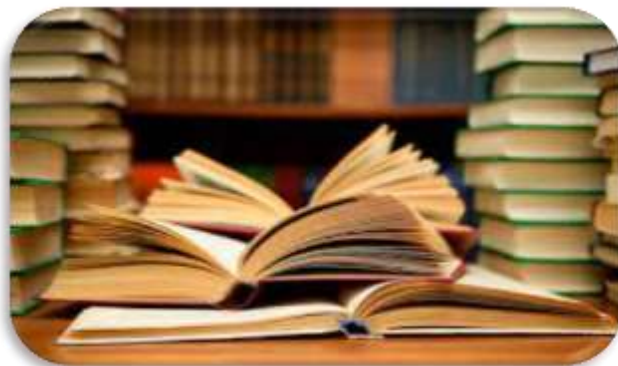


Research Paper



Investigating the Nexus of TBLT and Automatic Corrective Feedback: Implications for Second Language Writing

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ABSTRACT

Task-based language teaching (TBLT) and Automatic Corrective Feedback (ACF) are two pedagogical approaches that intersect in the realm of language learning and teaching. However, the integration of ACF into TBLT has not been thoroughly investigated, especially in second language writing. The current study, hence, was an attempt to explore the relationship between TBLT and ACF on the overall quality of L2 writing among a group of Iranian EFL learners. To this end, a number of 120 EFL learners were selected to participate in the study. The participants were subsequently allocated randomly into five groups: two control groups and three experimental groups. A preliminary writing assignment, serving as the pre-test, was administered to all groups. In this task, learners were instructed to rewrite the reading passage from unit 6A of the American File book, which was designated as a descriptive writing task. Subsequently, the participants received the required intervention over three sessions in the experimental groups. The distinctions among the experimental groups pertained to the types of task repetition employed. When needed, the participants sought assistance from Grammarly as an ACF. Participants in the control group did not experience any types of task repetition nor automated corrective feedback. Once the treatment sessions concluded, participants were administered the same pre-test as a post-test to gauge any alterations in the quality of their writing. Data analysis entailed a series of t-tests. Findings indicated that, on the whole, the three writing tasks accompanying ACF impacted the quality of writing among EFL learners similarly. Recommendations for future research were also put forward.

Keywords: *Task repetitions; Exact task repetition; Content task repetition; Procedural task repetition; Automated corrective feedback; Complexity, Accuracy and fluency (CAF) measures*

آموزش زبان مبتنی بر وظیفه (TBLT) و بازخورد اصلاحی خودکار (ACF) دو رویکرد آموزشی هستند که در قلمرو یادگیری و آموزش زبان تلاقی می کنند. با این حال، ادغام ACF در TBLT به طور کامل بررسی نشده است، به ویژه در نوشتن زبان دوم. از این رو، مطالعه حاضر تلاشی برای بررسی رابطه بین TBLT و ACF بر کیفیت کلی نوشتن L2 در میان گروهی از زبان آموزان ایرانی بود. برای این منظور، تعداد ۱۲۰ زبان آموز زبان انگلیسی برای شرکت در مطالعه انتخاب شدند. سپس شرکت کنندگان به طور تصادفی به پنج گروه تقسیم شدند: دو گروه کنترل و سه گروه آزمایشی. یک تکلیف نوشتاری مقدماتی، که به عنوان پیش آزمون عمل می کرد، برای همه گروه ها اجرا شد. در این تکلیف به زبان آموزان دستور داده شد که قسمت ریپیتینگ واحد A6 کتاب American File را که به عنوان تکلیف نوشتن توصیفی تعیین شده بود، بازنویسی کنند. سپس شرکت کنندگان مداخله لازم را طی سه جلسه در گروه های آزمایشی دریافت کردند. تمایز بین گروه های آزمایشی مربوط به انواع تکرار تکلیف به کار گرفته شده بود. در صورت نیاز، شرکت کنندگان از Grammarly به عنوان ACF کمک گرفتند. شرکت کنندگان در گروه کنترل هیچ نوع تکرار کار یا بازخورد اصلاحی خودکار را تجربه نکردند. پس از پایان جلسات درمانی، از شرکت کنندگان پیش آزمون مشابه پس آزمون برای سنجش هرگونه تغییر در کیفیت نوشتار آنها انجام شد. تجزیه و تحلیل داده ها مستلزم مجموعه ای از آزمون های t بود. یافته ها نشان داد که به طور کلی، سه وظیفه نوشتاری همراه با ACF به طور مشابه بر کیفیت نوشتن در بین زبان آموزان انگلیسی تأثیر می گذارد. همچنین توصیه هایی برای تحقیقات آتی ارائه شد.

کلمات کلیدی: تکرار کار. تکرار دقیق کار؛ تکرار کار محتوا؛ تکرار کار رویه ای؛ بازخورد اصلاحی خودکار؛ اندازه گیری پیچیدگی، دقت و روان (CAF)

INTRODUCTION

Writing is an important language skill for EFL learners to develop their language knowledge. As Chastain (1988, p. 244) noted, writing is not only a way of communication through which language learners can express what's going on in their minds, but also it can help language learning with its “unique features”. To write well learners must have good capabilities in writing. Moreover, some who wants to write an essay or story must be familiar with the steps of writing and its aspect (Zarrinabadi & Rezazadeh, 2023). The writer should be able to organize the ideas to construct the sentences and use punctuation and spelling well. Besides, they must be able to arrange the writing into cohesive and coherent paragraphs. Hyland (2003) believes that performance in language development is subject to improvement in writing skills. The text of an effective ESL writer must be cohesive, logical, clearly structured, interesting, and properly organized with a wide range of vocabulary and mastery of conventions in mechanics (Karim & Nassaji, 2020). Writing is often considered part of teaching and learning the grammar and syntax of English, which consequently undervalues the significance and nature of writing and influences its development (Woodrow, 2011).

Writing is also significant for teaching and teachers. Effective teaching requires different skills that involve writing (Burton, 2009). As reported by Burton (2009), writing plays important roles in different teaching activities including:

planning lessons, jotting down ideas, taking messages, marking students' assignments, drafting class reports, editing drafts of texts, critiquing course books, designing units of work, note-taking, recording the gist of meetings, filling in assessment sheets, making journal entries, sending emails, writing up projects ... and so on” (p. 168).

Furthermore, “writing offers teachers a way to learn about what they do” (Manchón, 2011). Therefore, writing is important for teaching in that it helps teachers in different aspects and stages of teaching.

The majority of prior research has emphasized that writing involves a number of complex rhetorical and linguistic capabilities (Bitchener & Knoch, 2010). It also requires the writer's full attention and concentration. Effective writing involves conveying a message in such a way that it affects the audience as the writer intends. An effective writer is always aware of the readers' competence level. He/she gives a sense of thoroughness and wholeness to his/her writing and knows the conventions of every genre. Lee and Evans (2019) states that writing involves lower-order skills, such as forming letters, as well as higher-order cognitive skills like cohesion and coherence that makes writing a complex process to teach. Lack of research in ESL (English as a Second Language) writing increases the instructors' difficulties as he/she has to rely on trial-and-error methods to find out which approach should be adopted. Moreover, the approaches to writing suffer from a drawback of either total control or total freedom (Zhang & Li, 2023). Dysfunctional writing styles can create obstacles throughout one's life (Jiang & Eslami, 2022). Writing is an incredibly complex cognitive task that demands learners to have mastery over different factors which range from the learner's academic history and personal interest to particular linguistic, psychological, and cognitive phenomena (Ozfidan & Mitchell, 2020). Students face difficulties in writing the English language, due to a number of factors involved in the act of communication. English language itself has a lot of irregularities and idiosyncrasies which create a myriad of difficulties in writing especially for second language learners (Polio & Shea, 2014).



Task-based language teaching (TBLT) emphasizes the importance of meaningful language use through engaging tasks that promote communication and interaction (Ellis, 2003). In the context of language writing, TBLT encourages learners to produce written texts as part of task completion, providing opportunities for authentic language practice (Bygate, 2001). The integration of automated corrective feedback (ACF) within TBLT can enhance this process by providing immediate and targeted language support to learners during task performance (Lamy & Hampel, 2007). As learners engage in writing tasks, ACF tools such as Grammarly can identify and correct grammatical errors, spelling mistakes, and punctuation errors in real-time, allowing learners to receive immediate feedback on their written production (Shadiev & Feng, 2023). This combination of TBLT and ACF promotes a dynamic learning environment where learners actively engage with tasks while receiving timely language support, ultimately facilitating language development and proficiency (Tan, Cho & Xu, 2023). Therefore, integrating ACF within TBLT practices can offer a valuable avenue for improving language writing skills and promoting effective language learning (Liu & Sadler, 2003).

One research gap in the field of language writing pertains to the limited exploration of the integration of Task-Based Language Teaching (TBLT) and Automated Corrective Feedback (ACF). While there is extensive research on the effectiveness of each approach independently, there is a scarcity of studies that examine how the combination of TBLT and ACF can impact language writing outcomes. Existing literature primarily focuses on either TBLT or ACF separately, overlooking the potential synergies that may arise from their integration. Therefore, there is a need for empirical research that investigates the interaction between TBLT principles, such as task authenticity and communicative language use, and the provision of ACF tools, such as Grammarly or other automated systems, in language writing contexts. Such research could provide valuable insights into how the integration of TBLT and ACF influences writing performance, learner engagement, and language development, addressing a significant gap in the current literature. The current study, therefore, aimed to investigate the influence of integrating task repetition and ACF on enhancing language learners' complexity, accuracy and fluency (CAF) measures.

LITERATURE REVIEWS

As mentioned in previous parts, feedback is a crucial part of learning in general, and language learning in particular. Moreover, one of the most important elements of effective feedback is its timing (Boud & Molloy, 2013), in addition to being understandable, specific, and contextualized (Barrot, 2021). The element of timeliness in particular can be challenging in a contemporary higher education environment with high numbers of students and large workloads of teachers. In this context, automated feedback tools offer considerable potential in being able to provide timely feedback at a time and place of a student's choosing as they provide flexibility of time and place. This means that the feedback students seek can be immediate in some cases, thus overcoming the lag time involved in waiting until teachers have time in their busy workloads to provide feedback. This is particularly useful when it comes to students' writing, as the development of written accuracy in language learning is an iterative process and students' writing skill can improve significantly through multiple feedback cycles (Fernández-Toro & Hurd, 2014; Sheen, 2007).



Automated corrective feedback (ACF), however, also has potential drawbacks and challenges, in particular when there is a perception that online feedback can be impersonal (Guardado & Shi, 2007). This depends to some extent on the type of automated feedback tool that is used. In addition, online feedback relies to a great extent on students being self-directed and taking responsibility for making the feedback process effective – what Winstone et al (2017) call ‘proactive recipience’. This tool offers specific features that help to overcome some of the perceived disadvantages of automated feedback such as the option to provide contextualized information in the form of a teacher’s personally designed workbook.

Previous research suggests that writing frequently can raise learners’ awareness about the conventions of L2 texts and help them with the automatization of processes such as lexical retrieval, and compensate for the often-short time of instruction (Bitchener & Storch, 2016). However, frequent writing practice by itself is not sufficient; learners need also to receive feedback on their writing to improve (Bitchener & Storch, 2016; Ferris & Roberts, 2001). Research has shown that written corrective feedback (WCF) can facilitate learners’ uptake and retention of correct forms for writing development (Ellis, 2009). Automated writing feedback is electronic writing feedback that is generated by computer systems. WCF has been defined as “feedback on forms to advance the language learning of the writer and thus contributing to text quality” (Murphy & de Larios, 2010, p. viii). As such, it remains a ubiquitous practice (Ferris, 2006) that could be effective to edit texts (e.g., Truscott & Hsu, 2008), develop learners’ interlanguage (e.g., Bonilla, Van Steendam, Speelman & Buyse, 2018), and foster L2 acquisition processes (e.g., Storch & Wigglesworth, 2010). ACF systems may facilitate the iterative writing process by alleviating teachers’ time-intensive practice of providing formative individual feedback to students (Burstein et al., 2003). Students can receive specialized diagnostic feedback from an automated system that covers critical aspects of writing such as sentence form, word usage, and organizational structure (Bai & Hu, 2017). Students can utilize this information to rewrite their essays independently, allowing them to participate in writing, feedback, and revision cycle independently.

Along with this growth in interest in ACF, however, there is increasing concern over this new method of giving feedback. What is not yet clear is whether ACF and TR can influence language learning writing quality. The major objective of this piece of study, therefore, is to find out whether the application of ACF and TR have any influence on three main components and dimensions of EFL learners’ writing, which are complexity, fluency, and accuracy.

In short, the present research seeks to find answers to the following questions:

Does ACF improve the efficiency of exact repetition regarding writing CAF measures of Iranian intermediate EFL learners?

Does ACF improve the efficiency of procedural repetition regarding writing CAF measures of Iranian intermediate EFL learners?

Does ACF improve the efficiency of content repetition regarding writing CAF measures of Iranian intermediate EFL learners?

METHODOLOGY

Participants

In this study, a convenience sample of 120 respondents was collected from English language learners enrolled in various language institutes in a city in Iran. EFL learners meeting specific criteria were



selected: having more than 3 years of English learning experience, currently studying English File 3, and expressing willingness to participate in the study. Based on these criteria, 120 EFL learners agreed to take part. The mean age of participants was 20, and Persian was their first language. Among them, 62.5% ($n = 75$) were female and 37.5% ($n = 45$) were male. In terms of educational status, 32.5% ($n = 39$) were senior and junior high school students, 47.5% ($n = 57$) were university students, and 20% ($n = 24$) were university graduates. Prior to the study, participants received information about the research aims. Data collection commenced only after ensuring participants' understanding and readiness, with researchers providing necessary explanations and assistance throughout the process.

Research Instruments

The instructional material utilized in this study was American English File Level 3 (Oxenden, Latham-Koenig, & Seligson, 2013), from which the reading passage of unit 6A was selected as the writing prompt. This passage was chosen because it presented all tenses of passive voice, which was deemed challenging for the learners.

Grammarly

Grammarly is an English automated writing tool powered by Artificial Intelligence (AI) to detect duplicate content and errors in grammar, vocabulary, mechanics, syntax, and language style (Grammarly, 2021). Its updated interface makes it accessible through any iOS, Android, and Mac devices as well as popular web browsers such as Firefox, Safari, and Chrome. Grammarly has several editing affordances that may render it useful in language teaching and learning (Barrot, 2023; Koltovskaia, 2020; O'Neill & Russell, 2019). First, it provides real-time feedback as users type the text in the editing textbox, allowing them to correct their work instantly. Second, it identifies and classifies the errors by underlining them with different colors. A red line relates to grammar, spelling, and punctuation, while a purple line indicates issues in language tone, formality, and politeness. A blue line corresponds to clarity and conciseness, whereas a green line relates to making the statements more engaging. Third, Grammarly suggests corrections and metalinguistic explanations of the identified errors in the text. Fourth, it allows users to choose the English variety (Canadian, American, British, and Australian) that they prefer for a more adaptive experience. Fifth, Grammarly generates a performance analysis report which includes word count, readability, and norm-referenced score. Sixth, it allows users to set goals based on intent, audience, emotion, domain, and style. Finally, the tool provides overall test scores that range from 1 to 100. This score is based on the highlighted corrections and offered suggestions that appear in the document.

Using Grammarly during the writing process was straightforward and user-friendly. After installing the Grammarly browser extension or accessing the Grammarly website, users were instructed to follow these steps:

Input Text: user start by typing or pasting your text into the Grammarly interface.

Real-Time Feedback: As the user type, Grammarly automatically analyzed the text for grammatical errors, spelling mistakes, punctuation issues, and clarity improvements.

Review Suggestions: The user take time to review the suggestions provided by Grammarly.



Accept or Reject Changes: User decide whether to accept or reject each suggestion.

Revise and Improve: The user continuously revises your text based on Grammarly's feedback to enhance its clarity, coherence, and correctness

Final Review: Once the user has completed his/her writing, he/she does a final review of text using Grammarly's comprehensive editing tools

CAF Measures

To assess potential differences in the written tasks between the experimental and control groups, the writings were analyzed for complexity, accuracy, and fluency using measures developed by Wigglesworth and Storch (2009). Following their model, the length of each story in words was initially calculated using computer word count. Subsequently, each story was segmented into T-units, clauses, and dependent clauses. A T-unit, as defined by Wigglesworth and Storch (2009), consists of an independent clause plus all subordinate clauses attached to or embedded within it. The concept of T-unit was initially introduced by Hunt (1965) and has since been widely utilized to gauge overall syntactic complexity, particularly in analyzing L2 written texts (Ellis & Barkhuizen, 2005). Finally, error-free T-units, clauses, and dependent clauses were tallied. Errors such as capitalization, spelling, and lexical choice were counted unless they altered meaning. The methodology for measuring complexity, accuracy, and fluency is outlined in Table 1.

Table1

CAF measures

Measures	Their explanations
Complexity	Proportion of clauses to T-units Proportion of dependent clauses to total clauses
Accuracy	Percentage of error-free T-units Percentage of error-free clauses
Fluency	Average number of words per text Average number of T-units per text Average number of clauses per text

Procedure

A group of EFL learners at the intermediate level, studying English in language institutes, were selected as participants for the study. Their proficiency levels had been previously assessed and controlled by the institute. To ensure homogeneity, a QOPT (2014) was administered, and based on their scores, 120 intermediate EFL learners were chosen. These participants were then randomly divided into 4 groups: 1 control group and 3 experimental groups, consisting of 3 task repetition groups accompanying automated corrective feedback. Each group consisted of 30 participants. Prior to the study, all participants received necessary instructions in an introductory session. Additionally, the experimental groups receiving were trained to set up a Grammarly account and use its free version. The first writing task, acting as the pre-test, was conducted in all groups, where learners were tasked with rewriting a reading passage studied in



unit 6A of the American File book, serving as a descriptive writing task. To ensure comparability, both pre-test and post-test writing tasks were administered under the same conditions: same text type (descriptive essay), setting (classroom), length (200 to 300 words), and duration (within 90 minutes), without the aid of reference materials. Subsequently, participants in the experimental groups received the required treatment over three sessions. The variation among experimental groups was in the types of task repetition and the provision of automated corrective feedback, as outlined in Table 2 below.

Table 2*Treatment sessions*

	CG2 No Repetition and no Automated Corrective Feedback (NRACF)	EG4 Exact Repetition with Automated Corrective Feedback (ERACF)	EG5 Procedural Repetition with Automated Corrective Feedback (PRACF)	EG6 Content Repetition with Automated Corrective Feedback (CRACF)
Week 1	Pretest Rewriting the reading passage 1 (descriptive writing task) + ACF	Pretest Rewriting the reading passage 1 (descriptive writing task) + ACF	Pretest Rewriting the reading passage 1 (descriptive writing task) + ACF	Pretest Rewriting the reading passage 1 (descriptive writing task) + ACF
Week 2	No task repetition	Rewriting the reading passage #1 (descriptive writing task) + ACF	Rewriting the reading passage #2 (descriptive writing task) + ACF	Rewriting the reading passage #1 (narrative writing task) + ACF
Week 3	No task repetition	Rewriting the reading passage #1 (descriptive writing task) + ACF	Rewriting the reading passage # 3 (descriptive writing task) + ACF	Rewriting the reading passage #1 (persuasive writing task) + ACF
Week 4	Posttest Rewriting the reading passage #1 (descriptive writing task)	Posttest Rewriting the reading passage #1 (descriptive writing task)	Posttest Rewriting the reading passage #1 (descriptive writing task)	Posttest Rewriting the reading passage #1 (descriptive writing task)



As illustrated in Table 3.2, the first control group (NRNCF) did not undergo any form of task repetition or receive automated corrective feedback. The second control group (NRACF) did not engage in task repetition but did receive automated corrective feedback. Conversely, the first experimental group (ERNCF) underwent exact repetition, rewriting the same descriptive content without receiving corrective feedback. The second experimental group (PRNCF) experienced procedural repetition, rewriting descriptive tasks with different content but without corrective feedback. The third experimental group (CRNCF) performed content repetition, rewriting the same content using different writing styles (descriptive, narrative, and persuasive) without corrective feedback. The fourth experimental group (ERAFC) and the fifth experimental group (PRAFC) received corrective feedback after the initial task (pretest). Participants in these groups, along with the sixth experimental group (CRAFC), followed the same procedure as their counterparts in EG1, EG2, and EG3, respectively, with the only difference being the provision of automated corrective feedback after each task.

Data analysis

As previously mentioned, this quasi-experimental study aimed to investigate the potential impacts of different types of task repetition (i.e., content repetition, exact repetition, and procedural repetition) and automated corrective feedback on the writing complexity, fluency, and accuracy (CFA) of EFL learners. In essence, the dependent variables were the students' writing performance, encompassing complexity, accuracy, and fluency, while the independent variables were task repetition and automated corrective feedback (ACF). To address research questions, a t-test was employed to compare the pretests and posttests of experimental groups with their respective counterparts. SPSS 22 was utilized for all statistical analyses.

RESULTS

The first research question aimed to investigate whether ACF improve the efficiency of exact repetition regarding writing CAF measures. To answer this research question, a paired-sample t-test was run whose results are shown in Table 3 below.

Table 3

Results of paired-sample t-test for the first experimental group

		Paired Differences			T	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean			
Pair 1	Pretest1 - Posttest1	-.55000	.32987	.07654	-5.745	14	.000
Pair 2	Pretest2 - Posttest2	-.15221	.11765	.03387	-5.481	14	.000
Pair 3	Pretest3 - Posttest3	-.17669	.10234	.03098	-6.280	14	.000



Pair 4	Pretest4 - Posttest4	-.19876	.13765	.03512	-6.213	14	.000
Pair 5	Pretest5 - Posttest5	-24.00765	16.30161	4.43265	-6.773	14	.000
Pair 6	Pretest6 - Posttest6	-4.10000	2.39873	.56875	-6.219	14	.000
Pair 7	Pretest7 - Posttest7	-1.90000	2.25876	.61432	-4.583	14	.000

Examining the Table 3 reveals that the significance level for all dimensions was less than 0.05, indicating that both exact task repetition and automated corrective feedback (ACF) influenced all 7 dimensions of writing performance (CAF). Consequently, it can be inferred that both exact task repetition and ACF had a notable impact on the writing performance of EFL learners.

For the second research question which was formed to measure the influence of ACF accompanying procedural task repetition in improving writing skills, 7 CAF indicators were measured and the results are given in Table 4.

Table 4

Results of paired-sample t-test for the second experimental group (EG5)

		Paired Differences			t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean			
Pair 1	Pretest1 - Posttest1	-.48000	.34875	.09245	-5.745	14	.000
Pair 2	Pretest2 - Posttest2	-.16443	.11987	.02876	-5.481	14	.000
Pair 3	Pretest3 - Posttest3	-.18342	.13876	.03142	-6.280	14	.000
Pair 4	Pretest4 - Posttest4	-.25001	.13567	.03165	-6.213	14	.000
Pair 5	Pretest5 - Posttest5	-23.67843	12.32161	4.01765	-6.773	14	.000
Pair 6	Pretest6 - Posttest6	-2.70000	3.01243	.55786	-6.219	14	.000
Pair 7	Pretest7 - Posttest7	-2.90000	2.26740	.52543	-4.583	14	.000

For the experimental group that underwent procedural task repetition and ACF, measurements were conducted for 7 dimensions of CAF. The significance level for all dimensions was less than 0.05, indicating that both procedural task repetition and ACF influenced all 7 dimensions of complexity, accuracy, and fluency in the writing of EFL learners. Thus, it can be concluded that both procedural task repetition and ACF had an impact on the writing performance of language learners.



The last research question was formed to measure the effect of content task repetition accompanying ACF on the quality of EFL learners' writing. The results are revealed in Table 5.

Table 5

Results of paired-sample t-test for the third experimental group (EG6)

		Paired Differences			t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean			
Pair 1	Pretest1 - Posttest1	-.45000	.29856	.07654	-5.745	14	.000
Pair 2	Pretest2 - Posttest2	-.14118	.13876	.03453	-5.481	14	.000
Pair 3	Pretest3 - Posttest3	-.17892	.15765	.03176	-6.280	14	.000
Pair 4	Pretest4 - Posttest4	-.26123	.15012	.03987	-6.213	14	.000
Pair 5	Pretest5 - Posttest5	-25.87651	13.77844	4.12435	-6.773	14	.000
Pair 6	Pretest6 - Posttest6	-4.50000	2.27899	.56742	-6.219	14	.000
Pair 7	Pretest7 - Posttest7	-3.10000	2.00989	.69865	-4.583	14	.000

To determine the impact of content task repetition and automated corrective feedback (ACF) on the writing quality of EFL learners, a paired-sample t-test was conducted. The results revealed that the significance level for all dimensions was less than 0.05. This suggests that both content task repetition and ACF influenced all 7 dimensions of EFL writers. In essence, it can be inferred that both content task repetition and ACF had an effect on students' writing performance.

DISCUSSION

Effect of ACF and exact task repetition on writing CAF measures

Our analysis of the results showed that ACF has the potential to improve the efficiency of exact task repetition in enhancing writing complexity, fluency, and accuracy measures of Iranian intermediate EFL learners. Here are some ways in which automated corrective feedback can contribute to the efficiency of exact task repetition:

ACF can help learners to recognize and address areas of their writing where they are not using more sophisticated or nuanced language structures. When learners receive feedback on specific aspects of their writing that are not complex enough, they can work to improve those areas in subsequent writing tasks. This can lead to a more efficient development of complex language structures, as learners can focus their attention on specific areas that need improvement (Ranalli, 2018).



ACF can also contribute to the efficiency of exact task repetition in terms of writing fluency. By providing learners with targeted feedback on specific errors, they can work to correct those errors more quickly and efficiently in subsequent tasks. This can help learners to develop greater automaticity in their

The results also showed that ACF can also help learners to improve their writing accuracy more efficiently. Kellogg, Whiteford & Quinlan (2010) believed that by identifying and correcting specific errors, learners can work to develop greater accuracy in their language use. This can help to reduce the number of errors that learners make in subsequent writing tasks, which can lead to more efficient development of writing accuracy.

Generally speaking, the results of this study showed that ACF can contribute to the efficiency of exact task repetition in enhancing writing complexity, fluency, and accuracy measures of Iranian intermediate EFL learners. However, as mentioned before, it is important to note that the effectiveness of ACF depends on various factors, including the quality of the feedback provided, the learners' individual language proficiency, and the specific nature of the writing tasks. Additionally, it is important to balance the use of ACF with other forms of feedback and instruction that foster learners' autonomy and creativity in their writing.

Effect of ACF and procedural task repetition on writing CAF measures

Another important finding of this investigation was that ACF has the potential to improve the efficiency of procedural task repetition in enhancing writing CAF measures of Iranian intermediate EFL learners. ACF can help learners identify and address specific areas of their writing that lack complexity. By receiving targeted feedback on language structures, vocabulary use, or sentence variety, learners can focus on improving these aspects in subsequent writing tasks. This targeted feedback can efficiently guide learners in developing more sophisticated and complex writing skills over the course of procedural task repetition (Kang & Han, 2015).

The findings illustrated that ACF can also contribute to the efficiency of procedural task repetition in terms of writing fluency. This finding broadly supports the work of other studies in this area linking the influence of ACF on improving the efficiency of EFL writing (Hosseiny, 2014; Han & Hyland, 2015). By providing learners with specific feedback on errors or areas of improvement, ACF allows learners to make necessary adjustments and corrections, leading to more fluent and cohesive writing over time. This process can help learners develop greater automaticity in their writing, leading to improved fluency.

ACF can help learners improve writing accuracy more efficiently during procedural task repetition. By identifying and addressing specific errors, such as grammatical mistakes or lexical inaccuracies, learners can work to correct these errors in subsequent writing tasks. This targeted feedback can lead to more accurate and polished writing over time, contributing to the efficiency of procedural task repetition (Ferris, Liu, Sinha & Senna, 2013).

It's important to note that educators should consider the balance between providing ACF and fostering learners' autonomy and creativity in their writing. While ACF can be a valuable tool, it should be integrated with other forms of feedback and instructional strategies to support a comprehensive approach to writing development.



Effect of ACF and content task repetition on writing CAF measures

The last research question in this study sought to determine whether ACF has the potential to improve the efficiency of content task repetition in enhancing writing complexity, fluency, and accuracy measures of Iranian intermediate EFL learners. The results revealed that content task repetition improved the quality of Iranian EFL writings. Since content task repetition involves engaging learners in tasks that focus on the development and refinement of specific content-related aspects of writing, such as organization, coherence, and development of ideas, language learners' writing can improve through the use of this kind of feedback.

As reported by previous researches, ACF can help learners identify and address specific areas of their writing that lack complexity in terms of content and organization (Li, Link & Hegelheimer, 2015). By receiving targeted feedback on the development of ideas, logical reasoning, or coherence, learners can focus on improving these aspects in subsequent writing tasks. This targeted feedback can efficiently guide learners in developing more complex and well-structured writing over the course of content task repetition.

It is concluded from the reported results that ACF can also contribute to the efficiency of content task repetition in terms of writing fluency. By providing learners with specific feedback on the organization and coherence of their writing, ACF allows learners to make necessary adjustments and corrections, leading to more fluent and cohesive writing over time (Eslami, 2014). This process can help learners develop greater fluency in expressing their ideas and arguments effectively.

ACF can also help learners improve writing accuracy more efficiently during content task repetition. By identifying and addressing specific errors related to content development and organization, learners can work to correct these issues in subsequent writing tasks. This targeted feedback can lead to more accurate and well-structured writing over time, contributing to the efficiency of content task repetition (Gao & Ma, 2022).

CONCLUSION, IMPLICATIONS AND LIMITATIONS OF THE STUDY

Returning to the questions posed at the beginning of this study, it is now possible to state that different task types, namely exact, procedural and content can improve the quality of Iranian EFL writers regarding three measures of complexity, accuracy and fluency. It was also shown that automatic corrective feedback (ACF) has an influence on the effectiveness of three types of task repetition in improving writing skills. The current study has some implications for second language writing classrooms which are discussed below.

Despite the small sample size, this study offers some pedagogical insights. The data indicate that students derived benefits from task repetition, albeit in varying ways. Thus, task repetition can be strategically employed to achieve specific pedagogical objectives. For instance, if fluency is the focus in language classrooms, a single repetition may suffice. Conversely, accuracy and complexity may require multiple repetitions for improvement. Language teachers should consider trade-off effects when selecting tasks for assessment, as learners tend to prioritize specific CAF dimensions based on task demands. Task repetition can contribute to a more balanced performance over time.

From a language classroom perspective, it is notable that learners generally embrace task repetition, with enjoyment increasing over repetitions. Facilitating opportunities for learners to reach their full



potential is crucial for fostering motivation and confidence. Utilizing slightly varied task versions allows learners to draw on prior knowledge while promoting active participation and continued development without diminishing motivation. Overall, task repetition offers ample opportunities for student engagement, fostering classroom interactions and target language use independently of direct teacher intervention.

The present study is subject to several limitations that warrant consideration when interpreting its findings. Firstly, the research was conducted outside the traditional classroom environment, which may limit the direct applicability of the results to language classroom contexts. Conducting similar studies within regular classroom settings would provide more generalizable results directly applicable to language learning environments.

Secondly, the sample size of the study was relatively small, and participants produced texts of varying lengths. While efforts were made to address text length discrepancies by using proportions of errors, the variation in text length could still be a confounding factor. This, coupled with the small sample size, may partially account for some of the non-significant and unrelated results observed.

Additionally, the study relied on a single type of classroom placement test to assess participants' L2 proficiency levels. However, research suggests that such placement tests may not fully capture language proficiency. A replication study employing the same research design but utilizing more robust language proficiency assessments would offer a more comprehensive understanding of language learners' linguistic and writing abilities.

Suggestions for Further Research

As previously stated, the aim of this study was to explore the impact of various types of task repetition on the writing proficiency of Iranian EFL learners, specifically in terms of accuracy, fluency, and complexity. The findings indicated that task repetition, as a form of planning, positively influenced the overall writing quality of the learners. However, this study also identified areas for further investigation, suggesting avenues for future research endeavors.

It's important to note that the participants in this study were of intermediate proficiency level. Therefore, future research should consider examining the effects of different task repetition strategies on learners across various proficiency levels and educational backgrounds. This could provide insights into how task repetition treatments may affect writing performance at different proficiency levels.

Furthermore, future studies could benefit from implementing longer treatment periods and conducting delayed post-tests. Short-term studies like this one may not fully capture the long-term effects of task repetition on EFL writing performance. By extending the duration of the study and incorporating delayed assessments, researchers can better understand the sustained impact of task repetition over time.

Additionally, future research with EFL learners could enhance its methodology by employing larger sample sizes and incorporating different types of tasks. Exploring a wider range of task types and administering a longer sequence of repetitions could offer a more comprehensive understanding of the fluctuation of task repetition effects on writing proficiency.

Moreover, longitudinal studies could be conducted to investigate the enduring influence of task repetition on EFL writing performance and development over an extended period. This would provide



valuable insights into the long-term benefits of task repetition in improving writing skills among EFL learners.

Further research is needed to explore the effects of different types of written feedback, incorporating measures beyond complexity, accuracy, and fluency (CAF). Additionally, to comprehensively understand the intricate relationship between task repetition types and written corrective feedback, future studies should investigate interactions with other influential variables such as L2 motivation and attitude. While many questions remain unanswered, the findings of this study affirm the positive role of written corrective feedback in second language learning contexts, at least for certain learners and structures.

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