

The Role of Morphological Awareness and Background Knowledge in Turkish EFL Learners' Writing Ability

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Article information

Abstract

Morphological awareness is the metalinguistic realization that words consist of meaningful roots and affixes that can be isolated and manipulated. Learners at different proficiency levels use various forms of background knowledge such as cultural knowledge, technical knowledge, religious knowledge, vocabulary knowledge, and contextual visuals. The purpose of this research was to see whether morphological awareness and background knowledge affected the fluency and accuracy of Turkish EFL learners. The participants consisted of 80 Turkish EFL students. At first, participants were homogenized to select samples and eliminate outliers, then a pretest was used to assess participants' writing fluency and accuracy prior to treatment. During the treatment phase, materials were presented to participants, and at the end, a posttest was used to assess the effect of treatment on participants' writing fluency and accuracy. According to the result of the data analysis, there was a significant difference in morphological awareness of EFL learners' writing performance in terms of accuracy from the pre- to posttests. Furthermore, the findings revealed a similar amount of progress in participants' writing fluency.

Keywords	morphological awareness (MA), background knowledge (BK), writing accuracy, writing fluency, EFL learners
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1. Introduction

Learning a foreign language necessitates a variety of linguistic abilities. Language researchers have long emphasized the importance of four fundamental language skills: listening, speaking, reading, and writing (Sadikuk 2015). Dragomir and Niculescu (2020) assert that writing is the most productive skill since it entails the depiction of speech graphically as an inescapable component of communication.

Writing is the black-and-white representation of emotions, ideas, preferences, dislikes, and goals (Akkaya & Kırmızı, 2010). Writing is important in the teaching and learning process since it allows the assessment of students. It is the most challenging of the four English language skills, along with listening, speaking, and reading. Each writer's writing should strike a balance between numerous factors such as topic, audience, organization, vocabulary, and grammar. Writing seems to be difficult for both native and non-native speakers (Sadiku, 2015). As English is a foreign language with no practical application in most language learning classes in Turkey, writing is the most difficult assignment for most learners (Eryılmaz & Yeşilyurt, 2020). Researchers have placed a premium on the ways in which a student's writing might be enhanced to communicate more effectively (Silva et al., 2012). Numerous issues with the mastering and development of writing abilities are evident at the elementary and secondary levels of school (Topuzkanamış, 2015).

Morphemes are a language's tiniest units of meaning. As a result, the phrase morphological awareness (MA) connotes a knowledge of discrete components of meaning. MA is the deliberate examination of morphemes. Morphological production is the unintentional usage of morphemes, which occurs most often during spontaneous spoken language. When people communicate, they make morphemes but seldom think about them actively. Additionally, mature writers may write without consciously considering the morphemes they are writing, especially in less formal writing circumstances such as notes, e-mails, and the like (Kieffer & Lesaux, 2012; Nagy et al., 2006; Tyler et al., 2003). Öz (2014) defines morphological awareness as learners' conscious understanding of the morphemic structure of words, as well as their capacity to generate and change that structure.

Numerous studies have accumulated sufficient evidence regarding the importance of background knowledge (BK) relevant to the text's substance and topic. Readers who have more relevant knowledge about a text's topic have a larger potential for comprehending and learning from it. This is presumably because activating relevant semantic feature information, drawing accurate explanatory and elaborative inferences, and meaningfully and coherently connecting new information to prior knowledge are some of the ways that relevant background knowledge facilitates semantic and conceptual processing at multiple levels (Cook, 2005; Chang, 2006; Choi, 2015; Combs, 2008; Crandall & Tucker, 1999; Foorman et al., 2012).

BK is the degree to which a speaker is acquainted with a topic of a conversation, a speech, a program, an article, or a chat (Ekler & Cinkara, 2018). Language proficiency may assist verbal processing, but familiarity with a topic may help conceptual processing (Alexander et al., 1995; Kaakinen & Hyönä, 2005; McCrudden & Schraw, 2010; McCrudden et al., 2005). Participants were asked in a study by McCrudden and Schraw (2010) to evaluate the positive and negative aspects of living in a certain area after reading a text that described four locations

from the viewpoint of a researcher. It was discovered that readers took more time to evaluate messages that connected to what they already knew and to create a suitable picture of the material. Several additional studies support this claim (Afflerbakh, 1990; Curinga, 2014; Kazemi, 2015; Smit et al., 2021; Spivey & King, 1989).

According to Evans et al. (2010), the accuracy of foreign language writing may be impacted by a variety of elements, including the learning environment, student variations, and instructional techniques. Among these characteristics, they emphasize the inadequacies in teaching approaches, which may contribute significantly to EFL/ESL learners' inability to maximize their capacity to write properly. Skehan (1996) defines accuracy as a feature of a learner's ability to cope with whatever level of inter-linguistic complexity s/he is presently exposed to; that is, how similar the generated language is to the target language.

Additionally, fluency is essential for linguistic output. Language learners are frequently referred to as competent language users if they speak effectively and in a native-like manner in their second language (Housen et al., 2012). According to Chenoweth and Hayes (2001), writing fluency is essential for second language learners' academic progress. Fluency is often defined in second language acquisition studies as the language user's ability to generate language at a consistent pace without interruptions (Skehan, 2009), or as the automated generation of language (Segalowitz, 2016). The quantity of words in a written text, the length of the text (Fathman & Whalley, 1990; Reid, 1990), or the amount of time spent writing are often used to measure written fluency (Chenowith & Hayes, 2001; Skehan, 2009). Furthermore, fluency has been defined as the number of corrections made by the learner, even though Abdel Latif (2012) contends that corrections are irrelevant to writing fluency.

The language learner's grasp of the second language influences fluency. Fluency develops when a language learner's understanding of grammar and

vocabulary grows (Chenowith & Hayes, 2001; Çelik, 2019). The more skilled the writer, the less conscious focus is necessary to generate words and sentences. If spelling requires a lot of attention, the writer may be unable to focus on the content of the text when writing (Chenowith & Hayes, 2001). Furthermore, according to Housen et al. (2012), enhanced automated language processing results in more fluent language output. Towell (2012) also considers a learner to be fluent if their material is available via practiced techniques. As a language pattern's remembering becomes more automatic, the output gets easier and more fluid (Towell, 2012).

The present study employed morphological awareness and background knowledge as treatments to improve the writing fluency and accuracy of the participants. This is a crucial field of study because it reveals the applicability of these variables in a Turkish context and enables EFL students to gain a deeper understanding of the significance of writing ability. The purpose of this research was to concentrate on not just writing but also on morphological awareness, background knowledge, fluency, and accuracy.

2. Methodology

2.1 Research Design

Since there was no randomization in the sample selection, this research is classified as quasi-experimental. Abraham and MacDonald (2011) assert that this form of investigation is frequently conducted when it is not feasible to establish a control group or conduct random sampling. The researcher as the teacher had two classes which were considered the study's participants and were classified as one of two treatment groups: morphological awareness (MA) (treatment group A) and background knowledge (BK) (treatment group B). Although the existence of a third group as a control group would have been a complementary strong point, the researcher did not have another suitable class, and therefore there was no control group in this study. The purpose of this research was to see to what extent MA

and BK affected the writing fluency and accuracy of Turkish intermediate EFL students. The study had four phases: a homogenizing phase to select the samples and eliminate outliers, a pretest phase to assess participants' writing fluency and accuracy prior to treatment, a treatment phase to deliver the prepared materials to the participants, and a posttest phase to assess the treatment's effect on participants' writing fluency and accuracy.

2.2 Research Questions

This study addressed the following research questions:

1. To what extent does morphological awareness (MA) affect the writing fluency of EFL students?
2. To what extent does morphological awareness (MA) affect the writing accuracy of EFL students?
3. To what extent does background knowledge (BK) affect the writing fluency of EFL students?
4. To what extent does background knowledge (BK) affect the writing accuracy of EFL students?
5. Is there any statistically significant difference in writing accuracy between the participants in the morphological awareness and background knowledge groups?
6. Is there any statistically significant difference in writing fluency between the participants in the morphological awareness and background knowledge groups?

Morphological awareness and background knowledge were considered as the independent variables and writing fluency (as the number of clauses per minute) and accuracy (as the percentage of error-free clauses in the total number of clauses) as the dependent variables.

2.3 Participants

This research included 80 intermediate EFL students. As the primary phase of the research, an Oxford Placement Test (OPT) was employed to choose participants with the purpose of homogenizing them; outliers were eliminated, and the remaining were separated into background knowledge and morphological awareness groups. Thirty-five students were in the MA group, and 35 students were in the BK group. It was a quantitative research project, and both sets of participants were trained and taught by the same teacher. The participants varied in age from 18 to 25 years old.

2.4. Instruments

The Oxford Placement Test (OPT) was used as a homogeneity test to homogenize the initial differences in participants' English language skills. The OPT is divided into grammar and vocabulary components with multiple-choice questions. A writing pretest was used to determine the participants' initial writing fluency and accuracy. Another instrument was a writing posttest to check participants' abilities after the treatment process.

The researcher began assessing the papers for fluency and correctness after collecting the data from each test. To measure fluency, the number of words was computed and divided by the time limit of 30 minutes for each paper, as recommended by Feller and Apple (2006), who believe that the total number of words written in a certain amount of time may be used to define fluency. To measure accuracy, the number of error-free T-units was divided by the total number of T-units, as per Larsen Freeman (2006). The accuracy and fluency scores were then converted into percentages in order to enter the data into SPSS.

Fluency = Total number of words /30

Accuracy = Error-free T-units/total T-units

2.5. Procedure

The data for this study were gathered quantitatively and were based on a quasi-experimental research design. The objective of quasi-experimental research is to establish a causal relationship between an independent and a dependent variable. First, 80 intermediate EFL learners were selected as the research's initial samples, and then an OPT exam was administered to the learners to homogenize them for the main study. The OPT included 60 questions. This research consisted of two groups: the morphological awareness group, which included 35 learners, and the background knowledge group, which also included 35 learners. The treatment was completed in 14 sessions, each lasting two hours. In the treatment sessions, the book that was used for the morphological awareness group was *Oxford Word Skills* (Gairns & Redman, 2012), through which students were taught different word patterns, prefixes, and suffixes. Learners become acquainted with suffixes and prefixes such as “re-,” “pre-,” “anti-,” “mis-,” “co-,” “dis-,” “-ee,” “-ful,” “-less,” and “-ish” throughout the 14 sessions of treatment. Then, the posttest was administered.

The other treatment group, background knowledge, was taught using the book *Writing Paragraphs: From Sentence to Paragraph* (Zemach & Islam, 2006) , which focuses on different kinds of topics and paragraphs. There were two posttests for this group; one of the test topics was similar to the topics that the learners wrote about in the treatment sessions and the other was a new topic for the participants. This subject did not relate to topics in the treatment sessions. Examples of topics that BK students focused on during their 14 treatment sessions included white lies, the best birthday present/party, university students and part-time jobs, best friends, and characteristics of a good friend.

These books were used as reference materials for the teacher to prepare teaching materials. Students were not required to purchase the books but were given the option of doing so if they wished.

3. Data Analysis and Results

A standardized OPT exam was administered to all participants before the treatment to guarantee homogeneity of the subjects. Outliers were excluded from the research, while the others (70 students) were chosen as participants.

The Kolmogorov-Smirnov and Shapiro-Wilk tests were used to check the data distribution normality. Later, to see whether the students in both groups performed substantially differently or similarly in the pretest, two Mann-Whitney U tests were employed to evaluate the groups' performance in writing accuracy and fluency. Then, a paired samples t -test, Wilcoxon test, and Mann-Whitney U tests were used to address the research questions.

3.1 Homogeneity of Participants

The participants were given an OPT proficiency test at the beginning of the study to check that there were no major disparities in their proficiency levels and that they were at the intermediate level. Each item was worth one point. The following are the descriptive data gathered from the OPT.

Table 1

Descriptive Statistics of OPT Test

	N	Minimum	Maximum	Mean	Std. Deviation
OPT	80	35.00	47.00	40.08	3.6
Valid N	70				

Table 1 shows that the mean score was 40.08, with a standard deviation of 3.6. To generate a homogeneous group, participants with scores within one SD above and below the mean were recruited. There were 70 students left, and ten students were excluded from further participation in the study.

3.2 Normality Analysis

The normality of data collected during the pretest and posttest stages was evaluated before applying statistical analysis. The Kolmogorov-Smirnov and Shapiro-Wilk test were used to determine if the data were normally distributed.

Table 2

Normality Tests

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Static	df	Sig.
Pretest Accuracy. MA	.24	33	.000	.90	33	.004
Posttest Accuracy. MA	.21	33	.001	.88	33	.002
Pretest Fluency. MA	.13	33	.200*	.97	33	.45
Posttest Fluency. MA	.091	33	.200*	.96	33	.34
Pretest Accuracy. BK	.20	32	.001	.92	32	.032
Posttest Accuracy. BK	.17	32	.014	.91	32	.015
Pretest Fluency. BK	.16	32	.029	.93	32	.046
Posttest Fluency. BK	.11	32	.200*	.95	32	.035

Based on the results presented in Table 2, the significance levels of the differences between the accuracy and fluency in pretest and posttest scores of both groups were lower than the .05 alpha level, indicating that the scores for each group were different from each other. It could therefore be concluded that the scores deviated from a normal distribution.

3.3 Pre-test Data Analysis

Before answering the research questions, the pretest scores of the groups were compared to identify the existence of any difference in the accuracy and fluency of the participants in the groups before the treatment administration. Since the obtained data did not show a normal distribution, the investigation of the difference in accuracy and fluency levels was conducted by Mann-Whitney U tests.

Table 3 displays the descriptive statistics of the groups' accuracy scores in the pretest to determine if there was a significant difference.

Table 3

Descriptive Statistics of Accuracy for Pretests

	Group	N	Mean
Writing accuracy	MA	35	.80
	BK	35	.71
	Total	70	.755

According to the findings in Table 3, there seemed to be a difference in the mean scores of learners in morphological awareness and background knowledge groups for writing accuracy. A Mann-Whitney U test was employed to examine the observed difference. The findings are presented in Table 4.

Table 4

Mann-Whitney U Test Comparing the Accuracy Performances in Pretests

	Writing accuracy
Mann-Whitney U	98.00
Wilcoxon W	111.00
Z	-3.4
Asymp. Sig. (2-tailed)	.14
Exact Sig. [2*1-tailed Sig.]	.14

When the mean scores of the groups in pretests were compared to see whether they were different, it was determined that the observed difference was not statistically significant since the p -value, which was $p = .14$, was higher than the established alpha level. As a result, it can be concluded that the groups exhibited comparable levels of writing accuracy prior to treatment. The fluency

levels of the subjects on the pretests were then compared. Tables 5 and 6 show the outcomes.

Table 5

Descriptive Statistics of Fluency for Pretests

	Group	N	Mean
Writing fluency	MA	35	3.6
	BK	35	3.1
	Total	70	3.35

According to the descriptive data in Table 5, the mean fluency score of participants in the morphological awareness group seemed to be somewhat higher than that of the background knowledge group. As a result, the scores were compared using the Mann-Whitney U test to see if the difference was statistically significant. Table 6 illustrates the outcomes.

Table 6

Mann-Whitney U Test Comparing the Fluency Performances in Pretests

	Writing accuracy
Mann-Whitney U	110.2
Wilcoxon W	130.2
Z	-4.3
Asymp. Sig. (2-tailed)	.08
Exact Sig. [2*1-tailed Sig.]	.08

It was determined that the observed difference was not statistically significant since the p -value, which was $p = .08$, was higher than the established

alpha level. It could therefore be concluded that the groups exhibited comparable levels of writing fluency prior to treatment.

3.4 Effects of Morphological Awareness and Background Knowledge

3.4.1 Effects of morphological awareness on writing fluency

In order to answer the first research question, learners' mean pretest and posttest scores were calculated, and the significance of the differences was examined using a paired sample *t*-test along with descriptive statistics.

Table 7

Paired Samples T-Test Comparing Fluency from Pre- to Posttest in MA Group

	Mean	N	Std. Deviation	Std. Error Mean
Pretest Fluency. MA	3.06	35	.42	.072
Posttest Fluency. MA	3.9	35	.67	.115

Paired Differences								
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	sig. (2-tailed)
				Lower	Upper			
Pretest Fluency. MA-Posttest Fluency. MA	-.53	.42	.072	.68	-.39	-7.4	3	< .001

The mean values demonstrated that learners' scores increased from pretest ($M = 3.6$) to posttest ($M = 3.9$), showing an improvement in fluency. Consequently, the paired samples *t*-test was used to determine the significance of the difference between pretest and posttest scores.

The mean difference between the pretest and posttest scores ($M = -.53$) of this group revealed that learners' writing fluency increased considerably as a consequence of treatment ($t(33) = -7.4, p < .001$), as

shown in Table 7. In fact, it was indicated that learners' acquisition of morphological awareness might have greatly improved their writing fluency.

3.4.2 Effects of morphological awareness on writing accuracy

The pretest and posttest mean scores seemed to differ significantly for this group. Table 8 shows the mean scores for this group. The posttest mean score was greater than the pretest mean score, indicating that the learners' writing accuracy had improved in this group. As a result, the scores were evaluated to see whether the difference was significant. The Wilcoxon test was employed to determine the significance of the observed difference since the scores departed from a normal distribution.

Table 8

Comparing Accuracy from Pre- to Posttest in MA Group

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest Accuracy. MA	35	.60	1.00	.80	.10
Posttest Accuracy. MA	35	.60	1.00	.87	.10
Valid N	35				

Wilcoxon test Comparing Accuracy from Pre- to Posttest in MA Group

	Posttest, Accuracy MA-Pretest Accuracy MA
Z	-3.640 ^b
Asymp. Sig. (2-tailed)	< .001

Wilcoxon signed-rank tests were used to determine the significance of the difference between the pretest and posttest scores. Participants in this group improved their writing accuracy considerably following treatment, as seen in Table 8. In other words, the difference in mean scores between the pretest and posttest was determined to be statistically significant ($Z = -3.64$, $p < 0.001$). This suggested that the Turkish EFL students' writing

accuracy was also influenced by their acquisition of morphological knowledge.

3.4.3 Effects of background knowledge on writing fluency

As can be concluded from Table 9, within this group, the pretest and posttest mean scores differed. The posttest mean score was higher than the pretest mean score, suggesting that in this group learners' writing fluency improved.

Table 9

Comparing Fluency from Pre- to Posttest in BK Group

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest Fluency. BK	35	2.6	4.2	3.1	.46
Posttest Fluency. BK	35	2.6	4.2	3.4	.46
Valid N (List wise)	35				

Wilcoxon test Comparing Fluency from Pre- to Posttest in BK Group

	Posttest. Fluency BK - Pretest. Fluency BK
Z	-4.3 ^b
Asymp. Sig. (2-tailed)	< .001

Wilcoxon signed-ranks tests determined the significance of the difference between the pretest and posttest scores. Learners in this group performed considerably better in writing fluency following the treatment, as indicated in Table 9. In other words, the difference in mean scores between the pretest and posttest was determined to be statistically significant ($Z = -4.3, p < .001$). This suggested that the Turkish EFL students' writing fluency was influenced by their acquisition of background knowledge.

3.4.4 Effects of background knowledge on accuracy

Table 10 shows that the pretest and posttest mean scores for this group differed to a considerable extent. The posttest mean score was higher than the pretest mean score, suggesting that learners' writing accuracy improved.

Table 10

Comparing Accuracy from Pre- to Posttest in BK Group

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest Accuracy. BK	35	.50	1.00	.71	.12
Posttest Accuracy. BK	35	.60	1.00	.74	.12
Valid N (List wise)	335				

Wilcoxon test Comparing Accuracy from Pre- to Posttest in BK Group

	Posttest Accuracy. BK - Pretest Accuracy. BK
Z	-2.13 ^b
Asymp. Sig. (2-tailed)	.03

Wilcoxon signed-ranks tests were used to determine the significance of the difference in pretest and posttest scores. Individuals in this group improved their writing accuracy significantly following treatment, as seen in Table 10. In other words, the mean difference between pretest and posttest scores was found to be statistically significant ($Z = -2.13$, $p = .03$). This suggested that the acquisition of background knowledge influenced the writing accuracy of Turkish EFL students.

3.4.5 Differences in writing accuracy between the morphological awareness and background knowledge groups

The findings of the pretest analysis indicated that the groups performed similarly in terms of writing accuracy and fluency; therefore, to

answer the fifth research question, another Mann-Whitney U test was used to compare their posttest performances. Table 11 summarizes the descriptive statistics findings.

Table 11

Descriptive Statistics of Accuracy for Posttests

	Posttest Accuracy		
	Mean	Std. Deviation	N
MA	.87	.10	35
BK	.74	.12	35
Total	.805	.12	70

Mann-Whitney U Test Comparing the Accuracy Performances in Post-tests

Writing Accuracy	
Mann-Whitney U	129.5
Wilcoxon W	131.1
Z	-3.3
Asymp. Sig. (2-tailed)	.02
Exact Sig. [2*1-tailed Sig.]	.02

As shown in Table 11, the group that underwent morphological awareness treatment had a higher mean ($M = .87$) than the background knowledge group ($M = .74$).

The Mann-Whitney U test was used to determine the significance of the difference between the groups' posttest mean scores while taking pretest similarity into consideration. According to Table 11, the p-value of $p = .02$ indicated that the difference was statistically significant. Comparing the mean results revealed that the morphological awareness treatment had a greater effect on learners' writing accuracy.

3.4.6 Differences in writing fluency between the morphological awareness and background knowledge groups

Once again, the Mann-Whitney U test was utilized, as can be seen below.

Table 12

Descriptive Statistics of Fluency for Posttests

	Posttest Fluency		
	Mean	Std. Deviation	N
MA	3.9	.67	35
BK	3.4	.46	35
Total	3.5	.55	70

Mann-Whitney U Test Comparing the Fluency Performances in Posttests

Writing Accuracy	
Mann-Whitney U	108.3
Wilcoxon W	134.1
Z	-4.65
Asymp. Sig. (2-tailed)	< .001
Exact Sig. [2*1-tailed Sig.]	< .001

As shown in Table 12, the morphological awareness group had a higher mean ($M = 3.9$) than the background knowledge group ($M = 3.4$).

The Mann-Whitney U test determined the significance of the difference between the groups' posttest mean scores. The p -value of $< .001$ indicated that the difference was statistically significant.

4. Discussion

There has been extensive research on the relationship between students' increasing literacy abilities and morphological awareness, which is the metalinguistic notion that words are made up of meaningful roots and affixes, or morphemes, that may be separated and altered (Akbulut, 2019; McCutchen & Stull, 2015). When students come across a word, they are unfamiliar with—for example, the word *unsuccessful*—morphological insights enable them to deduce the meaning of the word from its known parts, namely the prefix *un-*, the stem *success*, and the suffix *-ful*. Morphological awareness has been shown to be a reliable indicator of language proficiency in both word reading and comprehension. Furthermore, recent meta-analyses have shown that morphological education enhances literacy results both for learners who have basic levels of literacy proficiency and those who struggle (Deacon & Kirby, 2004; Zhang et al., 2023; Liu et al., 2024).

The importance of morphological awareness in writing has recently drawn more attention from researchers. Writing offers a unique perspective on how learners' morphological abilities are developing since it necessitates the productive management of morphological forms (Asad & Shadbin, 2019). Morphology scholars have focused to a large extent on spelling, one specific writing skill (Goodwin & Ahn, 2013; Nunes et al., 2006), but there is also rising interest in the connection between morphological awareness and other writing skills.

Additionally, during the past several decades, a key concern in the domains of second language evaluation and pedagogy has been how well-versed a student is in the subject matter or content of an L2 assignment. The influence of background knowledge on L2 reading and vocabulary research studies has been studied (Lee, 2011; McNail, 2010; Sabatin, 2013), but less study has been done on how BK affects the quality of L2 production during writing and speaking tasks. The concept of BK has been established as a variable that affects how complicated L2

learners perceive a task to be in the context of task-based second language acquisition (SLA) (East, 2017; Kuiken, 2023; Maad, 2012). According to predictions made by researchers (Bava Harji & Cheitanchian, 2017; Housen et al., 2012), the linguistic complexity, accuracy, and fluency (CAF) of L2 learners' language production will generally decline in comparison to that produced for a more familiar topic when they perform a production task on a topic with which they are less familiar (i.e., cognitively more complex tasks). Additionally, they predict trade-off consequences between CAF components (Skehan, 2009).

Given the distinctive features of the writing process, which may have an impact on the relationship between the cognitive complexity of tasks and the quality of language production, researchers have recently called for more studies on the cognitive complexity of tasks in the writing modality (Yoon, 2021).

The researcher's objective in conducting this study was to determine if morphological awareness and background knowledge had any effect on the fluency and accuracy of Turkish intermediate learners' writing ability. Seventy learners were recruited for this study, and an OPT was utilized to homogenize the subjects. Participants were separated into two treatment groups: one for morphological awareness, and another for background knowledge, which each included 35 participants.

The SPSS (Statistical Program for Social Science) was used to process quantitative data to draw conclusions for the research questions. The results of the analyses related to the corresponding research questions revealed that MA and BK both had significantly positive effects on the writing accuracy and fluency of the EFL learners.

Following data collection, the significance of the differences between pretest and posttest scores was determined using Wilcoxon signed-rank tests.

Generally, the mean values showed that learners' scores improved from pretest to posttest in both groups. In other words, the mean differences between pretest and posttest scores were found to be statistically significant. By considering each group's statistical results, it can be concluded that EFL intermediate learners in the MA group improved the most in both their writing fluency and accuracy. Furthermore, the results indicated that in the BK group, the participants' writing accuracy and fluency also improved from pre- to posttests, but to a lesser extent than the MA group.

There are legitimate educational reasons for learners to develop morphological awareness. According to research studies, morphological awareness is a strong predictor of literacy growth (Deacon & Kirby, 2004; Layes, et al., 2017; Lee et al., 2023; Wang & Zhang, 2023). The findings of this study on the effects of MA and BK on fluency and accuracy were consistent with Morin (2003), who has proposed the technique of construing word implications using morphological information, as well as the requirement for morphological fulfillment in the target language. She describes morphological awareness as the ability to exercise control over morphemes and word-building standards in a language. Anglin et al. (1993) and Cohen-Mimran et al. (2023) have demonstrated that learners might evaluate the morphological structure of unfamiliar difficult words to make sense of their meanings. The current study's results also align with Kieffer and Lesaux (2012) and Curinga (2014), who studied the impact of morphological awareness. They identified a substantial association between morphological awareness and reading comprehension and argued that morphological awareness resulted in an improvement in writing accuracy and fluency. The study's findings on the effects of background knowledge on writing confirmed those of Kazemi (2015) and Layes et al. (2017), who investigated the impact of background knowledge on EFL oral presentations. They also observed that familiarity with the topic influenced learners' oral presentations.

It is noteworthy that the results of this study contradicted those of Salimi and Fatollahnejad (2012) who investigated the influence of strategic planning and background knowledge on foreign learners' writing ability. In contrast to this study, which revealed a considerable effect, they observed no significant influence of background knowledge on improving writing.

5. Conclusion

The purpose of this research was to determine the effects of morphological awareness and background knowledge on Turkish intermediate EFL learners' writing accuracy and fluency.

The statistical analysis revealed that learners generated more accurate and fluent compositions after undergoing a 14-week treatment focusing on the acquisition of either morphological awareness (MA) or background knowledge (BK). The results indicated that MA had a more beneficial effect on students' writing accuracy. However, as the BK group also showed improvement, the results suggested that BK should also be taken into consideration as a feature when developing syllabuses and materials in order to encourage the development of accuracy and fluency in writing task output.

6. Limitations, Recommendations, and Suggestions of the Study

One primary constraint of this research was that information on gender was not collected, which meant that comparisons could not be made between genders. Another limitation was the lack of sufficient participants to enable another group to act as a control. One other major limitation of this study was the limited number of affixes that the MA group were exposed to during treatment. Thus, for further investigations, the author suggests considering both genders and comparing their results separately. Also, repeating this research with a greater number of subjects can add to the validity and value of the results. Additionally, a pilot study would be

helpful to determine the right sample size for a larger project and/or to enhance different components of the study design.

The importance of proficient writing is universally recognized among educators; thus, teachers ought to devise effective strategies to inspire students to engage in writing. Therefore, the findings of the present study should encourage teachers to impart MA to their students, specifically regarding the stems, prefixes, and suffixes of words. Building learners' MA may assist students in recognizing and employing morphological indicators when confronted with unknown vocabulary in a text. Based on the observed efficacy of the implemented strategies in enhancing the writing ability that was the focus of this investigation, it is reasonable to hypothesize that implementing MA and BK training may both result in improved writing ability. Such advancements, in turn, may contribute to learners' motivation and yield higher scores in subsequent writing assignments.

7. About the Author

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