ABSTRACT

Studying in an international school setting offers an excellent opportunity for students to acquire the target language, English, through abundant language exposure. As observed during classroom observations, several students outperformed their peers in targeted language production despite the same school language exposure. Extramural English is assumed to play a substantial influence. This case study explored the Extramural English exposure of 15 ninth-grade students, the duration of such exposure, and the language accuracy of their academic writing captured after receiving it. A qualitative design was utilised to examine the data acquired from students’ linguistics background survey, daily online logs, interview transcription, and their writing products. The findings reveal that parents are the central agency facilitating language learning. During the eight-week research period, 80% of the students received interactive Extramural English, while 100% were exposed to non-interactive Extramural English. The frequency of receiving Extramural English exposure is more significant than the onset of exposure. A minimal linguistic error was recognised for 29% of average conciseness and 23% of inappropriate punctuation, while other errors were between 1% and 5%. This research highlights the importance of Extramural English exposure to written language accuracy among secondary EFL students.
Introduction

International schools have increased by 62% in 10 years (ISC Research, 2021). In 2017, Indonesia led the way with 190 international schools in the Asian region (Mononimbar, 2017). International schools offer English as a medium of instruction and the adoption of a global curriculum, for example, Cambridge Assessment International Education (Cambridge International Education, 2022), which improves the students’ language proficiency. Learners are exposed to various linguistic inputs in the classroom acquired from their teachers (Chan, 2014) and their peers (Gámez et al., 2018).

It was found that the school factors must fully compensate for disparities in English language competency. Parental attitude toward language learning (Cohen et al., 2021; De Houwer, 2017), parent’s education, and socioeconomic status are strongly associated with students’ English language competency (Altinkamis & Simon, 2020; Azzolini et al., 2020; Lindgren & Muñoz, 2013). The parents provide home facilities, such as books, which have been evident to increase phonological awareness and reading comprehension that support language acquisition (Pace et al., 2017), increasing the quality and quantity of language exposure the students receive, recognised as Extramural English.

Extramural English refers to the English students use or are exposed to outside the classroom (Avello et al., 2019; Leona et al., 2021). They may hear English spoken at home or school, play online games in English, listen to English-language music, read English-language books, or attend English-language courses. It enhances learners’ language acquisition (Krashen, 1982), vocabulary, and communication capacity (Lindgren & Muñoz, 2013; Muñoz, 2014; Peters, 2018).

Numerous studies have investigated the correlation between language exposure and vocabulary (Akbarian et al., 2020; Bisson et al., 2014; Chang & Monaghan, 2019; De Wilde et al., 2020a; Leona et al., 2021), the relationship between language exposure and grammar (Matusevych et al., 2017), speaking (Chan, 2014; Gámez et al., 2018), or language proficiency—listening, speaking, reading, and writing (Altinkamis & Simon, 2020; Al-Zoubi, 2018). Correct grammar is essential in academic writing because it facilitates the precise and exact communication of ideas (Cavaleri & Dianati, 2016). However, Extramural English and language accuracy in academic writing have not been specifically addressed.

This study then investigated Extramural English exposure of students and how it shapes their linguistic accuracy in academic writing, especially in international school contexts. The study aimed to provide language learners, teachers, and parents with a better understanding of the role of exposure in students’ language learning, hence boosting learners’ academic writing ability, specifically in written linguistic accuracy.
Literature Review

Extramural English

Language exposure or input refers to any spoken or written language a learner is exposed to in communicative circumstances (Van Patten et al., 2019). With the assistance of technology, language exposure, known as Extramural English, is available outside of the classroom, accelerating the spread of English and multiplying its accessibility (Kessler, 2018). Extramural English exposure manifests in interactive and non-interactive forms.

The interactive language exposure is communicative, of high-quality input, diverse in registers, and contextually relevant (Slabakova, 2016). Travelling to English-speaking countries, speaking in English, playing online games, and using social media are recognised as interactive language exposures that improve one’s language proficiency (De Wilde et al., 2020b; Domingo, 2019). Interaction yields comprehensible output (Gitsaki, 1998), stimulating awareness, hypotheses testing, and reflection toward fluency. It allows language learners to pick up new words and rules of grammar (Lindgren & Muñoz, 2013).

Non-interactive language exposure, for instance, reading and watching TV or movies in the target language, eliminates communication and fosters receptive skills (Avello et al., 2019; Domingo, 2019; Peters, 2018). Passive perceptual exposure was reported to have a less positive correlation with active language usage, such as social media use and gaming in English, which were identified as the most beneficial language inputs, according to De Wilde et al. (2020). However, other studies (Avello et al., 2019; Fang & Park, 2019) found that non-interactive language exposure correlated with vocabulary expansion and was more impactful than the school instructions (Peters, 2018).

Krashen (1982) proposed the Affective Filter Hypothesis, which claims that language acquisition is optimised when students are strongly motivated, self-confident, and anxious. The non-interactive exposures permit language learners to proceed at their own pace, pick appropriate content for their level and interests, and re-read or re-watch what they have been reading or seeing to improve their comprehension (Jones, 2019). The positive attitude of language learners renders them “open” (Krashen, 1982, p. 31) to language input and enhances language acquisition.

The benefits of Extramural English are positively confirmed (Al-Zoubi, 2018; Avello et al., 2019; Azzolini et al., 2020), while the starting age and the frequency of receiving language exposure have been disputed (Muñoz, 2014). The early start of language exposure positively contributes to a native-like pronunciation (Lightbown & Spada, 2013); however, other studies have shown that the frequency or quantity of receiving language exposure matters. Frequency of exposure, aural augmentation, variations in working memory, and incidental vocabulary acquisition were proven effective (Malone, 2018). Language acquisition may not require an early start, but input quantity and language use may be equally crucial (Slabakova, 2016).

Quantity and quality of Extramural English determines one’s language acquisition and is enhanced through the support of parents (Altinkamis & Simon, 2020; Azzolini et al., 2020; De Houwer, 2017; Lindgren & Muñoz, 2013; Makarova et al., 2019;
Pawlak, 2021). It has been found that mothers with greater levels of education and parents from higher socioeconomic backgrounds are more likely to encourage their children to acquire a second language (Brown, 2021). Parents might assume the role of agents when they teach their children to speak English at home (Cohen et al., 2021) or provide learning facilities to their children, for example, by reading books or accessing videos that support language acquisition (Azzolini et al., 2020).

Academic Writing: Language Accuracy

Brown and Lee (2015) suggest the requirement for micro and macro writing skills. It covers the competency in applying correct surface linguistic area, punctuations, writing purpose, and strategies. Therefore, writing is suggested to be the most complex linguistic skill to master, and errors are common (Pescante-Malimas & Samson, 2017).

Numerous studies have been conducted on EFL writing errors. Kaweera (2013) reviewed the writing errors among EFL Thai students, identifying the sources of interlingual errors in the participants’ direct translation from Thai to English. Khansir (2013) conducted a study comparing EFL and ESL student-written errors, varying between the two groups in punctuation, which marked the highest errors, and spelling, which marked the lowest. Liao (2016) meanwhile identified grammatical error types made by 66 Taiwanese university students to study how Automated Writing Evaluation (AWE) affected the students’ writing performance and showed the AWE application’s effectiveness in enhancing students’ writing performance, especially linguistic performance, by analysing and comparing students’ writing errors.

Errors are the evidence to understand how a language is learned (Richards, 2015). It provides feedback to students, teachers, and researchers to help them enhance their language proficiency by preparing several language learning strategies to tackle the problem. The purported tool for evaluating language accuracy is Error Analysis, which claims to be helpful for both learners and teachers in resolving learning problems and boosting language awareness to avoid repetition (Lightbown & Spada, 2013; Richards, 2015).

Method

As teachers at one of Surabaya’s international schools attended by 100% of Indonesian students studying the International Cambridge Curriculum framework, we have observed that several Grade 9 students who studied the same class, Global Perspective, outperformed their colleagues in English academic writing. Despite their exposure to the same classroom language, their academic writing was superior to that of their peers. They answered the questions well and enthusiastically shared their comments with the rest of the class. Figure 1 illustrates a representative sample of student replies.
This one-of-a-kind phenomenon prompted the current case study research design, assuming that Extramural English substantially influences the creation of variations among pupils. Prior studies (De Wilde et al., 2020a; Oxford, 2017; Pawlak, 2021) have suggested examining the participants in context, focusing on the participants’ perspectives, and offering extensive data presentations for evaluating the theoretical field and reality for drawing better conclusions in certain circumstances. Twenty Grade 9 Indonesian students who outperformed their colleagues in academic writing, as determined through classroom observations and the documentation of their English and Global Perspectives test scores above 90, were invited to participate. After submitting the consent letter, 15 of them and their parents were willing to participate in the research. Confidentiality, anonymity, and transparency were upheld according to the research and publication ethics guidelines approved by the Universitas Negeri Surabaya Research Ethics Protocol (Protocol Code: B/15360/UN38.8/LT.02.02/2022).

**Instrument and Procedure**

Different methods were employed to address the research questions. A language background questionnaire was distributed to the students and their parents. The
details of Extramural English exposure and the number of hours students are exposed to English were documented through the Online Log. The Online Log, distributed to all the student participants once a week during the eight weeks of the research, provides several benefits, including real-time data collecting, which tracks changes over time, smartphone accessibility, and captures the natural flow of everyday life (Arndt et al., 2021). Inquiries were concise, focused, and open-ended to avoid fatigue or prompted reactions in frequent users.

Due to the students’ same language exposure, all 15 participants attended a Zoom Meetings Focus Group, and individual interviews were organised to ascertain their perspectives. Considering the hectic schedules of the parents and the pandemic, telephone interviews were done with six parents who accepted the interview invitation for data triangulation of the students’ Extramural English exposure and the facilities the parents provided for children to receive exposure.

The final information obtained from the students was their written research reports. Individual research papers ranging from 800 to 1200 words were assigned to students in the Global Perspectives program following two months of 60-minute lessons per week. Fifteen reports were evaluated for language errors. This study was conducted according to the research guidelines and publication ethics regulations of the Research and Publication Ethics Board of the Universitas Negeri Surabaya.

Data Analysis

All the 15 student participants consistently submitted their Online Logs for analysis during the research period. Table 1 illustrates a sample of Online Log, which distinguishes non-interactive language exposure from interactive language exposure for analysis.

With the help of an automatic writing assessment software, Grammarly, and the researchers’ knowledge, we assessed the students’ research reports using a grammatical, lexical, semantic, and mechanical fault rubric adapted from Wu and Garza (2014).
<table>
<thead>
<tr>
<th>Week</th>
<th>Question Number</th>
<th>Participant Number</th>
<th>Questions</th>
<th>Participant’s Answer</th>
<th>Out-of-School Language Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>What is the contact with English (exposure) you receive out-of-school (for example, reading English books/novels, watching English videos, listening to English podcasts, playing online games, social media, or talking to native speakers)?</td>
<td>English Private Course 2x a week, 2nd language to communicate daily with my parents and brother, using my phone with full English language settings, listening to music, watching Netflix movies with no subtitles, social media for the videos Or just read the captions or the tweets, and reading from the Google web</td>
<td>Interactive: 1 Non-Interactive: 1</td>
</tr>
</tbody>
</table>
Table 2
Error Coding Categories

<table>
<thead>
<tr>
<th>Types of errors</th>
<th>#</th>
<th>Error Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammatical errors</td>
<td>1</td>
<td>Verb Tense</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Sentence Structure</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Coordination</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Relative Clause</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Singular/plural</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Verb omission</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Subject omission</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>S-V agreement</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>Fragment</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Genitive Case</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>Infinitive/gerund</td>
</tr>
<tr>
<td>Lexical errors</td>
<td>12</td>
<td>Noun</td>
</tr>
<tr>
<td></td>
<td>13</td>
<td>Pronoun</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Verb</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>Adjective</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>Adverb</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>Article</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>Preposition</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>Word form</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>Interjections</td>
</tr>
<tr>
<td>Semantics errors</td>
<td>21</td>
<td>Clarity/conciseness</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>Word choice (meaning)</td>
</tr>
<tr>
<td>Mechanics errors</td>
<td>23</td>
<td>Punctuation</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>Capitalisation</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>Spelling</td>
</tr>
</tbody>
</table>

Results

Extramural English

Students’ language proficiency is discovered to be linked to their parents’ socioeconomic status (SES) and their mother’s level of education. Figure 2 shows the educational levels of the participants’ parents. A total of 80% of the participants’ parents had a Bachelor’s degree, and 20% had a Master’s degree. Two mothers and fathers involved in this study were college graduates from foreign universities outside Indonesia.
One hundred per cent of the participants in this study belong to the middle class or higher SES. These parents could send their children to an international school, which costs more than regular schools with the national curriculum in terms of facility costs and other fees. This conclusion clarifies why the participants received so many facilities during childhood, enhancing their English skills. During the interview, one of the parents stated that she did not speak English but wanted her daughter to be proficient by enrolling her in an English course taught by native English speakers.

We prefer to communicate in Indonesian rather than English at home. However, my child takes English classes, watches videos on YouTube, and reads books in English. (English translation)

(Parent of Participant 15, Parent’s Interview)

The facilities provided by the parents are valuable sources for language acquisition for the participants, allowing them to have more possibilities to experience and more language exposure. Even though their parents may not have been natural English speakers, they purchased English books for their children to read, enrolled them in lessons taught by native English speakers, or provided them with an English television channel and Internet connection for their devices.

Since they were small, my children have been studying English. They are accustomed to watching English-language television and YouTube and reading English-language books. Before the outbreak, they had received English training from native speakers. (English translation)
Their Extramural English exposure influences the participants’ language learning and performance. Figure 3 depicts the participants’ daily Extramural English exposure, documented according to the interactive and non-interactive modes. There are two forms of interactive language exposure: verbal and written. The non-interactive language exposure involves utilising English in device settings, listening, watching, reading, and playing offline games.

Keeping track of the Students’ daily Extramural English, as indicated in Table 3, it was found that 80% of the participants conversed daily in English, on average. A few participants described how they appreciated conversing with native speakers via social media, which might be deemed as high-quality input, similar to the experience of Participant 14:

Talking to native speakers on the Instagram app to gain more knowledge and expand my social life.

( Participant 14, Online Log)

On average, 10% of the participants committed their time to online games. They are members of the online gaming community and play as a group. Nonetheless, just a fraction of the participants engaged in online gaming.

Table 3
Out-of-School Language Exposure

<table>
<thead>
<tr>
<th>Out of school Language Exposure</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Week 5</th>
<th>Week 6</th>
<th>Week 7</th>
<th>Week 8</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>80%</td>
<td>80%</td>
<td>80%</td>
<td>80%</td>
<td>80%</td>
<td>80%</td>
<td>80%</td>
<td>80%</td>
<td>80%</td>
</tr>
<tr>
<td>Playing games online</td>
<td>0%</td>
<td>7%</td>
<td>7%</td>
<td>20%</td>
<td>20%</td>
<td>7%</td>
<td>7%</td>
<td>13%</td>
<td>10%</td>
</tr>
<tr>
<td>Playing games offline</td>
<td>13%</td>
<td>13%</td>
<td>13%</td>
<td>13%</td>
<td>13%</td>
<td>13%</td>
<td>13%</td>
<td>13%</td>
<td>13%</td>
</tr>
<tr>
<td>Using the English language setting on the device</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Listening</td>
<td>67%</td>
<td>73%</td>
<td>80%</td>
<td>73%</td>
<td>67%</td>
<td>73%</td>
<td>67%</td>
<td>80%</td>
<td>73%</td>
</tr>
<tr>
<td>Watching</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Reading</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>
Figure 3
Extramural English Exposure

Extramural English Exposure

Interactive

Communication

Verbal

Written

Playing online games

Playing offline games

Non-Interactive

Listening

Music

Podcast

Using the English language setting in the device

Reading

Fiction

Non-Fiction

Watching

With subtitles

Without subtitles
Non-interactive language exposure surpassed interactive language exposure. During the two-month research period, playing offline games, using the English language setting on the device, listening to music or podcasts, and reading activities were reported as the participants' sources of non-interactive language exposure. On average, 13% of the participants preferred offline games over internet games. As stated by Participant 10 during the interview, they chose offline games for amusement or to improve their cognitive abilities.

like playing games like Chess. It is fun. I can learn how to think of a strategy to win.
(Participant 10, FGD-Students’ Interview)

73% of the participants, on average, got engaged in the listening activity, which came second in the category. The Online Log implies that the individuals listened to a podcast with diverse themes or tunes. The podcast provides participants with an excellent opportunity to learn about various subjects while listening to music. In addition, listening activities enhance language skills, as explained in the Online Log.

Listening (to) music allows me to think of how to be creative in arranging words.
(Participant 2, Online Log)

In addition, all the participants reported that they used the English language setting on the gadget, watching films, and reading books. The English language setting is familiar to the participants, as indicated by Participant 12.

I get my English exposure from YouTube, my family, your family, my school, my friends, the television, and my device setting.
(Participant 12, Student’s Interview)

Table 4 shows consistent data on watching and reading English materials were collected from the first to the last week of the study. Films, news, documentaries, and social media proved popular among the participants. As a result of watching the video, they are entertained, acquire the language, understand the culture, and implement the communicative techniques. Participant 11 recounted his experience watching the live Internet debate broadcast during the Focus Group Discussion and confirmed it increased his communication skills.

People around the world (can join the debate) since the platform is everywhere. There is one moderator during the discussion. So, everyone should watch their words and talk more carefully during the debate.
(Participant 11, FGD-Students’ Interview)
Table 4

Duration of Extramural English Exposure (in hours per day per week)

<table>
<thead>
<tr>
<th>Interactivity</th>
<th>Out-of-School Language Exposure</th>
<th>Week</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Interactive</td>
<td>Communication</td>
<td>2.3</td>
<td>2.3</td>
</tr>
<tr>
<td></td>
<td>Playing games online</td>
<td>3.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Non-Interactive</td>
<td>Playing games offline</td>
<td>2.0</td>
<td>4.0</td>
</tr>
<tr>
<td></td>
<td>Listening</td>
<td>2.1</td>
<td>2.2</td>
</tr>
<tr>
<td></td>
<td>Watching without subtitle</td>
<td>3.1</td>
<td>3.2</td>
</tr>
<tr>
<td></td>
<td>Watching with subtitle</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td>Reading (including using English in device setting)</td>
<td>1.7</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Reading is identified as a component of the participants’ daily language exposure and has effects comparable to watching. All the participants read materials on social media, while book reading was less common. The usefulness, appeal, and effectiveness of social media reading are consistently highlighted.

I watch and use social media because it is practical, easy to use, and entertaining. Not only that, I can learn a lot by using social media and people’s opinions or perspectives from different backgrounds.

(Participant 2, Online Log)

The students had more non-interactive out-of-school language exposure than interactive out-of-school language exposure from the first to the last week of the study, as shown in Table 4. All the students were exposed to reading, watching, and using the English language setting every week. According to Table 4, their language exposure varied, averaging between 0.6 and 3.2 hours per day per week. The most common type of non-interactive extramural exposure is watching without subtitles, with an average of 3.2 hours per day per participant. Students were exposed to communication for an average of 2.4 hours per day; this represents the second greatest portion of their daily routines. Each participant spent an average of 2.2 hours per day per week on listening. The students engaged in offline or online gaming for an average of 2.1 hours per day, which is marginally distinct from their time spent listening. The daily and weekly reading time is two hours. The least amount is 0.6
hours daily of watching foreign films with subtitles per week. Table 4 shows how students allocated their time to extramural English exposure daily.

The duration of each participant’s weekly exposure to the target language is displayed in Table 5. During the COVID-19 outbreak, the participants stayed at home and engaged in online streaming, reading, and listening.

The weekly report revealed that the participants whose language acquisition began before preschool had the shortest average duration, 8.3 hours per day every week. A group with a later English start had a more extended period of out-of-school language exposure, 9.8 hours per day weekly for the pre-schoolers and 9.3 hours per day weekly for the beginning elementary students. Participant 7’s description showed the importance of frequency or quantity of language input in language acquisition rather than the onset.

I came to this school without knowing anything about English. My parents sent me to Kelt, an English course, learning English with native speakers for several years. I learn about grammar and everything. It helps me a lot to improve my (English) skills.

(Participant 7, Student Interview)

Table 5
Each Participant’s Average Duration of Out-of-School Language Exposure (In Hours Per Day Every Week)

<table>
<thead>
<tr>
<th>The Onset of English Exposure</th>
<th>Participant</th>
<th>W1</th>
<th>W2</th>
<th>W3</th>
<th>W4</th>
<th>W5</th>
<th>W6</th>
<th>W7</th>
<th>W8</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before preschool</td>
<td>1</td>
<td>9</td>
<td>5</td>
<td>9</td>
<td>7</td>
<td>7</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>7.6</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>5</td>
<td>7</td>
<td>7</td>
<td>9</td>
<td>9</td>
<td>12</td>
<td>7</td>
<td>10</td>
<td>8.3</td>
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<tr>
<td></td>
<td>5</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>11</td>
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<td>13</td>
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<td>11</td>
<td>11.3</td>
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<td></td>
<td>11</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>3</td>
<td>2</td>
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<td>12</td>
<td>11</td>
<td>9</td>
<td>8</td>
<td>11</td>
<td>10.3</td>
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<tr>
<td>Preschool</td>
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<td>9</td>
<td>9</td>
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Academic Writing: Language Accuracy

The error detection was initially done through Grammarly. It was then evaluated by the researchers, who have been certified to teach English as a foreign language for more than 15 years. The errors were categorised based on grammatical, lexical, semantics, and mechanics errors (Wu & Garza, 2014).

The system discovered an average of 101 incorrect identifications daily. The findings revealed a small percentage of grammatical and lexical faults and significantly greater semantic and mechanical errors. Table 6 provides information about the error proportion.

The percentage of detected grammatical errors was the lowest, ranging from zero to five per cent on average. The participants, on average, did not make relative clauses, verb omission, subject omission, and genitive case errors. The error rate for verb tense errors was the highest at 5%, followed by singular/plural errors (3%). Next were coordination and subject-verb agreement issues (2%). The least frequent were sentence structure, fragment, and infinitive/gerund errors (1%). Participant 3 shared that she trusted her parents to help her with her English. In the excerpt, there is a verb tense error (could).

Parents are the closest person and the person that we could trust the most (Sentence number 21, Participant 3’s work)
Note: “Could” should be replaced with “can”.

Single and plural forms were the next frequent type of grammar errors. The overuse of the letter “s” indicates pluralism in English construction, may originate from an intralingual error resulting in overgeneralisation, as illustrated in Participant 3’s use of “childrens” but the meaning is not affected.

Social skills are essential for childrens.
(Sentence number 5, Participant 3’s work)
Note: “Childrens” should be replaced with “children”.

In the category of lexical errors, the students had the most problems with preposition errors (9%). There are multiple inappropriate placements of the preposition or missing preposition usage, like “on” being used instead of “of”:

As stated by UN Women, globally, women still get paid roughly 23% less than their male comparatives, increasing difficulty on accessing digital infrastructure.
(Sentence number 46, Participant 4’s work)
Note: The preposition “on” should be changed to “of”.

Although not frequent, the students made errors with adjectives and articles (4%) than pronouns and verbs (2%). Noun error was minor (1%).

As for semantics errors, clarity and conciseness (29%) were a great problem. See example in Figure 4 where the student used “as well as” and “as a result of” inappropriately. Grammarly suggested “and” and “due to” respectively.
### Table 6
**Error Analysis of the Participant’s Research Report**

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<thead>
<tr>
<th>Participant</th>
<th>Number of Errors</th>
<th>Grammatical errors</th>
<th>Lexical errors</th>
<th>Semantics errors</th>
<th>Mechanics errors</th>
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</table>

**Types of Errors**

- **Grammar errors**
  - 1. Verb Tense
  - 2. Sentence Structure
  - 3. Coordination
  - 4. Relative Clause
  - 5. Singular/plural
  - 6. Verb omission
  - 7. Subject omission
  - 8. S-V agreement
  - 9. Fragment
  - 10. Genitive Case
  - 11. Infinitive/gerund
  - 12. Noun
  - 13. Pronoun
  - 14. Verb
  - 15. Adjective
  - 16. Adverb
  - 17. Adjective
  - 18. Preposition
  - 19. Word form
  - 20. Determiner
  - 21. Clarity/conciseness
  - 22. Word choice (meaning)
  - 23. Punctuation
  - 24. Capitalisation
  - 25. Spelling

- **Lexical errors**
  - 1. Verb Tense
  - 2. Sentence Structure
  - 3. Coordination
  - 4. Relative Clause
  - 5. Singular/plural
  - 6. Verb omission
  - 7. Subject omission
  - 8. S-V agreement
  - 9. Fragment
  - 10. Genitive Case
  - 11. Infinitive/gerund
  - 12. Noun
  - 13. Pronoun
  - 14. Verb
  - 15. Adjective
  - 16. Adverb
  - 17. Adjective
  - 18. Preposition
  - 19. Word form
  - 20. Determiner
  - 21. Clarity/conciseness
  - 22. Word choice (meaning)
  - 23. Punctuation
  - 24. Capitalisation
  - 25. Spelling

- **Semantics errors**
  - 1. Verb Tense
  - 2. Sentence Structure
  - 3. Coordination
  - 4. Relative Clause
  - 5. Singular/plural
  - 6. Verb omission
  - 7. Subject omission
  - 8. S-V agreement
  - 9. Fragment
  - 10. Genitive Case
  - 11. Infinitive/gerund
  - 12. Noun
  - 13. Pronoun
  - 14. Verb
  - 15. Adjective
  - 16. Adverb
  - 17. Adjective
  - 18. Preposition
  - 19. Word form
  - 20. Determiner
  - 21. Clarity/conciseness
  - 22. Word choice (meaning)
  - 23. Punctuation
  - 24. Capitalisation
  - 25. Spelling

- **Mechanics errors**
  - 1. Verb Tense
  - 2. Sentence Structure
  - 3. Coordination
  - 4. Relative Clause
  - 5. Singular/plural
  - 6. Verb omission
  - 7. Subject omission
  - 8. S-V agreement
  - 9. Fragment
  - 10. Genitive Case
  - 11. Infinitive/gerund
  - 12. Noun
  - 13. Pronoun
  - 14. Verb
  - 15. Adjective
  - 16. Adverb
  - 17. Adjective
  - 18. Preposition
  - 19. Word form
  - 20. Determiner
  - 21. Clarity/conciseness
  - 22. Word choice (meaning)
  - 23. Punctuation
  - 24. Capitalisation
  - 25. Spelling
Mechanical errors, such as inappropriate punctuation, accounted for 23% of the errors and is the second highest type of error. Missing commas, full stops, or hyphens were frequently present. Capitalisation or spelling errors ranked last (2%). The example shows the omission of a comma before “such as” in the sentence “...through the Internet such as...”.

Cyberbullying is when people bully others through the Internet such as body shaming or saying bad words to them. (Participant 9’s work)
Note: A comma should be added between “internet” and “such”.

Grammarly was useful to the students as 33% of the participants utilised the revisions indicated by automated written input, such as the Grammar Checker in Google Docs or Grammarly. This helps the learners produce academic writing with limited errors that do not interfere with the meaning and do not influence the message delivery. Sixty-seven per cent of the participants confirmed that writing in English was natural, and they practically re-read their writing before submission. They relied on their “instinct”, driven by Extramural English language exposure intake.

Figure 4
Sample of Clarity Error Detection

According to Dr. Ira Savitri Tanjung, a psychologist, as well as child and adolescent psychiatrists, Indonesian youngsters are dealing with mental problems as a result of the addiction to mobile gadgets.

(Participant 5’s work)
Discussion

Prior research has demonstrated the advantages of interactive and non-interactive language exposure for language development (Peters, 2018; Al-Zoubi, 2018). De Wilde et al. (2020b) emphasised the role of interactive language exposure in learners’ language performance for their multimodality. However, the finding of this study revealed that non-interactive Extramural English was essential. Although not every participant was exposed to interactive language, all of them reported regularly watching, reading, and using English language settings on their devices, which was supported by their positive parental attitude towards language learning and their educational or economic background (Altinkamis & Simon, 2020; Cantone, 2022; Cohen et al., 2021; De Houwer, 2017). The participants in the present study made fewer errors in clarity, punctual and grammar (1%-29%) compared to a previous study by Mustafa et al. (2017). The participants in Musta et al.’s (2017) study had similarity, were about the same age at the junior high level and from the same country, were required to write 150 words of essay. They showed a higher frequency of language errors, ranging from 30% of prepositions to 48.4% of word form errors. The hypothesis that language is relevant to other aspects of report writing is supported by the analysis of the participants’ writing as a result of Extramural English, enabling students to conduct self-checking in the future. The language input, turning into the intake, activates the monitoring systems that control language production based on the hypothesis drawn from the input (Krashen, 1982) and assists the students in producing fewer linguistic errors in their writing.

Despite the ongoing debate between the effective onset of the language and the frequency of the language, prior studies have demonstrated the importance of frequency and quantity of language input (Muñoz, 2014; Peters & Webb, 2018; Slabakova, 2016). The participants in the present study exhibited a range of Extramural English types before, during, or after preschool years. However, the participants’ incidences of written errors were comparable. Their daily average length of Extramural English exposure was marginally higher than those with earlier language onset, even though they encountered language exposure later. This finding aligns with the study by Matusevych et al. (2017) that shows the correlation between cumulative exposure and language performance and the absence of the effect of the starting age of receiving language exposure.

Conclusion

The study was on the role of Extramural English exposure in the language accuracy of 15 secondary school EFL learners who outperformed their peers. While not all the participants had the opportunity to engage with interactive language, the results showed that 100% of them had encountered non-interactive Extramural English exposure, such as through frequent reading, watching English materials, and using English language settings on their devices, which was supported by their positive parents’ attitude towards language learning and their educational or economic background. The findings confirmed the essential role of non-interactive Extramural English exposure and the importance of the duration of receiving language exposure.
over the onset of the language. This resulted in minor language errors found in their academic writing. Individual attributes, meanwhile, become a limitation of the study that could be included in future research for a more thorough investigation by employing an ethnographic method.

References


Cavaleri, M., & Dianati, S. (2016). You want me to check your grammar again? The usefulness of an online grammar checker as perceived by students. *Journal of Academic Language and Learning, 10*(1), 223-236.


