that enables automated feedback, such as paraphrasing, improving sentence structure, and grammar checking, to help students produce more accurate writing. Despite its usefulness, concerns exist about its potential to cause overreliance, especially among long-term users. However, limited research has examined how upper-intermediate students behaviorally engage with Grammarly. This study addresses the gap by exploring students' behavioral engagement and examining whether it serves as a helpful tool or a source of overreliance. Using qualitative methods with a narrative inquiry design to collect responses, data were collected through in-depth interviews with three purposely selected participants who used Grammarly in the long term and were enrolled in an Advanced Writing class from Mulawarman University. Thematic analysis was used to identify themes by coding and comparing participants' narratives. This study found that students accepted feedback on clarity, grammar, and spelling, but often rejected unclear feedback. Their revision strategies involved several other platforms. Despite its benefits, students felt unsure about submitting their assignments without Grammarly checking, which indicates overreliance. This study highlights the need for students and educators to critically use Grammarly as a platform or a helpful tool to foster teaching effectiveness and the development of students' independent writing skills.

**Keywords:** *Behavioral engagement; automated feedback; English writing; higher education; revision strategies*

## INTRODUCTION

Grammarly is a platform that consists of several functions, including grammar checking and paraphrasing, to help its users generate accurate and effective writing. In general, a platform is a software-based digital system that facilitates interactions and supports multiple functions for users (De Reuver et al., 2018). As a platform, Grammarly performs one of its main functions by providing real-time feedback on users' writing, particularly on minor issues such as grammar, mechanics, vocabulary, style, and syntax (Barrot, 2021). Grammarly also becomes a tool to help users understand grammar rules intensively, improve writing skills, and provide more accurate feedback from technology than humans in the writing process (Yousofi, 2022; Barrot, 2021). Thus, they can be aware of the errors they make in lower-order concerns and learn from them, especially for students in higher education.

Previous studies consistently emphasize Grammarly's role in improving grammatical accuracy and writing fluency (Faisal & Carabella, 2023; Yousofi, 2022). For undergraduate students, the features of Grammarly are particularly beneficial in completing writing assignments such as essays, papers, summaries, etc. According to Faisal and Carabella (2023), Grammarly offers suggestions for alternative word choices and serves as an automatic grammar checker. Grammarly could enhance students' confidence in writing, especially in the academic field, because the tool was able to make them understand Grammar rules. Yousofi (2022) stated that Grammarly has advantages that help students with intermediate and advanced levels identify their errors, improve their writing style, and improve their spelling accuracy. The findings of that research indicate that Grammarly's effectiveness is consistent with writing skills and grammatical awareness in an academic context. However, too much use of

Grammarly can cause reliance or addiction for the users (Yousofi, 2022). Students can become overly reliant on Grammarly during the process of doing English writing assignments and slowly lose confidence in their own knowledge. Hence, students who engage with Grammarly can have concerns about making mistakes, leading them to be hesitant to submit assignments without being checked by Grammarly first.

The concern of overreliance on the feedback feature of Grammarly is supported by several studies on student engagement, which found that Grammarly can lead to overreliance, especially for students with levels under the advanced (Ebadi et al., 2023; Koltovskaia, 2020; Yousofi, 2022). The behavior of students who are reliant on Grammarly usually involves just accepting all the feedback provided by the tool (Koltovskaia, 2020). This pattern of reliance aligns with behavioral engagement, which refers to students' responses and actions after receiving feedback. Robbins (1995) highlights behavioral engagement in the context of corrective feedback (CF), which can be observed through how students respond to and utilize the feedback they receive. Furthermore, according to Zhang and Hyland (2018), behavioral engagement encompasses students' actions in response to feedback, such as their revision efforts and the time spent on revision.

There are several types of reactions that can be observed when students engage behaviorally in the writing process. Koltovskaia (2020) specified that the concerns of behavioral engagement consist of revision operations, such as actual revisions, revision strategies to improve draft accuracy, and time spent during the revision process. Koltovskaia (2020) revealed that the concern of behavioral engagements for actual revisions has three types, which are accepting the feedback as provided, rejecting it, or substituting it with a self-generated correction that is based on personal judgment. Moreover, Koltovskaia (2020)

identified various students' revision strategies, including consulting external resources, prioritizing easier corrections, and verifying feedback accuracy, the time spent on revision reflects behavioral engagement with Grammarly. From here, it can be seen that engagement is not only measured by how much students receive feedback, but also by the extent to which they process, select, and adjust the feedback to their own knowledge. Insights from previous studies provide a foundation for analyzing how students engage behaviorally with Grammarly when doing English writing assignments.

While these frameworks help conceptualize engagement, recent concerns have emerged regarding students' excessive reliance on Grammarly feedback and accepting it without critical evaluation. It reveals that Grammarly can be a source of overreliance. Yousofi (2022) shows students' dependency on Grammarly, where they rely more on automated corrections rather than developing their own writing skills. Furthermore, Campbell et al., (2007) explain that overdependence occurs when users stop treating technology as a tool and instead rely on it uncritically. Meanwhile, Eisenberg and McDonnell (2003) define overreliance as inefficient dependence, where individuals disregard the risk of failure and assume the system is always correct. In the context of Grammarly, this can lead students to accept corrections without critically evaluating or questioning the accuracy of the feedback. Moreover, according to Birtchnell (1988), dependence or reliance refers to a condition in which a person relies excessively on external sources for validation, guidance, and affirmation, relating to a lack of self-confidence and being unable to trust their own abilities. Thus, students potentially use Grammarly as a source of overreliance if they rely too much on it until they slowly lose confidence in their writing skills.

Related to engagement and overreliance, there are only a few studies that focus on student engagement with

Grammarly, which includes behavioral, cognitive, and affective (Koltovskaia, 2020), but there is no research that focuses on student behavioral engagement with Grammarly on revealing how it becomes a helpful tool or a source of overreliance. Many previous studies have focused on students' perceptions of the benefits and drawbacks of Grammarly, especially as a tool that can help the writing process (Fitria et al., 2022; Inayah & Apoko, 2024; O'Neill & Russell, 2019; Putri et al., 2024; Yurika et al., 2023), but only a few studies have discussed the long-term usefulness of Grammarly, which can cause dependency, especially for students working on English Writing assignments (Yousofi, 2022). Therefore, to fill this gap, the purpose of this study is to investigate students' behavioral engagement with Grammarly to determine whether they utilize Grammarly as a helpful tool or even as a source of overreliance. The study attempted to answer the following research questions:

1. How do students behaviorally engage with Grammarly feedback in their English writing assignments?
2. How do students perceive Grammarly as a helpful tool or source of overreliance in their English writing assignments?

## METHOD
### *Research Design*
This research employed a qualitative method with narrative inquiry as a design to explore more deeply how students engage behaviorally with Grammarly in completing English Writing assignments. Narrative inquiry was considered appropriate because a deeper understanding of the experiences and opinions that participants have of their interactions with Grammarly could be gained. Therefore, narrative inquiry helped answer the research questions by capturing detailed stories about participants' engagement with Grammarly.
### *Participants*
The study involved three participants from

the English Education Study Program of Mulawarman University, Willa, Andreas, and Sarah (pseudonyms), who were selected by purposive sampling based on a screening questionnaire. The criteria were the students who have used the free version of Grammarly for one year or more for English writing assignments, feel confident to submit assignments after being checked by Grammarly, prefer to check their writing with Grammarly before submitting it to lecturers, have passed the upper-intermediate writing class, and were enrolled in the advanced writing class. The study focuses on upper-intermediate transitioning to advanced-level students because they represent a transition stage where writing skills are expected to be more developed.

The participants were considered suitable for achieving the research objectives because they had extensive experience using Grammarly in academic writing. They were at a level of proficiency where they actively used automated feedback tools for English writing assignments, especially when completing semester projects that required them to read, note, paraphrase, and summarize several academic articles. Their insights could provide a deep understanding of how long-term use of Grammarly affects student behavioral engagement in writing assignments. In addition, all participants agreed to be interviewed only for research needs. They were given a consent letter with the consideration that their identities would be protected through the use of pseudonyms. Therefore, all data collected could only be used for research purposes.
### *Instruments*
The instrument used in this study was an interview guide, as in-depth interviews were conducted to allow participants to share their personal experiences and detailed stories about how they engaged behaviorally with Grammarly. The interview guide consisted of seven questions with follow-up questions prepared to explore the participants' engagement with Grammarly during their

writing process, how they accepted, rejected, or substituted feedback with self-generated corrections, as well as to find out how Grammarly could affect the participants' confidence.

### Data Collection

Data was collected through in-depth interviews that were conducted online and individually via Google Meet due to geographical distance. Each interview lasted fifteen to thirty minutes and was audio recorded with the participants' permission. The data collection process involved several steps, including identifying interesting phenomena, selecting participants based on criteria with a screening questionnaire, conducting interviews, transcribing the recordings using TurboScribe, and checking them manually before being used as data for analysis.

### Data Analysis

Data analysis used thematic analysis following the steps outlined by Creswell and Creswell (2018). The first step was to prepare the interview transcripts and review them to ensure they were complete. After that, the transcripts were read several times in their entirety to gain a deep understanding. The next step was coding, in which important statements related to behavioral engagement were identified, categorized, and analyzed to examine patterns and relationships that generated several themes, starting from actual revisions, revision strategies, and time spent on writing. Through this process, two additional themes emerged, which were Grammarly as *a helpful tool* or *a source of overreliance*. All of the themes were used to organize the findings section, which was presented thematically with supporting excerpts from the participants' interview responses. Once everything was complete, the final report was written, and the data were interpreted in relation to the research objectives.

### Trustworthiness

To ensure the validity of this study, triangulation was applied by comparing participants' statements with relevant theory or previous research on behavioral engagement and Grammarly use as a helpful tool or source of overreliance. In addition, to ensure the reliability of the findings, peer debriefing was conducted with the research supervisor.

## RESULTS AND DISCUSSION

This section answers the first and second research questions based on the analysis of the interview responses from the three participants. This research aims to reveal students' behavioral engagement with Grammarly feedback that can be a helpful tool or even a source of overreliance.

### Students' Behavioral Engagement with Grammarly Feedback

This part aims to answer the first research question, which focuses on revealing the results of thematic analysis on an interview to find out how students engage behaviorally with Grammarly in their writing assignments. Students' behavioral engagement with Grammarly feedback consists of three, which are actual revisions, revision strategies, and time spent (Koltovskaia, 2020; Zhang & Hyland, 2018). Therefore, the findings describe these three things.

### Actual Revisions: Accepting, Rejecting, Substituting Feedback with Self-Generated Corrections

One aspect of behavioral engagement is how students respond to feedback given through their revision actions. Actual revisions consist of three types, which are accepting, rejecting, and substituting the feedback with a self-generated correction (Koltovskaia, 2020). ***Accepting*** means that participants accept the corrections or feedback provided by Grammarly. Two of the three participants had the same type of feedback that they received.

> Excerpt 1:
> *"For accepting feedback are usually like grammar checks ... and then there's ... it said 'subtract word'. It's like reducing the word so it's not too much. Then,*

*there's something like 'improving clarity', so the words are usually changed by Grammarly to make them more suitable." (Willa, lines 86-89)*

From the answer, Willa intended to convey that what she usually accepted were grammar errors checked by Grammarly. Furthermore, the type of feedback she mentioned as *"subtract word"* referred to Grammarly's feedback on wordy writing results, allowing the words in a sentence to be reduced until they become more effective. Moreover, the type of feedback she received as *"improving clarity"* meant that Grammarly gave feedback on the words in her writing to make them clearer and more suitable for the sentences she wrote. All the feedback received by Willa is the same as the feedback received by Andreas. In contrast, Sarah accepted more feedback on spelling.

Excerpt 2:
*"But the ones I accepted were more like typos. Well, that's usually a lot. I accept it if it's a typo." (Sarah, lines 119-121).*

Sarah, as the third participant, has a different pattern of accepting feedback. She stated that she often accepted typos because she found many typos in her writing, which means that she received Grammarly's type of feedback on spelling more frequently.

Among all those described by the participants, the results show that the types of feedback accepted were feedback related to grammar errors, subtracting words or improving the clarity of sentences, and spelling. This is similar to a study by Fitria et al. (2022) Grammarly can help participants know writing issues in terms of language use, vocabulary usage, and mechanics. This finding is also consistent with Zhang (2020), in which the participants accept the feedback related to error corrections at the micro level, such as grammar and spelling.

In addition to accepting Grammarly's feedback, participants could also ***reject*** the feedback provided. ***Rejecting*** means not accepting the feedback provided by Grammarly by clicking on the *"Dismiss"*

feature. In this research, Willa and Andreas often reject the same type of feedback.

Excerpt 3:
*"Usually the line is yellow, which tells me to paraphrase or change the wording. Then, I read it and I thought, 'Ah, I don't understand this,' ... so I chose 'Dismiss'." (Willa, lines 100-105)*

Willa stated that she often rejected Grammarly feedback that appeared on sentences with a yellow underline, which asked her to paraphrase or change the wording. If the feedback did not match her knowledge, she would choose the *"Dismiss"* feature from Grammarly to reject it. Besides Willa, Sarah often rejected feedback from Grammarly in the form of inappropriate punctuation and grammar feedback.

Excerpt 4:
*"The ones that I often reject are those... the punctuation, then also singular plural. Then there are also quotation marks when talking directly. I reject several of them because they're not appropriate. There is also feedback that doesn't match the tenses." (Sarah, lines 114-121)*

Sarah stated that she often rejected punctuation, such as quotation marks, and grammar errors, such as singular and plural, as well as feedback from Grammarly that did not correspond to the tenses in her writing.

Based on the data, feedback often rejected by participants is feedback with a yellow underline that requires paraphrasing, punctuation, including quotation marks, and grammar errors, such as singular, plural, or incorrect tenses. Additionally, if the feedback is incomprehensible or inappropriate, the participants will reject it. This finding is consistent with Koltovskaia (2020), who found that students could reject Grammarly feedback when they considered it inappropriate or incomprehensible.

Moreover, moving from accepting and rejecting feedback, most of the students chose to ***substitute the feedback*** provided by Grammarly ***with self-generated corrections***

51

because they felt that some feedback was in line with their thoughts, and some were not.

Excerpt 5:
*"I would substitute more also, Sis, because maybe I might see, sometimes it's already clear that from our own grammar, we might feel like, 'I think this is the right one'." (Andreas, lines 63-67)*

Andreas stated that he preferred to substitute Grammarly feedback with his own knowledge. He also has the type of feedback that was often substituted and corrected.

Excerpt 6:
*"It's more about the word choices, Sis. Sometimes there are some words that we are not familiar with. Well, we try to make a sentence into a more familiar word, which may depend on the context." (Andreas, lines 76-84)*

Andreas mentioned that the type of feedback he often received was word choices, which he thought were not unfamiliar and improved the sentences, depending on the context, to make them understandable. This was similar to Sarah, who also said the same as him.

Excerpt 7:
*"For me, it's more about substituting, because sometimes there are also some words, for example … the word from the Javanese language that can't be translated …. Well, sometimes Grammarly can't read it. It appears with a red underline. So, I usually substitute it with my knowledge first and add italics to the word." (Sarah, lines 81-92).*

Sarah revealed that she substituted feedback with her own knowledge when dealing with language that Grammarly could not detect. After that, she made the word with the red underlined into italics. Similar to Sarah, Willa also used italics in foreign languages that Grammarly did not detect.

Excerpt 8:
*"Sometimes, if Grammarly detects foreign languages, it must appear with a red underline, Sis … I made it to be italic so it won't be detected by Grammarly." (Willa, lines 105-109)*

From Willa's statement, it is found that Grammarly's feedback on foreign languages will appear with a red line, and it can be solved by making the foreign word italic, so Grammarly cannot detect it anymore.

As a result, all of the participants substituted Grammarly feedback with self-generated corrections, including feedback that focused on word choices to make it easier to understand, and adjusted feedback for regional or foreign language words with italics. They can substitute the feedback given to make the result appropriate to their knowledge and readable. This finding is in line with Ranalli (2021), who found that students selectively accept feedback or substitute it based on their own evaluation and the level of trust in the automated system. All of the actual revisions from the participants can be seen in Table 1 below.

Table 1. *Types of Feedback (Accepted, Rejected, or Substituted)*

| Participant | Accepted Feedback | Rejected Feedback | Substituted Feedback with Self-generated Corrections |
|---|---|---|---|
| **Willa** | Grammar errors, wordy sentences, or "subtract word," and improving clarity | Paraphrasing or wording suggestions *(yellow underline)* | Substituted unfamiliar or foreign words by using *italics.* |
| **Andreas** | Grammar errors and improving clarity | Paraphrasing or wording suggestions *(yellow underline)* | Substituted word choices with more familiar ones based on context. |

| **Sarah** | Spelling (typos) | Punctuation, singular/plural words, and tense feedback | Substituted Javanese or local terms with *italics* and self-generated wording. |
|---|---|---|---|

Based on Table 1, the three participants showed different ways of responding to Grammarly feedback. Willa and Andreas accepted feedback related to clarity and grammar, while Sarah accepted many spelling corrections. However, all participants tended to reject feedback that they did not understand or that was inappropriate, such as Willa and Andreas rejecting paraphrasing or wording that they did not understand, and Sarah rejecting inappropriate punctuation or tenses. In addition, all participants more often substituted feedback that was in line with their knowledge, as Andreas did when he substituted more familiar word choices based on his knowledge and context. Interestingly, both Willa and Sarah used italics as a strategy to prevent Grammarly from detecting foreign words or regional languages, which shows their awareness of the platform's shortcomings. The way each of the participants substituted words indicates that they were actively and selectively engaged with Grammarly's feedback, although they evaluated and modified it in different ways. This is in line with Yousofi (2022), who states that Grammarly has the benefit of helping students identify errors, improve their writing style, and improve their spelling accuracy.

### Revision Strategies

The revision strategies of the participants' English writing assignments were quite varied. Koltovskaia (2020) revealed various student revision strategies, including consulting external resources or websites, prioritizing easier corrections, and verifying the accuracy of feedback. Starting with Willa, she made revisions based on the feedback that she thought was most important, then compared them with other websites.

Excerpt 9:

*"Maybe I'm more likely to correct the important things first ... like articles. Then, after that, I still try other websites, like ChatGPT or Quillbot. I check the feedback again to see which one is more suitable. So, for example, if Quillbot feedback is more suitable, then I prefer Quillbot over Grammarly." (Willa, lines 132-139)*

Willa could correct the most important things in the feedback first, usually related to grammar errors, such as articles. Then, she would compare the Grammarly feedback with other websites. This strategy is similar to what Andreas did.

Excerpt 10:

*"I double-check Grammarly, then I try to compare it with other websites that are similar to Grammarly ... like Quillbot ... Paraphraser.io. I can also use them as my reference." (Andreas, lines 98-104)*

Andreas stated that he also compared feedback results from websites other than Grammarly as a reference in the revision process. Similarly, Sarah also revealed that her revision strategy after receiving feedback from Grammarly was that she would use another website for adjustments. However, before that, she also had a different process from the other participants.

Excerpt 11:

*"For writing assignments, I usually write in Indonesian first and then translate it into English manually ... Grammarly automatically gives feedback with the red and blue underlines ... I adjusted it to my knowledge of grammar .... After that, I take it to DeepL, to be personalized and finalized ... I return to Microsoft Word, then there is Grammarly again to check whether it is correct or there are no more typos or not." (Sarah, lines 165-183).*

Sarah stated that she usually used the strategy of writing in her first language, then translating it into her second language,

53

checking on Grammarly to get feedback, improving wording using DeepL, and checking Grammarly again as the final step.

In conclusion, all participants in this study had different revision strategies for English writing assignments after receiving feedback from Grammarly. One person revised based on the easiest feedback provided by Grammarly. Then, all participants admitted that they compared the Grammarly feedback results with the support of other websites, such as Quillbot, Paraphraser.io, or DeepL, for adjustments. This is in line with Koltovskaia (2020), who found that the participant consulted the internet or external resources to verify the accuracy of the Grammarly feedback given. Furthermore, one other participant had a

revision strategy starting with writing it in the first language, translating it manually into the second language, using Grammarly to do corrections, using DeepL as a preference, and finally going back to using Grammarly in Microsoft Word. This is similar to Guo and Huang (2020), who found that the participants had individual strategies in the writing process, such as using their first language to organize ideas and then translating the text from the first language to the second language. Students' use of their first language to write in the second language can serve the purpose of elaborating ideas and covering linguistic deficiencies (Kim & Yoon, 2014). All the participants' strategies can be seen in Table 2 below.

Table 2. *Revision Strategies Across Participants*

| Participant | Revision Strategies |
|---|---|
| Willa | Prioritized important feedback, such as articles, and then tried to verify the feedback on other websites like Chat GPT or Quillbot. |
| Andreas | Compared Grammarly feedback with other platforms, such as Quillbot or Paraphraser.io, for verification. |
| Sarah | Drafted in Indonesian, translated manually in English, checked Grammarly, improved with DeepL, and final check with Grammarly again. |

Table 2 shows that all participants used multiple platforms to refine and verify Grammarly feedback, reflecting their critical engagement with the automated feedback platform. Willa and Andreas showed similar behavior by checking other platforms for additional information, comparing it with Grammarly, and selecting the most appropriate results. In contrast, Sarah used a more complex strategy by translating from L1 to English, then integrating manual feedback from herself and automated feedback from Grammarly, which was personalized and then finalized. The variety of strategies shows that each student's revision strategy varies according to their knowledge, linguistic background, confidence, and writing skills.

***Time Spent***

Time spent is much time students spend on English writing assignments using Grammarly. According to Zhang and Hyland (2018) and Koltovskaia (2020), a lot of time spent can also reflect behavioral engagement with Grammarly. In this study, most participants could spend five to fifteen minutes in the revision process after receiving feedback from Grammarly.

Excerpt 12:
*"For that, it's probably about five to ten minutes." (Willa, lines 213-215)*
Willa meant that revising could take five to ten minutes. Furthermore, Sarah spent more time than Willa.

Excerpt 13:
*"To revise feedback from Grammarly, sometimes it doesn't take too long. The most we can do is around ten or fifteen minutes." (Sarah, lines 151-155)*

Sarah stated that the time taken to revise the writing based on the feedback from Grammarly ranged from ten or fifteen minutes. However, Andreas' statement was different from the two participants.

Excerpt 14:
*"It can be around 2 hours from me personally." (Andreas, lines 124)*

Andreas spent more time than Willa and Sarah. He admitted that revising an assignment with the help of Grammarly feedback could take two hours. With all the variations in time, the duration of time spent by participants can be seen in Table 3 below.

Table 3. *Time Spent on Revision*

| Participant | Estimated Time Spent | Reason |
|---|---|---|
| Willa | 5–10 minutes | Revised simple feedback, just to click to accept or reject. |
| Sarah | 10–15 minutes | Matched Grammarly feedback with her grammar knowledge. |
| Andreas | Around 2 hours | Double-checked across multiple sites, such as Quillbot or Paraphraser.io, and made context-based revisions. |

Based on Table 3, the participants had different time spent during the revision process of English writing assignments. Some spent five to ten minutes, ten to fifteen minutes, and two hours. Willa spent a shorter time, from five to ten minutes, especially for Grammarly's feedback on errors that only needed to be clicked to accept or reject. Meanwhile, Sarah spent ten to fifteen minutes because she only needed to match Grammarly's feedback with her own knowledge. The time spent from five to fifteen minutes is similar to Koltovskaia's (2020) research, where the participants spent more than five minutes in the revision process after getting feedback from Grammarly. On the other hand, Andreas spent two hours double-checking and comparing feedback on three websites, such as Grammarly, Quillbot, and Paraphraser.io. This is not in line with several studies showing that the time spent on revision is more than five minutes to thirty minutes (Koltovskaia, 2020; Setyani et al., 2023; Zhang & Hyland, 2018), because Andreas needs to substitute Grammarly's feedback with his knowledge, compare it with some similar websites, and choose words that are familiar to him and appropriate for the assignment, which may depend on the context.

**Grammarly as a Helpful Tool or a Source of Overreliance**
This section is focused on answering the second research question. To begin with, the use of Grammarly in the process of doing English Writing assignments can be two things which are a helpful tool or a source of overreliance. Furthermore, long-term overuse of Grammarly can lead to dependence (Yousofi, 2022). Therefore, this study aims to find whether the use of Grammarly can be a helpful tool or a source of overreliance.

*Grammarly as a Helpful Tool*
Two participants stated that they found Grammarly to be a helpful tool that could help correct minor errors in the process of working on their English Writing assignments.

Excerpt 15:
*"In my opinion, it's a more helpful tool ... especially when I'm really tired, there will be typos or any other kinds ... so I check using Grammarly to avoid errors, silly errors like that." (Willa, lines 154-160)*

According to Willa, Grammarly was a helpful tool to help her find minor errors, such as typos, while working on assignments. Similarly, Andreas also found Grammarly as a helpful tool.

Excerpt 16:
*"From my perspective, it's more about being helpful, Sis ... because there is no way I can get the grammar right, but with Grammarly ... my words that may not be right can be corrected by Grammarly." (Andreas, lines 153-165)*

Andreas revealed that in the process of writing, his grammar could be wrong, making it possible for Grammarly to correct his words. He also mentioned that Grammarly was useful for helping him with various assignments.

Excerpt 17:
*"There are certainly article assignments ... summarizing, noting, and so on. Well, that's definitely Grammarly involved there, Sis. Maybe for paraphrasing, there are grammar errors, well, I use Grammarly as a medium, maybe for learning." (Andreas, lines 36-42)*

Andreas used Grammarly as a tool to do article-related assignments, such as summarizing, noting, and paraphrasing. Then, he also used Grammarly feedback as a learning medium to improve his grammar knowledge.

Therefore, both of them stated that Grammarly has a role as a helpful tool in helping them with English writing assignments, especially in correcting spelling and grammar errors to improve writing accuracy. This is in line with Barrot (2021), who found that Grammarly can improve writing accuracy because it can provide direct corrections and metalinguistic explanations of the feedback. The availability of metalinguistic explanations in Grammarly helps Andreas learn to understand grammar. In addition, the participants also revealed that Grammarly helped in the process of completing English writing assignments, which aligns with Li et al. (2023). Grammarly feedback was also found useful for tasks related to academic writing, such as summarizing, noting, and paraphrasing. This is in line with the findings of Lazic et al. (2020), who found Grammarly could assist with these types of assignments.

### Grammarly as a Source of Overreliance

Grammarly can be a helpful tool, but prolonged use of Grammarly can also cause users to become dependent on it. According to Yousofi (2022), overuse of Grammarly can make users overly reliant on it. In addition, in this study, one participant admitted to being reliant on using Grammarly.

Excerpt 18:
*"For me, honestly, personally, this is overreliance, because for a few days, my Grammarly had an error ... because of that, I already panicked at first ... so it's like I must have Grammarly. If it's not checked by Grammarly, I don't feel confident in my writing ... especially since typos are the most fatal mistake in writing assignments. So, I lack confidence if I don't use Grammarly." (Sarah, lines 194-211)*

Sarah revealed that Grammarly has become a source of overreliance for her. If Grammarly did not work, she panicked and felt that she needed to use Grammarly. She felt insecure about her writing, especially if there were typos that she could be unaware of, but could be corrected by Grammarly.

This research not only found Sarah, who was reliant on Grammarly, but also two other participants, Willa and Andreas, who also indicated experiencing the same thing as Sarah, even though both claimed that Grammarly was only a helpful tool. They were also hesitant to submit assignments without Grammarly checking them first.

Excerpt 19:
*"I still don't want to do that, sis, I have to check it with Grammarly first so that I don't have too many errors in my assignment." (Willa, lines 192-199)*

Excerpt 20:
*"Well, that's hard, sis ... I am also not sure what I wrote ... maybe there's something wrong…." (Andreas, lines 183-189)*

Willa and Andreas revealed that they did not want to submit their English writing assignments without Grammarly checking them first to avoid errors or mistakes in their writing. They were not confident in their own

writing and were not sure if they had to submit the assignment without being checked by Grammarly first.

All of the participants' admissions indicated that they were reliant on Grammarly, even though Willa and Andreas did not admit Grammarly as a source of overreliance. This is in accordance with Birtchnell (1988), which reveals that dependence or reliance can refer to a condition in which a person relies excessively on external sources for validation, guidance, and affirmation related to a lack of self-confidence and being unable to trust their own abilities. Their admissions also show that they do not trust their abilities and rely on Grammarly. This finding is similar to the finding of Inayah and Apoko (2024) that Grammarly can make users more confident. Because of Grammarly, the participants become confident in their writing. They can accept, reject, and substitute the feedback given by Grammarly to match their knowledge. However, if the use of Grammarly is reduced or even eliminated, then students become unconfident, which causes them to be unsure of the results of their own writing. This is possible due to the long-term use of Grammarly. All three participants admitted that they had used Grammarly for a year or more and always used it for every English Writing assignment. This is emphasized in Yousofi's (2022) research that long-term overuse of Grammarly will cause dependency or reliance. Therefore, the three participants are over-reliant on Grammarly.

These findings suggest that writing pedagogy should encourage students to balance the use of Grammarly as an automatic feedback tool with independent writing practice to develop critical awareness and confidence in their own grammar knowledge, rather than depending on the platform. In addition, educators should also monitor how students use this tool, encourage them to foster confidence in their competencies, and guide students to use Grammarly in the writing process only as a tool, not as a

substitute for their own abilities. Moreover, the implication of technology-assisted learning is that Grammarly not only functions as a platform related to writing but also as a valuable resource for learning grammar and improving accuracy in writing.

## CONCLUSION

This study reveals that students engage behaviorally with Grammarly feedback through actual revisions. The feedback participants commonly received includes grammar checks, clarity improvements, and spelling corrections. In addition, they tend to reject feedback that is difficult for them to understand. In some cases, students substitute the feedback provided by Grammarly, especially for foreign or local language word choices. Furthermore, their revision strategies vary significantly, which often combine Grammarly feedback with other websites. Most participants spent five to fifteen minutes, but one participant spent two hours repeatedly checking the feedback with the results of various platforms. From these findings, excessive use of Grammarly in the long term can lead to reliance because students become less confident in submitting English writing assignments without Grammarly verification.

These findings theoretically contribute to the growing body of research on the development of technology-assisted writing, such as Grammarly or other automated feedback tools, which shows that their usage is not only helpful in improving grammar knowledge and accuracy but also has an impact on confidence. In addition, this study practically emphasizes that Grammarly should only function as a supporting tool, not a replacement for user competence. Students who use Grammarly should be aware of the importance of grammar knowledge by reading the metalinguistic explanations provided by Grammarly and checking their accuracy against more than one source. Meanwhile, educators should guide students to use Grammarly critically to learn from the

feedback provided, apply their grammar knowledge, and maintain confidence in their writing skills without relying entirely on a platform.

This study involved three upper-intermediate transitioning to advanced-level participants and focused only on behavioral engagement. Future research could involve a more varied group of participants to gain a broader understanding of Grammarly's use. In addition, future research is also recommended to explore cognitive and affective engagement to find out whether Grammarly functions as a helpful tool or slowly becomes a source of overreliance in various engagements. Finally, since Grammarly is not the only platform used in academic writing and will continue to evolve, users of automated feedback tools need to find the right balance between technology use and personal writing skills to remain confidently engaged without becoming reliant.

## REFERENCES

Barrot, J. S. (2021). Using automated written corrective feedback in the writing classrooms : Effects on L2 writing accuracy. *Computer Assisted Language Learning*, *0*(0), 1–24. https://doi.org/10.1080/09588221.2021.1936071

Birtchnell, J. (1988). Defining dependence. *British Journal of Medical Psychology, 61*(2)*,* 111-123. https://doi.org/10.4324/9781315675213-3

Campbell, E. M., Sittig, D. F., Guappone, K. P., Dykstra, R. H., & Ash, J. S. (2007). Overdependence on technology: An unintended adverse consequence of computerized provider order entry. *AMIA Annual Symposium Proceedings, 2007*, 94–98.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.

De Reuver, M., Sørensen, C., & Basole, R. C. (2018). The digital platform: A research agenda. *Journal of Information Technology*, *33*(2), 124–135. https://doi.org/10.1057/s41265-016-0033-3

Ebadi, S., Gholami, M., & Vakili, S. (2023). Investigating the effects of using Grammarly in EFL Writing: The case of articles. *Computers in the Schools*, *40*(1), 85–105. https://doi.org/10.1080/07380569.2022.2150067

Eisenberg, M. A., & McDonnell, B. H. (2003). Expectation damages and the theory of overreliance. *Hastings Law Journal*, *54*(5), 1335–1374. https://doi.org/10.2139/ssrn.316866

Faisal, F., & Carabella, P. A. (2023). Utilizing Grammarly in an academic writing process: Higher-Education students' perceived views. *Journal of English Language Teaching and Linguistics*, *8*(1), 23. https://doi.org/10.21462/jeltl.v8i1.1006

Fitria, R. A., Sabarun, S., & Miftah, M. Z. (2022). Students' perception of the use of Grammarly in undergraduate thesis writing. *PROJECT (Professional Journal of English Education)*, *5*(2), 366. https://doi.org/10.22460/project.v5i2.p366-371

Guo, X., & Huang, L. S. (2020). Are L1 and L2 strategies transferable? An exploration of the L1 and L2 writing strategies of Chinese graduate students. *Language Learning Journal*, *48*(6), 715–737. https://doi.org/10.1080/09571736.2018.1435710

Inayah, T. M., & Apoko, T. W. (2024). Exploring students' perspectives on the use of Grammarly in writing analytical exposition text. *JLE: Journal of Literate of English Education Study Program*, *5*(1), 73–83. https://doi.org/10.47435/jle.v5i1.2802

Kim, Y., & Yoon, H. (2014). The use of L1 as a writing strategy in L2 writing tasks. *GEMA Online Journal of Language Studies*, *14*(3), 33–50. https://doi.org/10.17576/GEMA-2014-1403-03

Koltovskaia, S. (2020). Student engagement with automated written corrective feedback (AWCF) provided by Grammarly: A multiple case study. *Assessing Writing*, *44*, 100450. https://doi.org/10.1016/j.asw.2020.100450

Lazic, D., Thompson, A., Pritchard, T., & Tsuji, S. (2020). Student preferences: Using Grammarly to help EFL writers with paraphrasing, summarizing, and synthesizing. In K. Borthwick, L. Bradley, & S. Thouësny (Eds.), *CALL for Widening Participation: Short Papers from EUROCALL 2020* (pp. 183–189). Research-publishing.net. https://doi.org/10.14705/rpnet.2020.48.1186

Li, W., Kau, K., & Shiung, Y. (2023). Pedagogic

exploration into adapting automated writing evaluation and peer review integrated feedback into large-sized university writing classes. *SAGE Open, 13(1)*, 1–18. https://doi.org/10.1177/21582440231209087

O'Neill, R., & Russell, A. M. T. (2019). Stop! Grammar time: University students' perceptions of the automated feedback program Grammarly. *Australasian Journal of Educational Technology*, *35*(1), 42–56. https://doi.org/10.14742/ajet.3795

Putri, S., Erni, E., & Masyhur, M. (2024). English study program students' perception on using Grammarly as an online grammar checker in Academic Writing. *AURELIA: Jurnal Penelitian Dan Pengabdian Masyarakat Indonesia*, *3*(2), 819–830. https://doi.org/10.57235/aurelia.v3i2.2240

Ranalli, J. (2021). L2 student engagement with automated feedback on writing: Potential for learning and issues of trust. *Journal of Second Language Writing*, *52*(February), 100816. https://doi.org/10.1016/j.jslw.2021.100816

Robbins, S. L. (1995). [Review of the book *The study of second language acquisition*, by R. Ellis]. *Issues in Applied Linguistics*, *6*(1), 135-138. https://doi.org/10.5070/l461005209

Setyani, E. D., Bunau, E., & Rezeki, Y. S. (2023). The influence of Grammarly towards Indonesian EFL students' first-degree thesis writing confidence. *Elsya : Journal of English Language Studies*, *5*(1), 54–67. https://doi.org/10.31849/elsya.v5i1.6773

Yousofi, R. (2022). Grammarly deployment (in) efficacy within EFL academic writing classrooms : an attitudinal report from Afghanistan. *Cogent Education*, *9*(1). https://doi.org/10.1080/2331186X.2022.2142446

Yurika, F., Munir, & Farahdiba, S. (2023). Students' perceptions toward the use of Grammarly as a grammar checker in the process of writing. *Journal of Technology in Language Pedagogy (JTechLP)*, *2*(2), 307–319.

Zhang, Z. (Victor). (2020). Engaging with automated writing evaluation (AWE) feedback on L2 writing: Student perceptions and revisions. *Assessing Writing, 43*, 100439. https://doi.org/10.1016/j.asw.2019.100439

Zhang, Z. (Victor), & Hyland, K. (2018). Student engagement with teacher and automated feedback on L2 writing. *Assessing Writing, 36,* 90–102. https://doi.org/10.1016/j.asw.2018.02.004