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研究課題名（和文）Effects of genre on writing fluency behaviors and linguistic outcomes

研究課題名（英文）Effects of genre on writing fluency behaviors and linguistic outcomes

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研究成果の概要（和文）：科研費のおかげで、流暢な文章を書く行動や言語的成果に対するジャンルの影響について研究することができました。この研究は、ジャンルが異なれば、複雑さ、正確さ、流暢さの点で異なる結果が得られるかどうかを明らかにする、非常に必要とされている研究でした。暫定的な調査結果は、さまざまなジャンルが、複雑さ、正確さ、および流暢さの点で多様な言語的成果を示すことを示しています。寛大な資金提供のおかげで、アメリカ応用言語学会などの国際会議に参加し、応用言語学の主要な学者から素晴らしいフィードバックを受けることができました。

研究成果の学術的意義や社会的意義

This study was worth conducting because English language teachers need to be aware of different linguistic features when assigning writing tests or assignments to their students. This study would be helpful for teachers who are going to teach English writing.

研究成果の概要（英文）：Thanks to Kakenhi, I was able to conduct research on the effects of genre on writing fluency behaviors and linguistic outcomes. This study was a much-needed piece of research that sheds light on whether different genres elicit different outcomes in terms of complexity, accuracy, and fluency. The preliminary findings show that different genres exhibit diverse linguistic outcomes in terms of complexity, accuracy, and fluency.

Because of generous funding I received, I was able to participate in international conferences such as American Association for the Applied Linguistics and receive great feedback from key scholars in the field of applied linguistics.

研究分野：Applied Linguistics

キーワード：L2 Writing

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## 1. 研究開始当初の背景

The role of genres in L2 writing has been the object of numerous studies. This growing interest in genres is due mainly to the fact that genre differences are crucial to L2 writing assessment and theory, as well as to L2 writing research design. Most studies examine the effects of genre on linguistic complexity, accuracy and fluency (CAF) (e.g., Connor-Linton & Polio, 2014). For example, Yoon and Polio (2017), conceptually replicating Lu's genre difference study (2011), explored genre effects on L1 and L2 writing. They found that the argumentative genre elicited greater complexity (length, particular structure and lexis) than the narrative genre. However, no difference was detected between the two genres with regard to accuracy and fluency. The limitations of these studies suggest that complexity, accuracy and fluency in L2 writing performance need to be examined through multiple metrics.

Recent research has investigated writing fluency from a multi-dimensional perspective (e.g., Barkaoui, 2016; Ranalli, Feng, & Chukharev-Hudilainen, 2018; Révész, Kourтали, & Mazgutova, 2017). Instead of using the number of words produced in a given time to assess fluency, researchers have adopted a process-based perspective and used different measures, such as pause and revision behaviors (Abdel Latif, 2013; Spelman Miller, Lindgren & Sullivan, 2008; Van Waes & Leijten, 2015). As writing fluency is affected by different writing processes such as monitoring, a single measure of length (i.e., the number of words) may not fully capture fluency (Abdel Latif, 2013). Van Waes and Leijten's multidimensional model of fluency posits that writing process (e.g., words per minute), pause (e.g., P-bursts, a string of actions delimited by initial and end pauses) and revision (e.g., R-bursts, a string of actions terminated by revision of the language produced during the burst) in writing fluency behaviors should be considered when assessing fluency validly.

## 2. 研究の目的

The purpose of this study is to explore the effects of genre on L2 writing fluency behaviors, linguistic complexity and accuracy, as well as to examine the relationship among these three constructs. In addition, to understand the effect of genre, it is important to examine L2 writing fluency behaviors to understand how it interacts with complexity and accuracy. In order to obtain information about the impact of genre, this study uses keystroke logging to measure L2 writing fluency with real-time and process-oriented measures. It has been believed that L2 learners may demonstrate different language fluency, complexity and accuracy with regard to different genres. However, most previous research on this topic has examined participants at only one proficiency level, and many studies did not report proficiency levels (see Plonsky, 2011). It is essential to determine how L2 proficiency affects writing fluency behaviors, linguistic complexity and accuracy when writing different genres. This study considers the impact of both writing genre and language proficiency on L2 writing fluency behavior, complexity and accuracy.

## 3. 研究の方法

This study is an extension of Lee's 2019 study, in which 123 English L2 learners' writing will be examined (60 intermediate and 63 advanced, according to the standardized English test scores such as TOEFL). The L2 learners were instructed in an EFL setting, similar to that in Japan. The writing fluency behaviors and writing complexity of these L2 learners' has already been evaluated.

The experimental design was mixed, with one within-subject factor. The independent variables were genre (within-subject). The dependent variables were fluency behaviors, complexity, accuracy, and writing quality. One of the researchers met with each participant individually in a conference room at their school on two separate days. Each day, the participants were asked to write one 300-word essay on a computer. The participants were not allowed to use reference materials or other resources while

writing. Their writing was recorded by Inputlog 7.0 (Leijten & Van Waes, 2013), the keystroke logging program. They were given 30 minutes to complete the essays.

Participants' writing behaviors (i.e., revision bursts and pause bursts) were recorded via keystroke logging software. Their texts were assessed for quality, on an analytic scale, syntactic complexity, using the syntactic complexity analyzer (Lu, 2010), and lexical complexity, using the D index (McCarthy & Jarvis, 2010), and lexical sophistication measures from Coh-Metrix (McNamara et al., 2014). Given the importance of investigating the CAF constructs, accuracy should be included for further analysis. Following Yoon and Polio's study (2017), to measure the L2 learners' accuracy, two native speakers assessed the essays in terms of syntactic, morphological, preposition and spelling errors per 100 words. They coded all the four types of errors, reaching acceptable inter-rater reliability.

To analyze the data, multivariate analysis of variance (MANOVA) was conducted to find the effect of genre and proficiency.

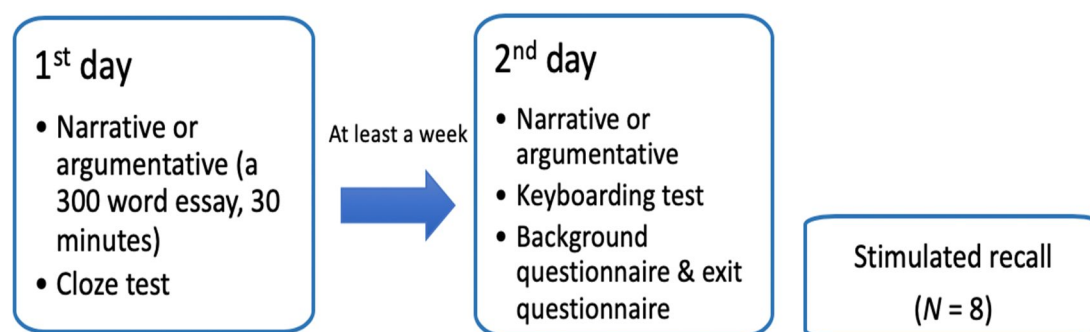


Figure 1. Summary of procedures

#### 4. 研究成果

Thanks to the Kakenhi that I received, I was able to conduct research on L2 writing. I participated in prestigious international conferences such as the American Association for Applied Linguistics (AAAL), the Second Language Research Forum (SLRF), and the International Association for Applied Linguistics (AILA). By attending these conferences, I received valuable feedback on my project from prominent scholars in the field of applied linguistics. They appreciated the idea of my project and encouraged me to write papers on this topic. Based on the feedback I received, I will now focus on finishing up the papers.

Theoretical implications of the results lie in their ability to provide insights into the impact of different genres on the writing fluency, accuracy, complexity, and overall quality of proficient learners. By examining how learners respond to diverse genres, we can gain a deeper understanding of their writing behaviors and the quality of their texts, drawing upon Kellogg's writing model (1996) for explanatory purposes. This knowledge holds significant importance for test developers and teachers alike as it aids in the design of writing tests and assignments.

In the realm of L2 writing instruction, educators commonly assign a variety of genres to their students. In this context, the research discussed here presents substantial empirical evidence that showcases how different L2 learners may exhibit distinct writing behaviors, varying levels of language complexity, and diverse text quality when tasked with writing different genres. It is crucial for teachers to grasp that even if the learners' proficiency level is not yet advanced, they should refrain from providing overly simplistic writing prompts or assignments. While it is true that many teachers already acknowledge the prevalence of language errors among learners, this research further underscores the importance of recognizing that students' level of

complexity can differ significantly.

5. 主な発表論文等

〔雑誌論文〕 計0件

〔学会発表〕 計5件（うち招待講演 0件 / うち国際学会 5件）

|   |
|---|
| 1. 発表者名<br>Jongbong Lee   |
| 2. 発表標題<br>L2 learners' writing processes and perceptions of task difficulty: The effects of genre and time constraints |
| 3. 学会等名<br>International Association of Applied Linguistics (国際学会)  |
| 4. 発表年<br>2021年   |

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| 1. 発表者名<br>Jongbong Lee  |
| 2. 発表標題<br>Genre differences in L2 writing: A corpus-based study |
| 3. 学会等名<br>2021 ALAK International conferences (国際学会)            |
| 4. 発表年<br>2021年  |

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| 1. 発表者名<br>Jongbong Lee  |
| 2. 発表標題<br>Effects of proficiency and varying time constraints on writing fluency behaviors and linguistic outcomes. |
| 3. 学会等名<br>Second Language Research Forum (国際学会)   |
| 4. 発表年<br>2020年  |

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| 1. 発表者名<br>Jongbong Lee and Charlene Polio  |
| 2. 発表標題<br>Effects of varying time constraints on quality, linguistic features, and fluency behavior in L2 writing. |
| 3. 学会等名<br>the annual meeting of American Association of Applied Linguistics (国際学会)                                 |
| 4. 発表年<br>2021年   |

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|---|
| 1. 発表者名<br>Jongbong Lee and Myeongeun Son   |
| 2. 発表標題<br>The effect of varied time constraints on writing performance             |
| 3. 学会等名<br>the annual meeting of American Association of Applied Linguistics (国際学会) |
| 4. 発表年<br>2023年   |

〔図書〕 計0件

〔産業財産権〕

〔その他〕

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6. 研究組織

| 氏名<br>(ローマ字氏名)<br>(研究者番号) | 所属研究機関・部局・職<br>(機関番号) | 備考 |
|---------------------------|-----------------------|----|
|---------------------------|-----------------------|----|

7. 科研費を使用して開催した国際研究集会

〔国際研究集会〕 計0件

8. 本研究に関連して実施した国際共同研究の実施状況

| 共同研究相手国 | 相手方研究機関 |
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