

THE ROLE OF REFORMULATION AND NOTICING TASKS IN IMPROVING  
THE GRAMMATICAL ACCURACY OF B1 LEVEL TURKISH EFL LEARNERS

by  
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THE ROLE OF REFORMULATION AND NOTICING TASKS IN IMPROVING  
THE GRAMMATICAL ACCURACY OF B1 LEVEL TURKISH EFL LEARNERS

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I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

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*To my dear family,  
and my beloved Pepito*

## ABSTRACT

Providing effective feedback to EFL learners on their output is essential in the improvement of their writing accuracy. The present quasi-experimental study aims to investigate the impact of reformulation and noticing tasks on learners' writing accuracy, their ability to notice the mismatches between the two versions of their writing, and their attitude towards this new feedback tool. The present study suggests a positive relationship between providing reformulation as feedback and the improvement of EFL learners' grammatical accuracy in writing. This mixed-methods study involved a total of 30 Turkish EFL students at B1 level of the preparatory program of a private university in Turkey. The treatment of the experimental group ( $n = 15$ ) included comparison of their paragraph with its reformulation followed by completion of a learning journal to stimulate noticing of the differences, and a question-answer stage for interactional feedback. The comparison group ( $n = 15$ ) received explicit corrective feedback in the traditional way and a question-answer stage as interactional feedback. The quantitative data was collected through a pre-test and a post-test in the form of paragraph writing, in addition to learning journals and stimulated recall interviews with the experimental group followed by a final focus group interview. The analyses of the data were carried out via tracing the target-like forms, the number of reformulations and noticing in the learners' output. While the quantitative data indicate a positive effect on the improvement of overall general accuracy, no significant effects were found between the two groups with respect to target grammatical forms. However, the qualitative data show how this feedback tool increases learners' noticing of their incorrect grammatical use. The learners' attitude

is also found to be positive towards receiving a native-like version of their output as a model text.

*Keywords: reformulation, feedback, noticing, writing accuracy*



## ÖZET

Yabancı dil öğrencilerine etkili geribildirim vermenin yazılı dil gelişimlerinde önemi büyüktür. Bu yarı-deneysel çalışma, yeniden biçimleme (reformulasyon) olarak verilen geribildirim yönteminin ve farkındalık çalışmalarının, yazılı dil kullanımında dilbilgisini geliştirdiğini öne sürmekte ve deneysel bir destek sunmaktadır. Bu çalışma, yeniden biçimleme yönteminin yazılı dildeki gelişime olan etkisini, öğrencilerin iki yazı arasındaki uyumsuzlukları ne ölçüde fark edebildiklerini ve bu geribildirim yöntemine olan yaklaşımlarını araştırmayı amaçlamaktadır. Bu karma yöntemli çalışma, Türkiye’de bir üniversitenin İngilizce Hazırlık Programı’nda, anadili Türkçe olan, B1 seviyesinde 30 yabancı dil öğrencisi ile yapılmıştır. Uygulama grubu ( $n = 15$ ) yazdıkları paragrafı yeniden biçimlenmiş versiyonu ile karşılaştırıp, iki yazı arasındaki uyumsuzlukları fark etmelerini teşvik etmek amacıyla bir öğrenme günlüğü oluşturularak, soru-cevap içeren etkileşimli geribildirim; kontrol grubundaki öğrenciler ( $n = 15$ ) ise yazılarına geleneksel yöntemle düzeltilmiş geribildirim yöntemini takiben soru-cevap içeren etkileşimli geribildirim almışlardır. Nicel veriler, öntest ve sontest aracılığıyla; nitel veriler ise uygulama grubundaki öğrencilerle yapılan öğrenme günlüğü çalışması, uyarılmış geri çağırma seansları ve odak grup görüşmesi ile toplanmıştır. Verilerin analizi, yazıda doğru kullanılmış dilbilgisi kalıplarının takibine ek olarak yeniden biçimlenen ve farkedilen kalıpların sayısı hesaplanarak yapılmıştır. Nicel verilere göre iki grup arasında genel dilbilgisi kalıplarının gelişiminde olumlu bir etki gözlenirken, hedef dilbilgisi kalıplarında anlamlı bir fark bulunmamıştır. Ancak nitel veriler, bu geribildirim yönteminin öğrencilerin yanlış dilbilgisi kullanımlarını farketmelerini artırdığını göstermiştir.

Öğrenciler, yazılarının doğru dil kullanımı içeren versiyonunu görme konusunda memnuniyetlerini belirtmişlerdir.

*Anahtar Kelimeler: reformulasyon, geribildirim, farkındalık, yazılı dilde doğruluk*



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## LIST OF ABBREVIATIONS

AI	Artificial Intelligence
CEFR	Common European Framework of Reference
CELTA	Certificate of English Language Teaching to Adults
CG	Comparison Group
DF	Degree of Freedom
EFL	English as a Foreign Language
EG	Experimental Group
ESL	English as a Second Language
GA	General Accuracy
L1	First Language
L2	Second Language
LJ	Learning Journal
M	Mean
SPSS	Statistical Package for Social Sciences
SD	Standard Deviation
SLA	Second Language Acquisition
TG	Target Grammar

# 1. INTRODUCTION

## 1.1. Background

In language learning, it is essential to give effective feedback to EFL learners, especially for the development of grammatical accuracy<sup>1</sup> in their written performance. It is generally accepted that EFL learners often receive written corrective feedback via marking nontarget-like grammatical features in their writing, and adding the accurate grammatical form (Lee, 2016). The ultimate aim of providing learners this type of traditional written feedback is to develop their writing accuracy by explicitly indicating the linguistically misused forms together with their correct forms. A more recent way of providing written corrective feedback to writing is commonly suggested via error-coding followed by a metalinguistic explanation provided by either written or oral means (Ogawa, 2021). Through this means of giving repeated feedback, it is often aimed to engage EFL learners in a more accurate use of target forms.

On the other hand, based on observations, despite the frequency of explicit written corrective feedback and metalinguistic explanations they receive, EFL learners are often inclined to make similar grammatical errors in their writing. For instance, learners are often criticized for their re-occurring errors with the use of articles, pronouns, prepositional phrases, verb tenses, or copular verbs due to either not paying enough attention to corrective feedback or lack of noticing. However, various forms of feedback may be given to learners to increase their noticing of the nontarget-like grammatical use, and advance their interlanguage development regarding their writing accuracy (Lee, 2016). In other words, reformulation of their

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<sup>1</sup> Accuracy: A learner's target-like language use, e.g. grammar, vocabulary or pronunciation

written work as feedback may help learners notice the linguistic errors in their writing and result in the improvement of their writing accuracy.

Reformulation, that is rewriting EFL learners' work to transform it into target-like form without altering its content (Lee, 2016), and providing noticing tasks in the form of positive feedback have been widely investigated in literature. It has been found that this type of feedback has more impact on the improvement of learners' output in comparison to more common feedback tools that include negative evidence (Hanaoka, 2007; Qi & Lapkin, 2001; Amini et al., 2019). It is claimed that not only learners' noticing of the provided input, but also noticing as result of their *own* production of the target language have a significant impact in the improvement of L2 learning. In other words, through this particular means of providing written feedback, EFL learners' own output is aimed to function as a stimulus which prompts them to become more conscious of the linguistic problems in their writing (Qi & Lapkin, 2001).

The effects of reformulation and noticing tasks as feedback on L2 development have received considerable attention recently (Hanaoka, 2007; Qi & Lapkin, 2001; Hanaoka & Izumi, 2012; Uggen, 2012; Amini et al., 2019). On the other hand, there is little research on the role of reformulation and noticing tasks as feedback, particularly on the development of EFL learners' grammatical accuracy in writing. Due to the complex nature of writing as a skill, the way noticing plays a role on EFL learners' improvement of writing accuracy also needs to be investigated. In order to achieve this aim, conducting collaborative dialogues with learners to raise their awareness of the misused linguistic forms in their writing may help during the noticing process. This way, it may both be possible to help learners to become aware of and notice the mismatches between their writing and its reformulation, and also

achieve a better analysis of their cognitive involvement during the noticing process. When learners are involved in noticing, by nature, they go through specific cognitive processes. Previous research in SLA and cognitive science has investigated the cognitive processes that lead to language learning and found that learners' own language production may better help them realize the gap between their intended message and the message they are capable of giving (Izumi, 2003 as cited in Uggen, 2012). However, research has tended to focus on the type of features learners notice in general rather than the role of reformulation as feedback and noticing tasks specifically on the development of learners' writing accuracy.

For this reason, the current study aims to investigate whether providing Turkish EFL learners the reformulation of their written output, and promoting their cognitive engagement in noticing the grammatical differences between their own writing and its reformulation helps them to develop their writing accuracy.

## **1.2. Statement of the Problem**

One of the essential problems in L2 writing is providing effective feedback to learners' texts (Hyland et al., 2016). Giving learners the reformulated version of their text may promote noticing of their grammatical errors in writing, thus, result in improvement of their writing accuracy. Reformulation refers to how a native speaker of the language would convey the same message when there is a communication breakdown during a genuine interaction with a non-native speaker. The mismatches between the learners' own output and its reformulation may be caused by lexical use, syntax, writing style, or flow of ideas in addition to grammatical accuracy (Cohen, 1982; Levenston, 1978; Allwright, Woodley, & Allwright, 1988 as cited in Hanaoka & Izumi, 2012). Therefore, when students compare their written work with its native-

like version, it may be difficult for some of them to notice the mismatches related to grammatical forms in particular.

Results of previous research have shown that when learners compare their own writing with its reformulated version, some focus on the ungrammatical features, whereas others may notice the mismatches related to lexical features, or the use of discourse markers. According to a study by Hanaoka (2007), when learners were asked to compare their own output with its reformulation, they mostly focused on the lexical features, identified and found solutions to their problems related to lexis, and applied the solutions in their subsequent work. In Ellis et al.'s (2006) study, as a result of analysing the think-aloud-protocols of learners, it was also found that the majority of the learners focused on vocabulary. Previous research raises the question of how focus on form should be initiated by learners during the comparison of their output with its reformulation. Since teachers' expectations of students' noticing may not be parallel with what they really notice, learners may need particular guidance and scaffolding via awareness-raising tasks to promote noticing of the ungrammatical forms in their writing. In light of these findings, the present study uses learning journals and stimulated recall interviews as noticing tasks to encourage learners to notice the grammatical differences between their writing and its reformulation as feedback, and become conscious of the target-like forms.

The main problem in the current study is that despite the frequent explicit written corrective feedback Turkish EFL learners receive on their writing, they often repeat the same grammatical errors, such as the use of articles, pronouns, prepositional phrases, verb tenses, or copular verbs, due to either not paying enough attention to the corrective feedback, or lack of necessary attention and noticing of the incorrect forms. Therefore, a different form of feedback to writing may be

implemented to increase learners' attention and awareness of their inaccurate grammatical use, thus, help them to improve their interlanguage with respect to writing accuracy. In light of the previous research in the field, the present study aims to promote B1 level Turkish EFL learners' noticing through learner-generated notes in the form of learning journals, and stimulated recall interview sessions after the comparison of their writing task with its reformulated version as feedback. The noticing tasks aim to serve as a cognitive tool in order to create conscious awareness of the mismatches between the learners' original text and its reformulation with respect to grammatical features.

### **1.3. Significance of the Study**

The impact of reformulation as feedback and implementation of noticing tasks on the development of EFL learners' writing have been widely investigated recently (Yang & Zhang, 2010; Hanaoka & Izumi, 2012; Farsi, 2016; Farsi & Barjesteh, 2016). The findings of previous studies have revealed that most learners may accomplish noticing the mismatches between their writing and its reformulation (Yang & Zhang, 2010). Moreover, according to Farsi & Barjesteh (2016), noticing tasks which enable EFL learners to compare their output with its reformulation are often effective in improving their grammatical accuracy in writing. Earlier studies (Hanaoka & Izumi, 2012; Yang & Zhang, 2010) also claim that learners should be engaged with reformulation followed by reconstruction tasks in order to improve their grammatical accuracy in writing. However, previous studies have also revealed contrary findings as a result of comparing the impact of implicit (e.g. reformulation) and explicit (e.g. error correction) feedback on L2 learning. According to a study on the impact of these two kinds of feedback provided for the improvement of past

simple -ed verb forms, explicit feedback was found to be more efficient than implicit feedback, especially with low intermediate ESL learners (Ellis et al., 2006). Based on the findings, learners may not have enough conscious awareness of the implicit corrective feedback, so this type of feedback can only be beneficial if learners succeed in noticing the changes in their work.

Although recent research has focused on the key concepts of noticing, and the impact of providing positive evidence on Turkish EFL learners' grammatical accuracy in writing, there is still a gap in literature on the impact of reformulation as feedback and noticing tasks in promoting learners' grammatical accuracy in writing. Therefore, the current study aims to contribute to the field by investigating the effect of reformulation and noticing tasks on the improvement of Turkish B1 level learners' writing accuracy. Reformulation is not a widely used type of positive feedback provided to Turkish students in language education, therefore, the present study has a significant role in the development of Turkish EFL learners' writing accuracy. The findings of the study will also contribute to the field by indicating the role of providing feedback with the reformulation technique to a different group of learners in a new context (Swain & Lapkin, 2002 as cited in Farsi, 2016). Moreover, the study aims to have a contribution to literature by using reformulation and noticing tasks with a specific focus on improving general and target grammatical accuracy of EFL learners. The findings reveal the impact of reformulation as feedback and noticing tasks on the grammatical accuracy of B1 level learners', to what extent learners are able to notice the differences in their writing, and their attitude to this means of positive feedback.

#### **1.4. The Present Study**

The current mixed-methods study is conducted with B1 level of Turkish learners at the English Preparatory Program of a private university. The study aims to reveal the role of reformulation as feedback and noticing tasks on the improvement of learners' writing accuracy regarding general grammatical accuracy and target grammatical forms. The present study suggests a positive relationship between providing reformulation as feedback and noticing tasks, and the improvement of EFL learners' grammatical accuracy in writing.

#### **1.5. Research Questions**

1. What is the impact of reformulation and noticing tasks as feedback on B1 level of Turkish EFL learners' general accuracy in writing? (Quantitative Data)
2. What is the impact of reformulation and noticing tasks as feedback on B1 level of Turkish EFL learners' writing accuracy regarding target grammatical forms? (Quantitative Data)
3. To what extent do B1 level of Turkish EFL learners accomplish noticing the grammatical differences as they compare their written output to its reformulated version? (Qualitative Data)
- 4a. What is B1 level of Turkish EFL learners' attitude towards reformulation and noticing tasks as a feedback tool? (Qualitative Data)
- 4b. How does their attitude correspond to the development of their writing accuracy? (Qualitative Data)

The study is further divided into four chapters: Literature Review, Methodology, Results, Discussion and Conclusion. In Literature Review section,

detailed information will be given about the definition of key concepts, theoretical foundations regarding the origins and features of noticing, the relation between noticing and interlanguage development, as well as reformulation as an alternative feedback tool, and the factors involved in reformulation and noticing. Previous studies in Turkey will also be explained to focus on the significance of the current study with respect to other studies in the field. In Methodology section, the research design, the context, the participants, the data sources, and the procedures applied to complete the present study will be presented in detail. The Results section will reveal the findings of the quantitative and the qualitative data analysis with the aim of investigating the role of reformulation and noticing tasks in improving the grammatical accuracy of B1 level Turkish EFL learners. Finally, the Discussion and Conclusion sections will focus on the key findings of the study by examining each of the four research questions in depth, and conclude with the limitations, pedagogical implications and recommendations for future research.

## 2. LITERATURE REVIEW

### 2.1. Definition of Key Concepts

Using reformulation as feedback and noticing tasks to develop EFL learners' grammatical accuracy in writing have been widely investigated (Schmidt & Frota, 1986; Skehan, 1998; Robinson, 1995; Ellis, 1995; Schmidt, 1990, 1995, 2001; as cited in Hanaoka, 2007). Many researchers agree that engaging L2 learners in noticing their non-target like use of the grammatical forms plays an important role in improving their proficiency in the target language. For this reason, noticing is commonly regarded as a crucial stage for language learning.

Reformulation of learners' writing as feedback accompanied with noticing tasks may involve EFL learners autonomously in their own writing to become aware of their grammatical errors, thus, reform their intake (Farsi, 2016). Batsone (1996), defines intake as, when the input, which is the language, enters learners' working system and becomes a part of their language learning. Reformulation of their own output provided as feedback aims to enable EFL learners to identify the differences between their writing, and reconstruct their writing accordingly. Reformulation is operationally defined as re-writing learners' output to make it target-like without altering its intended meaning (Lee, 2016). If the ultimate purpose of providing reformulated feedback to learners is to promote the development of grammatical accuracy in particular, it is important to determine which aspects of the target language are noticed, and to what extent noticing occurs.

As Thornbury (1997) and Batsone (1996) stated, EFL learners need to be cognitively involved in discovering the linguistic features of the input in order to

notice the gaps so that the input can turn into intake. Otherwise, the corrective feedback they receive on their writing may be unnoticed, or may not help them to retain the corrected form and improve their interlanguage. That is to say, another significant concept is interlanguage (Selinker, 1972), known as the learners' linguistic system produced when trying to communicate using the target language that they are learning (Tarone, 2018). Swain claims that (1995, 1998, 2005 as cited in Hanaoka, 2007), to help EFL learners become aware of the linguistic gaps, noticing plays an important role due to its triggering function. When learners are conscious of their limitations in terms of the linguistic forms or target vocabulary in their own output, they tend to focus more on the gaps and look for solutions in their following output. This cognitive engagement in noticing the gaps between their own writing and its reformulation is aimed to eventually lead to an improvement in their interlanguage.

Although reformulation technique as a feedback tool is not commonly used in EFL writing classes, due to its function of stimulating noticing, it may serve as a complement to traditional feedback methods (Yang & Zhang, 2010). Since reformulation offers L2 learners a native-like version of their writing, it may facilitate development of their grammatical accuracy in writing by providing them the opportunity to compare it with their original text to notice the gaps, and become more conscious of their linguistic limitations.

## **2.2. Theoretical Foundations**

### **2.2.1. The origins of noticing**

Over thirty years of research on second language acquisition (SLA), particularly since the proposal of Noticing Hypothesis (1990) by Schmidt, the amount and the kind of learner attention to linguistic features, in addition to the language features that

are most likely to be noticed, and the learners' developmental level have been questioned in many studies (Godfroid et al., in press; Tomlin & Villa, 1994; Simard & Wong, 2001; Carroll, 2006a, 2006b, Mackey & Philp, 1998; Philp, 2003 as cited in Uggen, 2012). The origins of Noticing Hypothesis date back to 1983. When Schmidt was investigating the grounds for the repeated grammatical and vocabulary errors of a Japanese student, Wes (Unlu, 2015) during his language learning process, he claimed that Wes was not conscious of his errors. Therefore, Schmidt conducted a study on the role of learner's awareness in learning a language, which formed the origins of the Noticing Hypothesis.

The Noticing Hypothesis (Schmidt, 1990) suggests that only what learners have noticed in the input is likely to become intake. This hypothesis by Schmidt had its roots in his own background in learning Portuguese. He argued that the linguistic form in the input, and the corrective feedback on the learner's errors do not become intake unless they are noticed by the learner (Schmidt & Frota, 1986 as cited in Unlu, 2015). That is to say, an awareness of the learners' linguistic gaps in addition to the corrective feedback they receive is necessary for them to achieve an improvement in their interlanguage.

This view is also in line with the pedagogical applications of the Cognitivist Approach to Second Language Acquisition (SLA). The Cognitivist Approach sees learning as a process where the learner is active in trying to analyze, apply the rules, and process the new information via discovery learning or problem-solving techniques (Suharno, 2010). According to this approach, cognitive development and second language learning are viewed as closely interrelated. Learning a new language is viewed as a dynamic process, rather than a static one, where the learner continues to interact with the language leading to their cognitive development in return.

Based on these views, it is important that the noticing process promotes learning opportunities and leads to the improvement of L2 learners' interlanguage. However, it may not often be possible to determine whether noticing occurs consciously or not since it is not easy to observe and measure this cognitive process. There have been concerns in literature in second language acquisition (SLA) as to how collect and analyze data regarding noticing and L2 learning (Mackey, 2006). Previous research (Adams, 2003; Swain & Lapkin, 2002; Qi & Lapkin, 2001; Hanaoka, 2007; Yang & Zhang, 2010; Uggen, 2012; Hanaoka & Izumi, 2012) have implemented stimulated recall interviews or think-aloud protocols to observe the cognitive processes in learners' mind. The most common trends showed that 66% of the noticing that took place by learner initiation was about lexical search (Ellis et al., 2001 as cited in Hanaoka, 2007). Other similar studies also confirmed the findings that documented learners' primarily noticing of lexis (Mackey et al., 2000; Williams, 2001 as cited in Hanaoka, 2007). However, the findings also showed that the learners benefitted from being exposed to native-like language and proper linguistic input in the feedback given via reformulation of their writing, and performed better in the post-test due to noticing their inaccurate use of the target language (Yang & Zhang, 2010).

### **2.2.2. Noticing and interlanguage development**

It is widely known that when L2 learners notice a gap in their language system, they are often likely to attend to the following input with more attention, which may lead to the improvement of their interlanguage (Uggen, 2012). The attention and awareness that are necessary for learners to notice the gaps in their interlanguage are considered as two cognitive processes for the development of their interlanguage, and have been an important focus of research on second language learning (Izumi &

Bigelow, 2000; Qi & Lapkin, 2001; Swain & Lapkin 2002; Mackey 2006; Hanaoka, 2007; Uggen, 2012).

Several studies in the field have focused on how learners' own production of the target language affects their attention and awareness necessary to notice the gaps and improve accuracy in their following output. As a replication of Izumi and Bigelow's study (2012) on learner output, noticing and second language acquisition, Uggen's study (2012) indicated that learners' own production of the target language affects their subsequent noticing of the restrictions they might have with lexical and grammatical forms. In Uggen's study, the experimental group students were asked to produce written output using the target structures before doing the underlining task of the target forms. However, the comparison group students were only required to underline the target forms without producing any output. According to the findings of the pre-test and post-test in the form of essay writing, in addition to the qualitative data gained from stimulated recalls, it was revealed that the majority of noticing that the learners accomplished were on general limitations related to grammar and vocabulary use.

Although the quantitative data from the post-test in Uggen's study (2012) did not indicate an effect of the learners' output on the development of their grammatical accuracy in the follow-up written tasks, the majority of the students were able to show an awareness of their linguistic limitations in grammar, particularly with more complex grammatical forms. Furthermore, the stimulated recalls were found beneficial in understanding the cognitive processes the learners go through during the comparison and noticing phases. The trends gained from the stimulated recall sessions also involved evidence of noticing even though it was not directly related to the target language use. For this reason, further research was reported to be necessary in order to

investigate to what extent learners notice specific language features and improve their interlanguage related to grammatical accuracy.

### **2.2.3. The features of noticing**

Issues concerning the relation between noticing and interlanguage, and the effect of such noticing on learners' language development have been increasingly emphasized in literature. Many researchers have argued that learners' language production, whether oral or written, may initiate noticing of the gap between their intention and their actual production in L2 (Izumi, 2003).

However, as Thornbury (1997) argues, teachers' intentions in making the corrections to students' writing, and the outcome of the corrections for the students may not always match. An essential factor in the feedback process might be the degree of such noticing and the role of learners' consciousness in language development. According to Unlu (2015), noticing of three features: "surface forms", "rules", and "the gap" between the learner's production and the target form are claimed to be essential for the input to become intake, and facilitate their interlanguage development.

In a study by Yang and Zhang (2010), conducted in an EFL class on the impact of reformulation, it was observed that the students noticed most of the mismatches between their own writing and its reformulation. This finding supports the argument that learners' involvement in the writing task may increase their consciousness of the correct grammatical forms by receiving positive feedback. Noticing in narrative writing tasks was also studied by Amini et al. (2019), and the kind of grammatical forms the learners were able to notice was investigated in a qualitative design. Based on the findings, the learners' quality of noticing is essential in the effectiveness of the

feedback because the learners in the study were found to keep the lexical and grammatical features that they noticed in long-term memory.

Previous studies show that reformulation as a feedback tool and noticing tasks may have a triggering effect (Swain, 1995, 1998, 2005 as cited in Hanaoka, 2007) on EFL learners, and help them to remember the grammatical forms within their noticing. The results of Hanaoka's study (2007) indicated that the learners could notice more features during the comparison stage of their output with its reformulation than the production stage. This finding indicates that providing native-like models facilitates noticing, and increases learners' awareness of the target-like features in writing.

On the other hand, Hanaoka's study (2007) has also shown that although most learners could notice the mismatches between their own writing and its native-like version, the majority of the noticed features may be lexical instead of grammatical ones. The results gained from the qualitative data showed some of the participants noticed lexical items since they realized they were not able to find the proper words to express their opinions during the production stage. Therefore, it is probable that EFL learners may attend to lexical search more than the grammatical features while noticing, due to their limitations in vocabulary. Another reason may be because lexical items can be more salient, therefore, much easier to notice without the guidance of a teacher.

Reformulated texts include "changes at all levels", so they differ from L2 learners' original writing in many aspects (Allwright, Woodley & Allwright, 1988 as cited in Swain & Lapkin, 2002), such as lexis, grammar, syntax, discourse, style, and organization. Therefore, most learners need assistance while comparing their original

writing to its reformulation to be able to benefit fully from this means of feedback. The qualitative data of previous research also state that EFL learners may need scaffolding during the noticing phase in order to identify specific grammatical features of the target language, and discuss the possible reasons for the mismatches. For instance, Thornbury (1997) lists possible awareness-raising tasks to assist noticing, such as spotting the differences between the two texts, counting the number of differences related to specific grammatical structures, and reporting on the differences between the two versions. These tasks may be implemented during the comparison stage to engage L2 learners cognitively in the noticing process.

Moreover, Swain and Lapkin (2002) conducted a study on the role of collaborative dialogues and stimulated recall interviews in second language learning, and investigated ESL learners' reactions to reformulation. Two adolescent French immersion students in the study were documented to notice and resolve their problems with language in collaboration while comparing their story with its reformulated version. The results of the study showed that reformulation of the learners' own output was beneficial for reinforcing noticing, and encouraged the learners to reflect on their language-related problems in their writing. Swain and Lapkin (2002) argue that various phases during the comparison of the two versions of writing may involve learners cognitively, and create an environment for having collaborative dialogues. This way, learners may be able to notice the linguistic variations between their written output and its reformulated version as feedback.

That is to say, in order to have learners benefit more from noticing tasks (Amini et al., 2019), their awareness can be raised towards the non-target like grammatical forms in their output. Implementing noticing tasks via collaborative dialogues or interactional feedback during comparison of learners' output with its reformulation

may help EFL learners become more conscious of what language forms they need to fix in their writing. According to Swain (2000), collaborative dialogue is conducted for the purpose of building and shaping linguistic knowledge, and promoting language acquisition. Therefore, these cognitive dialogues during the feedback phase may be considered as a social interaction to shape learners' linguistic knowledge (Swain, 2000).

Furthermore, as Vygotsky (1986) claims in the Zone of Proximal Development (ZPD), a person with knowledge of the language may provide the learner help to proceed from producing language with the guidance of the expert to managing on their own (Swain & Lapkin, 2002). Especially, when learners are introduced to a new linguistic form, it may take a while for them to master and use it accurately in their output, or in the same way, notice less transparent errors compared to more salient ones in their written output. L2 learners may notice the problematic target features in their written work easier when they work in collaboration with their instructor while comparing their writing with its reformulated version. For these reasons, interactional feedback during this particular stage of the feedback process may have an effect in helping learners with noticing of the mismatches, and working towards improving their writing accuracy.

#### **2.2.4. Noticing and the comprehensible output hypothesis (1995)**

While learners' noticing of the input is essential, noticing taking place as a result of learners' own language production, such as noticing their errors in paragraph writing in the target language, may also contribute to the development of their interlanguage. As Swain argues (1995, 1998 as cited in Qi & Lapkin, 2001), the 'noticing' or 'triggering' function of the learner's own output may initiate recognition

of their problems with L2. Although Swain's Comprehensible Output Hypothesis (1995) and the Noticing Hypothesis (1990) share similarities regarding the emphasis given to the impact of learners' conscious attention to forms in language acquisition, the Output Hypothesis focuses on the learners' own writing to trigger noticing of misused linguistic forms (Unlu, 2015). It is possible that when L2 learners sense their limitations due to their choice of vocabulary or target grammatical forms in their writing, they become more conscious of the gap between their own output and the native-like style as feedback.

According to the Output Hypothesis (1995), L2 learners may either notice the errors in their own language use, or the gap between their language production and the target-like use. Swain claims that learners need to elaborate on their own production so that they can improve their knowledge of the language. When L2 learners produce output, there is a higher possibility for them to process the new linguistic features. This, in turn, may result in higher chances of second language development since reflecting on their own output includes three essential stages: noticing, hypothesis testing, and internalizing linguistic input (Adams, 2003).

Following Swain's Output Hypothesis (1995), several studies have investigated the impact of learner output on noticing (Swain, 1993, 1995, 1998, 2005; Hanaoka, 2007; Izumi, 2003; Izumi & Bigelow, 2000; Swain & Lapkin, 1995, 1998, 2002). Izumi and Bigelow (2000), in their study with intermediate English as a Second Language (ESL) learners, focused on the role of noticing in learners' writing. According to their observations and pre-test results, they found that the learners, although the target grammatical form hypothetical conditionals was not newly introduced, had problems with accuracy in their essays. Therefore, they investigated whether the learners' written output initiated them to notice the target-like features.

They compared the features that were noticed by the experimental group that produced writing, to the comparison group that only underlined the noticed features in a comprehension task. Although it was found that underlining of the noticed features was the same with both experimental and comparison groups, and no significant impact was found between the groups, the study showed that the opportunity to produce output was important in improving the use of target-like forms. Moreover, it was suggested, for future research, using different noticing tasks to vary the conditions since the learners' attention was not always directed to the target structure. The reason for this was the learners did not underline some of the grammatical structures as they did not see their interlanguage grammar problematic.

In addition, Qi and Lapkin (2001) explored the effect of noticing in learners' output in a writing task with three stages. They conducted a case study with two ESL learners. Reformulation was provided as feedback to the learners' written output in order to promote noticing, and increase the standard of such noticing. The results revealed that learners' written work may increase the chances of noticing with the help of feedback given by the reformulation of their own output.

### **2.3. Different Perspectives in Written Corrective Feedback in SLA**

There have been a wide interest and developing perspectives in second language acquisition (SLA) regarding the way learner errors are treated and written feedback is given over the last twenty years (Bitchener & Ferris, 2012; Hyland & Hyland, 2006). Research on providing feedback, in addition to how EFL learners can best benefit from written feedback for their learning and interlanguage development have initiated various suggestions for responding to learners' errors in writing tasks. Previous studies in the field have explored to what extent error correction can be effective, and

how teachers should treat L2 learners' errors in their writing. The findings of the studies indicated differing perspectives for written feedback and their implications for learning since it is hard to reach generalizations due to varying feedback treatments, task types and learner styles (Hyland & Hyland, 2006). In general, written corrective feedback in SLA literature differs according to how explicit or implicit it is. As stated by Ellis, Loewen and Erlam (2006), explicit feedback indicates overtly that there is an error, whereas an overt indication of a learner's error cannot be found in implicit feedback. Instead, a form of recast or reformulation provides learners with some kind of positive evidence.

In light of this difference in perspectives when giving written feedback, one of the main discussions in literature has been on whether providing direct feedback by correcting learners' errors overtly, or giving indirect feedback through coding or underlining had an impact on the improvement of learners' grammatical accuracy in writing. Previous studies have indicated mixed results on the issue (Ogawa, 2021). For instance, Ferris (2006) found that learners benefitted more consistently from direct feedback when compared to receiving indirect feedback. In addition, it was found that learners' expectations from teachers were towards receiving explicit comments on their errors, and there was lack of appreciation when they did not receive any (Hyland & Hyland, 2006). In other words, when learners did not receive written corrective feedback with specific comments on the erroneous grammatical forms in their output, including insertion of the correct use and the reason for their errors, their expectations from the feedback were not fully met.

On the other hand, there is a counter-argument that direct feedback with explicit correction of learners' grammatical errors is discouraging, and written feedback needs to involve more than just corrections on a learner's writing (Hyland & Hyland, 2006).

For instance, Ferris and Roberts (2001) investigated whether there were any differences in students' self-editing the grammatical errors in their writing when they received written feedback with or without error codes, and without any feedback. However, there was no significant difference between the groups which took feedback with and without error-coding. Additionally, students were found to benefit from less explicit feedback, and self-edit their grammatical errors just as well. On the contrary, the learners in the group with no-feedback were less successful compared to the other two, which was an expected finding since L2 learners need some kind of guidance from an expert in locating the linguistic errors in their writing.

Even though previous studies on this issue had contradictory findings, in general, it was suggested that indirect means of feedback, which provides less explicit marking of ungrammatical forms, should provide enough guidance and input for L2 learners to be cognitively engaged in their work and reflect on it so that they can acquire the target grammatical structures, and gradually decrease the number of linguistic errors in their written output (Ferris & Roberts, 2001). Research in written corrective feedback suggests that this can often be the case for more 'treatable' errors which are referred to as learners' problems with verb tenses or forms, subject-verb agreement, use of articles, pronoun use, and spelling rules since these kinds of linguistic errors have a specific pattern, so they can be identified and treated easier by EFL learners (Ferris, 1999 as cited in Hyland & Hyland, 2006).

What is more, according to Long (1996), providing positive evidence in implicit feedback, such as recasts or reformulation of learners' written output, enables learners to link linguistic structures with meaning in context and initiates micro-processing through noticing. Nasajji (2007 as cited in Oruc, 2012) also claims that feedback in the form of reformulation may have a significant impact on language acquisition

because unlike teachers simply correcting the grammatical errors in learners' writing, it requires attention more than just to surface structures. In light of these views, to validate previous findings in literature, the current study investigates the impact of reformulation as feedback on Turkish B1 level learners' grammatical accuracy in writing by implementing noticing tasks via the use of learning journals and stimulated recall sessions.

#### **2.4. Reformulation as an Alternative Feedback Tool**

Research in Second Language Acquisition (SLA) shows that providing L2 learners interactional feedback for their written production via the reformulation technique initiates second language acquisition by guiding them towards noticing their problems with target language structures (Mackey, 2006). The concept of reformulation was first introduced by Levenston in 1978 as a challenging idea for the concept of reconstruction proposed by Corder in 1971. The notion of reconstruction differs from reformulation in that it is the correction of a learner's ungrammatical sentence by replacing it with a well-formed utterance at the sentence level, whereas reformulation covers other aspects of writing, such as lexis, discourse, style, and spelling, in addition to grammatical accuracy (Qi & Lapkin, 2001).

Unlike the traditional way of written corrective feedback, reformulation, which is defined by Cohen (1983:4) as rewriting a learners' text without changing the content and making it as native-like as possible (as cited in Adams, 2003), may increase cognitive engagement of L2 learners while noticing the gap between their own writing and its native-like version. This particular interaction with the reformulated version of their own output may direct the learner's awareness and

necessary attention to the target-like grammatical structures, thus, facilitate language development.

Similarly, Mackey (2006) stated in his study that interactional feedback can better assist L2 learners with noticing target forms. The findings of triangulated data from the pre-test and post-test, as well as the analyses of noticing via journals and classroom videotapes indicated a positive relationship between interactional feedback and noticing (Mackey, 2006). Since reformulation is also a kind of interactional feedback, it may also have a positive role in initiating noticing of the mismatches between learners' original writing and its native-like version. When L2 learners' false generalizations in their interlanguage and incorrect hypotheses result in grammatical errors in their written output, they are often in need of an appropriate type of feedback from their teacher to be able to correct these errors (Qi & Lapkin, 2001). In such cases, the reformulation of their own output and initiating noticing of the mismatches between the two versions of their output may provide the appropriate means of feedback to accelerate L2 development. According to Hyland (1998), the traditional feedback method where learners receive their written output with underlined marks or insertion of the corrections may sometimes be discouraging for them since it may not often be easy to balance positive and negative feedback.

What is more, as Chaudron (1988, as cited in Thornbury, 1997) puts it, teachers' assumption that whenever they make corrections in the learners' written output, it facilitates learning may not always be the fact. In other words, learners need to notice that they have non-target like forms in their output. Therefore, it is essential to direct their focus on the target forms, in addition to how far they are from the target form in the current state of their interlanguage so that they can internalize the feedback. Whereas, offering more interactional feedback, such as the reformulation of the

learner's written output for comparison with its original version, may push learners to use the positive evidence in the feedback to test their hypotheses. In addition, they may become more conscious of the linguistic gaps, and internalize the linguistic evidence they find (Adams, 2003).

Several studies have reported the benefits of reformulation as a feedback tool in promoting noticing and learning opportunities (Qi & Lapkin, 2001; Adams, 2003; Hanaoka & Izumi, 2012). In a study by Adams (2003), on the impact of reformulation and noticing on L2 output development via writing tasks, it was revealed that experimental group students, who took part in the noticing treatment followed by stimulated recall sessions, were better able to find the differences between their essay and its reformulation. Furthermore, this group's learners were also able to produce more target-like forms in the post-test than those in the other two groups. The difference between the experimental group and the group which were involved only in the noticing treatment indicates that stimulated recall sessions were also beneficial for the learning experience. However, the comparison group, which was only involved in task repetition instead of reformulation and stimulated recall sessions, were only able to use thirty percent of the inaccurate forms accurately in the post-test.

Moreover, Swain and Lapkin (2002) investigated what two ESL learners noticed when they compared their original story with its reformulation, and whether they were able to reconstruct their story as a result of the comparison they have made using collaborative dialogues. They used the transcribed dialogues and the stimulated recall interview data in coding the noticed features into three categories: lexical, form, and discourse. They found that when students are given positive corrective feedback through reformulated writing, they are more likely to notice that it is not exactly the same as their own, thus, reflect on their interlanguage to improve the missing

linguistic information. In addition, the post-test results indicated that the students managed to get 78% of the misused structures correct due to several opportunities of reflecting on their own work (Swain & Lapkin, 2002). One of the learners even mentioned the positive impact of this feedback technique on her learning.

These findings indicate that reformulation and noticing activities in the form of collaborative dialogues or stimulated recall interviews guided by the teacher may facilitate improvement of L2 learners' interlanguage. According to the findings of previous studies, it is possible to claim that reformulation as feedback accompanied with noticing tasks via teacher-student interaction (i.e. think-aloud protocols, stimulated recall sessions) may both give learners the implicit message that some form was non-native-like in their written output, and provide the positive evidence on how to express it in a more native-like way.

## **2.5. Factors Involved in Reformulation and Noticing**

Ever since the introduction of Noticing Hypothesis (1990), several factors have been found either to initiate, or limit L2 learners' noticing of the misused grammatical features in their writing, such as the learners' ability and competency (Hanaoka & Izumi, 2012). In other words, learners' proficiency level may effect noticing of the target-like features in their written output. Recent research in the field has shown that the learners' level of proficiency may affect the quality and quantity of the noticed features in terms of grammatical errors (Hanaoka, 2007). There is empirical evidence of more proficient learners having a greater level of noticing regarding grammatical forms (Swain & Lapkin, 1995; Williams, 2001 as cited in Hanaoka, 2007), and a better understanding of the noticed features (Qi & Lapkin, 2001).

The impact of reformulation as a feedback tool along with use of noticing tasks have been studied in various learning contexts (Qi & Lapkin, 2001; Swain and Lapkin, 2002; Hanaoka, 2007; Yang & Zhang, 2010; Amini et al., 2019). Previous studies show that the quality of noticing varies for learners depending on several factors other than the learners' level of proficiency, such as complexity and difficulty of tasks, and lexical or grammatical limitations the learners face during the composing stage. Hanaoka (2007) investigated the features of noticing, factors included in the phases of noticing, as well as the way students with a higher proficiency level notice the mismatches in a study, and documented the noticed features in 4-stage story-writing tasks by two groups of different proficiency levels: advanced and intermediate college students in Japan. Both groups of differing proficiency levels were given a story-writing task involving composing, comparison and two stages of revising their stories. The results, regarding the level of proficiency, showed that although most of the students noticed lexical features while they were identifying the mismatches between their story and its reformulation, students with a higher proficiency level were able to notice more forms than the ones with a lower level. This result is consistent with the findings of previous research in that learners' proficiency level influences the quality and the number of grammatical features that are noticed (Swain & Lapkin, 1995; Williams, 2001 as cited in Hanaoka, 2007).

Qi and Lapkin (2001) conducted a similar case study with two learners of English as Second Language (ESL) to investigate the nature of noticing, which is one of the pioneers of research on this particular topic in SLA. They investigated the relation between learners' written output, reformulation as feedback and noticing tasks. The results showed that the grammatical problems the learners faced while composing their written output had an impact on their noticing during the comparison

of their writing with its reformulation. This particular impact on their quality of noticing, in fact, sustained in the learners' future written output and the revisions they made since they continued to pay attention to their limitations related to the specific linguistic features. This finding shows that task difficulty and the limitations of the learners also have a role in increasing the quality of noticing. As Uggen (2012) also puts it, tasks which require more complex forms require more attention and awareness of the learners. Therefore, due to the limitations of the learners, complex grammatical forms can become more salient and the linguistic gaps may be easier to notice (Gass & Varonis, 1994; Schmidt, 1990; White, 1998 as cited in Uggen, 2012).

What is more, Qi and Lapkin (2001) also stated that learners with greater proficiency levels were able to analyze the reasons for the grammatical differences in addition to the higher numbers in noticing linguistically-related forms. Recent research has indicated the essential role of noticing tasks in EFL learners' development of writing. However, ensuring a high standard of noticing when providing reformulation of their output as feedback is also a significant factor which needs to be considered in the development of learners' interlanguage (Qi & Lapkin, 2001). That is to say, learners' proficiency level, as well as task difficulty and complication also have an impact on the quality of noticing.

## **2.6. Previous Studies in Turkey**

The increasing interest in the noticing and cognitive involvement of EFL learners to improve their interlanguage, as well as the awareness and attention necessary for noticing to occur have also led recent research in Turkey to focus on these areas. Several studies in the Turkish EFL context have focused on the impact of noticing and reconstruction tasks in language teaching, and the impact of explicit and

implicit error correction in improving Turkish EFL learners' accuracy in writing (Unlu, 2015; Oruc, 2012; Demir, 2019; Yilmaz, 2016; Sukur & Demircan, 2020; Ogeyik, 2017; Babanoglu, Agcam & Badem, 2018). The findings of previous research all refer to the importance of L2 learners' noticing as a result of the corrective feedback that their own production does not match the target language, and making the necessary revisions in their work.

Unlu (2015), in her review of studies on noticing, poses the question of whether teachers should have some control over the learners' noticing and make use of prompts to raise students' awareness of specific linguistic structures in their writing. Unlu (2015), however, goes on stating that learners still need to be given enough space to attend to the input in the feedback. These awareness-raising activities might be effective especially when L2 learners are asked to compare their writing with its reformulation as feedback.

Past research on this subject shows that when students are not guided during the noticing process, they often focus on the lexical items in their written output (Hanaoka, 2007; Uggen, 2012). If the aim is to initiate noticing of the gap regarding the grammatical forms in particular, then as Unlu (2015) argues, it might not serve our purpose to let students attend to their written output and the feedback autonomously since what they notice might not promote development of their grammatical accuracy.

In another study in the Turkish context by Oruc (2012), the role of reconstruction tasks on noticing was investigated. Although the type of reconstruction task implemented in the study was dictogloss instead of reformulation of learner-produced texts, the learners were still asked to produce an output and then compare their writing with the original version to direct their focus onto the target grammatical

features in order to notice the gaps. Unlike reformulation, the starting point in this particular research was the teacher's text. The significant difference in the experimental group's results of the pre- and post-tests ( $t = -15.17$ ;  $df = 18$ ;  $p \leq .007$ ) and the delayed post-test ( $t = -13.03$ ;  $df = 18$ ;  $p \leq .057$ ) shows when learners are cognitively involved in noticing the mismatches between their own output and its native-like version, they are better able to process the linguistic input and retain the new information.

Several other studies in Turkey have also touched the impact of noticing tasks in improving L2 learners' grammatical accuracy in writing, or as a way of providing corrective feedback to learners' erroneous grammatical forms in writing (Demir, 2019; Yilmaz, 2016; Sukur & Demircan, 2020; Ogeyik, 2017; Babanoglu, Agcam & Badem, 2018). However, the results of these studies revealed contradictory findings. Ogeyik (2017), for instance, in her study, shared findings of 11 different types of noticing treatment from research in different countries between the years 2008-2016, including implicit/explicit corrective feedback, pushed output, stimulated recalls, consciousness-raising tasks, and their effects on L2 learning. The most common findings demonstrated that noticing via output tasks promotes a greater level of second language learning.

Similarly, Demir (2019), in his study on different forms of corrective feedback, found that providing only positive feedback is not enough for students to learn the target forms, and their awareness should specifically be directed to the differences between their output and the target structure by the use of prompts to assist noticing. Yilmaz (2016) also stated the significance of guiding and engaging Turkish EFL learners in their writing through languaging, a term used by Swain (2006) to refer to making meaning and shaping knowledge by using language as a cognitive tool. This

method of using languaging as a cognitive tool is similar to having learners reflect on their errors in stimulated recall interviews. Yilmaz (2016), in her study with elementary level of university students, which was a replication of Suzuki's (2012) study on languaging, found that the group which were involved in languaging could improve their accuracy in writing more compared to the group that received direct correction of the errors in their writing. What is more, the learners managed to notice their errors with grammatical forms during the languaging treatment, as one of the participants mentioned, "*I used the verb in the wrong place. I should have been careful about the word order*" (Yilmaz, 2016, p. 416).

On the other hand, Sukur and Demircan (2020) conducted a study on the impact of intensive and extensive written recasts on L2 acquisition, particularly on the target grammar form: Present Simple -s. They found no significant difference between written recasts as feedback and no feedback. However, the study also revealed that providing learners with written recasts of specific linguistic forms (intensive recasts) rather than general accuracy in their writing (extensive recasts), can better improve their grammatical accuracy. Also, another study in Turkey with similar results was on providing explicit and implicit written corrective feedback (Babanoglu, Agcam & Badem, 2018). Data was collected from two groups receiving two different means of error correction of prepositions in a four-week treatment. The findings showed that explicit and implicit written corrective feedback have a similar impact on Turkish EFL learners' language development, with no significant results for implicit written feedback. In summary, recent research in Turkey has also demonstrated that cognitive engagement of EFL learners in noticing the ungrammatical forms in their written output through comparison of their writing with its reformulation initiates development of their writing accuracy.

### 3. METHODOLOGY

The present study seeks to measure the role of reformulation as a means of feedback and noticing tasks in the improvement of Turkish EFL learners' grammatical accuracy in paragraph writing. This chapter explains the research design, the context, the participants, the data sources, and the procedures that were applied to complete the study. Below is a comprehensive explanation of the context and the participants involved in the research. The tools used to collect data from the participants and the rationale, as well as the data collection process including the specific stages are also addressed. The aim of the current study is to answer the following research questions:

1. What is the impact of reformulation and noticing tasks as feedback on B1 level of Turkish EFL learners' general accuracy in writing? (Quantitative Data)
2. What is the impact of reformulation and noticing tasks as feedback on B1 level of Turkish EFL learners' writing accuracy regarding target grammatical forms? (Quantitative Data)
3. To what extent do B1 level of Turkish EFL learners accomplish noticing the grammatical differences as they compare their written output to its reformulated version? (Qualitative Data)
- 4a. What is B1 level of Turkish EFL learners' attitude towards reformulation and noticing tasks as a feedback tool? (Qualitative Data)
- 4b. How does their attitude correspond to the development of their writing accuracy? (Qualitative Data)

### **3.1. Research Design**

This is a mixed-methods study, where quantitative and qualitative data were gathered and analyzed in a concurrent research design (Dornyei, 2007). To triangulate and verify the findings, the quantitative and qualitative data sets were simultaneously collected over a period of eight weeks, which corresponds to a quarter-term.

#### **3.1.1. Quantitative research design**

There was no opportunity for random selection of the participants, therefore, the Quasi-Experimental Research Design was used for the quantitative part of the study with an intact group of participants. The participants were already placed in two different classes of B1 level of proficiency (according to CEFR) according to their scores from the achievement test administered locally at the end of the previous quarter-term. Due to the intact group of participants, the Pretest Posttest Non-Equivalent Groups Design was used to investigate the role of reformulation and noticing tasks in the improvement of the learners' grammatical accuracy in writing. The impact of reformulation and noticing tasks was investigated regarding general grammatical accuracy and the target grammatical structures that were covered at B1 level of proficiency. One of the intact groups performed as the comparison group, which continued to receive a placebo treatment in the form of explicit corrective feedback given by the teacher through underlining and coding of the grammatical errors, and insertion of the accurate forms. Whereas, the participants in the other intact group performed as the experimental group, which received a reformulated version of their writing task as feedback accompanied with a learning journal to promote noticing of the mismatches between the two versions of their writing.

A pre-test and a post-test were administered to both comparison and experimental groups before and after the three cycles of feedback treatment for each writing task administered in Weeks 3, 5, and 7 of the quarter-term to answer the first and the second research question about the impacts of reformulation and noticing tasks regarding participants' general accuracy in writing and target grammatical forms.

### **3.1.2. Qualitative research design**

The qualitative data, on the other hand, enables a more detailed understanding of the problem. In addition, the methodological triangulation of the data provides a larger view of the phenomenon. For triangulation purposes, and to answer Research Question #3 (To what extent do B1 level of Turkish EFL learners accomplish noticing the grammatical differences as they compare their written output to its reformulated version?), the experimental group participants were told to keep a learning journal (See Figure 1) and note down the differences that they noticed during the comparison stage (Stage 2).

Additionally, after each comparison stage (Stage 2), a cognitive interview via a stimulated recall interview session (Stage 3) was conducted with three participants in the experimental group. The participants for the stimulated recall interview were selected according to their performance on the pre-test based on the rationale that the proficiency level of learners influences the quality and the number of noticing regarding grammatical features (Swain & Lapkin, 1995; Williams, 2001 as cited in Hanaoka, 2007), and whether more proficient learners noticed more features than less abled ones while comparing their writing with the reformulated version provided.

The final qualitative data after the post-test was collected from the focus group interview with the experimental group about their attitude to reformulation as a new feedback tool and noticing tasks to answer Research Question #4 (a. What is B1 level of Turkish EFL learners' attitude towards reformulation and noticing tasks as a feedback tool? b. How does their attitude correspond to the development of their writing accuracy?). The focus group consisted of 10 participants selected on a voluntary basis.

Unlike the learning journals, the stimulated recall interview sessions (Stage 3) and the final focus group interview did not include all the participants in the experimental group. The number of participants in these interviews was kept to an optimal number in order to gain quality data for the current study. Since the experimental group also comprised a class, an inclusion and exclusion criteria were adapted for the selection of the participants for the interviews. The inclusion and exclusion criteria for the selection of the participants were:

- the regular attendance of the participants
- the level of participation in class
- the motivation level of the participants
- the performance of the participants based on the pre-test (for stimulated recall interview sessions)

### **3.2. The Role of the Researcher**

In the current study, the role of the researcher was both an insider and an outsider due to various factors. Since the researcher is also the class teacher, due to context familiarity, her major role was an insider while gathering and analyzing the data of her own class in order to establish a more fruitful environment for teaching

and learning to take place (Nakata, 2015). This means conducting the research with an *emic* perspective, defined as the reality viewed by an insider in order to understand the way people perceive the world (Given, 2008). What is more, the researcher's perception of the problem had already been formed since she had a similar experience as a student of English as a foreign language (EFL). This personal experience provided the opportunity to anticipate the linguistic problems the participants might have, and guide them towards noticing those linguistic problems in their writing.

Furthermore, the researcher had an outsider's role since, in addition to improving the teaching and learning environment, the current study also has an aim of contributing to the research field. The data were collected from the researcher's own context; however, the quantitative data were analyzed as a third person, which places the researcher in the role of an outsider in the study. Nakata (2015) argues that the difference between insider and outsider roles are not clear cut. Therefore, considering the present study, the researcher's roles as a teacher and a researcher simultaneously mostly make her an insider in the study.

### **3.3. Context and Participants**

The participants of the current study were a total of 30 monolingual students (13 Male and 17 Female) of Turkish nationality at the English Preparatory Program of a private university in Istanbul, Turkey. According to the obtained percentages in the socio-demographic characteristics, 53.3 % of the participants were female, and 46.7 % of them were male. The age range of the participants was 18-20. They were divided evenly into experimental ( $n = 15$ ) and comparison ( $n = 15$ ) groups. For reliability purposes, two foreign students in the experimental group were excluded in the research since they did not share a similar background in second language

learning. In the same way, four Turkish students in the comparison group were not included in the study due to their irregular attendance in class.

The English Preparatory Program of the university includes a program based on five modules. The students are given a placement test at the start of the academic year to be enrolled in their optimal proficiency level. By the end of an 8-week instruction on grammar and all four-skills: reading, writing, listening, and speaking, they are given an achievement test to move them to a higher proficiency level. The cut score for the achievement test is set by the university administration as 60%. The students who pass the final exam are then placed in an upper level class randomly. The participants in the current study all started at A1 level (according to CEFR) at the beginning of the academic year, and they were all in a class of B1 level for the duration of the current study.

Therefore, they all shared a similar background in second language learning.

The distribution of the socio-demographic characteristics of the participants is demonstrated in detail in Table 1.

Table 1

*Distribution of Socio-Demographic Characteristics*

		Experimental (n=15)		Control (n=15)		$\chi^2(p)$
		n	%	n	%	
Gender	Female	8	53.3	9	60.0	0.000 (1.000)
	Male	7	46.7	6	40.0	
Age	18-20	15	100.0	15	100.0	-
Year	Prep	15	100.0	15	100.0	-
Level Class	L3/11	15	100.0	15	100.0	-

Yates Chi-square test, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001

### **3.4. Data Sources and Procedures**

The present Quasi-Experimental study uses both quantitative and qualitative data sources in a concurrent design to triangulate the data and verify the findings.

#### **3.4.1. Quantitative data sources**

To answer Research Question #1 (What is the impact of reformulation and noticing tasks as feedback on B1 level of Turkish EFL learners' general accuracy in writing?), and Research Question #2 (What is the impact of reformulation and noticing tasks as feedback on B1 level of Turkish EFL learners' writing accuracy regarding target grammatical forms?), the data sources for the quantitative part included a pre-test (see Appendix A) and a post-test (see Appendix B).

##### ***3.4.1.1. Pre-test***

A paragraph writing task (of 100-120 words) on a pre-selected topic with a focus on level-based target grammatical structures (i.e. Past Simple Tense, Modal Verbs, If Clause Type 1 and If Clause Type 2) was administered to both groups as a pre-test to collect data in order to identify and categorize the common repeated grammatical errors regarding general grammatical accuracy and target grammatical structures. The task that was administered as a pre-test was developed for level-based diagnostic purposes by the level coordinator of the English Preparatory Program. The written output of the participants in both groups on the pre-test was evaluated and analyzed based on the frequency of their target-like use of the grammatical forms regarding general accuracy (Research Question #1) and target grammar structures (Research Question #2).

#### **3.4.1.2. *Post-test***

A paragraph writing task (of 100-120 words), similar to the one administered as a pre-test, on a pre-selected topic with a focus on the same level-based target grammatical structures (i.e. Past Simple Tense, Modal Verbs, If Clause Type 1 and If Clause Type 2), was given as a post-test to gather data in order to compare the progress of the experimental and comparison group participants' grammatical accuracy in their written performance, and find whether there was a significant improvement in their writing with respect to the grammatical categories identified at the pre-test (for Research Questions #1 and #2). The task that was administered as a post-test was also developed by the level coordinator as a formative assessment material for the course.

#### **3.4.2. Qualitative data sources**

To answer Research Question #3 (To what extent do B1 level of Turkish EFL learners accomplish noticing the grammatical differences as they compare their written output to its reformulated version?), the data sources for the qualitative part of the current study included completion of learning journal entries and stimulated recall interview sessions after each feedback treatment of reformulation and noticing tasks (see Figure 3). These qualitative data sources were only used with the participants in the experimental group as a measure of treatment. The participants in the comparison group did not receive any treatments other than explicit written corrective feedback provided as a placebo treatment (see Figure 4).

### *3.4.2.1. Learning journal*

To promote noticing of the native-like linguistic forms, and to trace what forms the learners mostly noticed, all experimental group participants were asked to keep a learning journal where they noted down the differences within their noticing while comparing the two versions of their writing. The learning journal idea was replicated from Mackey's study (2006) on feedback and noticing in L2 learning. To increase retention of the accurate grammatical forms in long-term memory, the participants were also told to note down any important points related to their noticing, and refer to their journal notes in their subsequent writing task. As Demir (2019) stated in his study, positive feedback may become less ambiguous for the learners if they are accompanied with prompts to draw their attention towards their linguistic errors. Therefore, the goals of keeping a learning journal in the present study were:

- a) to give prompts to help the participants with noticing of the differences between the two versions of their writing,
- b) to triangulate the findings of the quantitative data,
- c) to provide a written source of document to the participants to refer to in their subsequent written output.

The design of the journal (see Figure 1) was based on previous research on learner reports (Mackey, 2006).

The learning journal aimed to guide the participants towards:

- a) noticing any differences in general (e.g. lexis, sentence structure, word order, insertion of linkers) between their original output and its reformulated version, which are categorized as 'Other' in the present study,

- b) noticing which specific grammatical structures in their writing were different from its reformulated version,
- c) cognitive engagement of the participants to think critically and notice the reasons for the difference,
- d) deciding whether the noticed grammatical structures were new to them, or whether the difference was due to their lack of attention,
- e) taking any notes to remember to use in their subsequent writing task.

The learning journal used by the experimental group in the current study is shown in Figure 1.

Figure 1

*Learning Journal given to the Experimental Group*

Do you <b>notice</b> any general differences between your writing task and its native-like version? What are they?			
What do you <b>notice</b> in terms of <b>grammar</b> ? Write the differences between the two versions.	Why do you think your version is <b>not</b> native-like?	Was this grammar form <b>new</b> to you?	Notes to remember:
		Yes / No	
		Yes / No	
		Yes / No	

#### **3.4.2.2. Stimulated recall interview sessions**

The qualitative part of the present study aims to promote the quality of noticing and gain a more detailed perception of the cognitive processes the participants go through while noticing the mismatches. The stimulated-recall interview sessions were analyzed for data coding and categorization of the noticed grammatical forms in order to verify the findings of the learning journal (in case the participants did not try to

answer every question in the learning journal in detail). Following each feedback session, a stimulated recall interview was conducted with three participants in the experimental group. Based on the mean scores of the pre-test, participants of different achievement levels (high-mid-low) were selected to gain an understanding of whether lower or higher achievers were equally able to notice the grammatical mismatches between their writing and its reformulated version. Since noticing is a cognitive process, which is not transparent or easily measured, findings of previous research have also suggested using concurrent stimulated recall interviews as an effective way of understanding this cognitive process in L2 learners' minds (Qi & Lapkin, 2001; Swain & Lapkin, 2002; Adams, 2003; Mackey, 2006; Uggen, 2012; Yilmaz, 2016).

According to Izumi (2000), since noticing is a complex notion, it is important that multiple measures are used in research designs as a methodological triangulation of the data. Therefore, stimulated recall interviews also aimed to triangulate the findings of the quantitative data (i.e. the results of pre- and post-test). These cognitive interviews were conducted in the participants' L1 in order to decrease the processing load and to provide a more comfortable environment for them to express their ideas. The participants' responses were audiotaped and transcribed verbatim for qualitative data analysis. During the interviews, the researcher asked the participants the same prompts given in the learning journal with similar purposes:

- a) Do you notice any general differences between your writing task and its native-like version? What are they? (To draw the participants' attention to the differences in general; to activate the noticing process; to observe what features of writing they focus on autonomously, without mentioning the grammar focus)

- b) What do you notice in terms of grammar? (To provide positive evidence and guide the participants towards noticing the mismatches regarding grammatical forms; to help them become aware of their problems with grammatical forms)
- c) Why do you think your version is not native-like? (To initiate critical thinking so that they can reflect on their written output, notice the reasons for the difference, and to promote acquisition of native-like forms)
- d) Was this grammatical form new to you? (To encourage the participants to elaborate on the mismatches, and talk it through)

#### ***3.4.2.3. Focus group interview***

To answer Research Question #4 (a. What is B1 level of Turkish EFL learners' attitude towards reformulation and noticing tasks as a feedback tool? b. How does their attitude correspond to the development of their writing accuracy?), the final qualitative data was collected after the post-test. A focus group interview was conducted with the participants in the experimental group about their attitude to reformulation and noticing tasks as a new feedback tool. The similarity among the experimental group members was due to going through a similar cognitive process while noticing the differences between their writing and its reformulated version. The researcher aimed to collect data about the following aspects of reformulation and noticing tasks as feedback:

- a) how the participants perceived this new feedback method,
- b) whether they were able to identify the differences, and their reasons,
- c) what kind of forms they noticed the most, and
- d) if they thought they benefitted from this feedback tool

The focus group consisted of 10 participants recruited on a voluntary basis to achieve a more fruitful discussion of the different range of ideas. The group size was also kept to 10 participants so that quieter students would feel comfortable to express themselves, and not try to stay quiet in a larger group (Guest, G. et al., 2017). The discussion was moderated by the researcher in the participants' native language so that they could feel themselves in a comfortable environment to express their sincere thoughts. The interview was audio recorded and transcribed verbatim for a detailed content analysis and coding of the qualitative data to identify the emerging themes. The prompts that guided the focus group discussion are shown in Figure 2.

Figure 2

*Focus Group Discussion Prompts*

1. Do you think this new way of receiving feedback on your writing helped you to notice the grammatical errors in your writing?
2. Which grammatical errors were you able to notice easier – general grammar errors such as articles, verb tense-forms, or your errors with the new grammatical structures such as If Clause Type 2?
3. Were you able to understand the reasons for the differences? Did you feel the need to ask your teacher for a further grammatical explanation for the reasons?
4. If yes, which differences was this explanation necessary for? General grammar errors or new grammatical structures?
5. Do you think this way of feedback helped you to improve your writing accuracy?
6. If no, what else can be changed in this feedback style to have a better effect on your improvement?
7. Do you have any further comments or suggestions for this feedback technique?

### 3.4.3. Procedures

The total duration of the current study was eight weeks, which is also the duration of the modular term for B1 level in the course. Since the participants were

not familiar with this particular means of positive feedback to their written work, in order to familiarize them with the new process after the completion of the pre-test, the participants in the experimental group were given their pre-test and its reformulated version, and asked to find the linguistic mismatches between the two versions. That is to say, the pre-test also served as a piloting tool to familiarize the experimental group participants with this new means of feedback in addition to identifying the common grammatical errors.

After the completion of the pre-test, the participants in both groups were given a paragraph writing task (of 100-120 words) every two weeks based on the target topics and grammatical structures covered in the course. The writing tasks were given in Weeks 3, 5, and 7 followed by a feedback session in Weeks 4, 6, and 8 for each writing task. The implementation of the procedures with both experimental and comparison groups are explained separately in detail.

#### ***3.4.3.1. Procedure for the experimental group***

The procedure for the experimental group consisted of four stages in total:

**Stage 1:** A paragraph writing task (of 100-120 words) on a pre-selected topic with a focus on level-based target grammatical structures (Task 1: Past Tense-Modal Verbs; Task 2: If Clause Type 1; Task 3: If Clause Type 2) was administered to the group in class time (See Appendices C, D, and E). The writing task was generated by the level coordinator as formative assessment for B1 level. The participants were allocated 40 minutes to write a descriptive paragraph on the given topic. The writing tasks were then collected and reformulated by the researcher for each participant without changing the original meaning. For validity and reliability of the study, a

native speaker of English, who is a colleague and a trained CELTA tutor, completed proofreading of the reformulated versions.

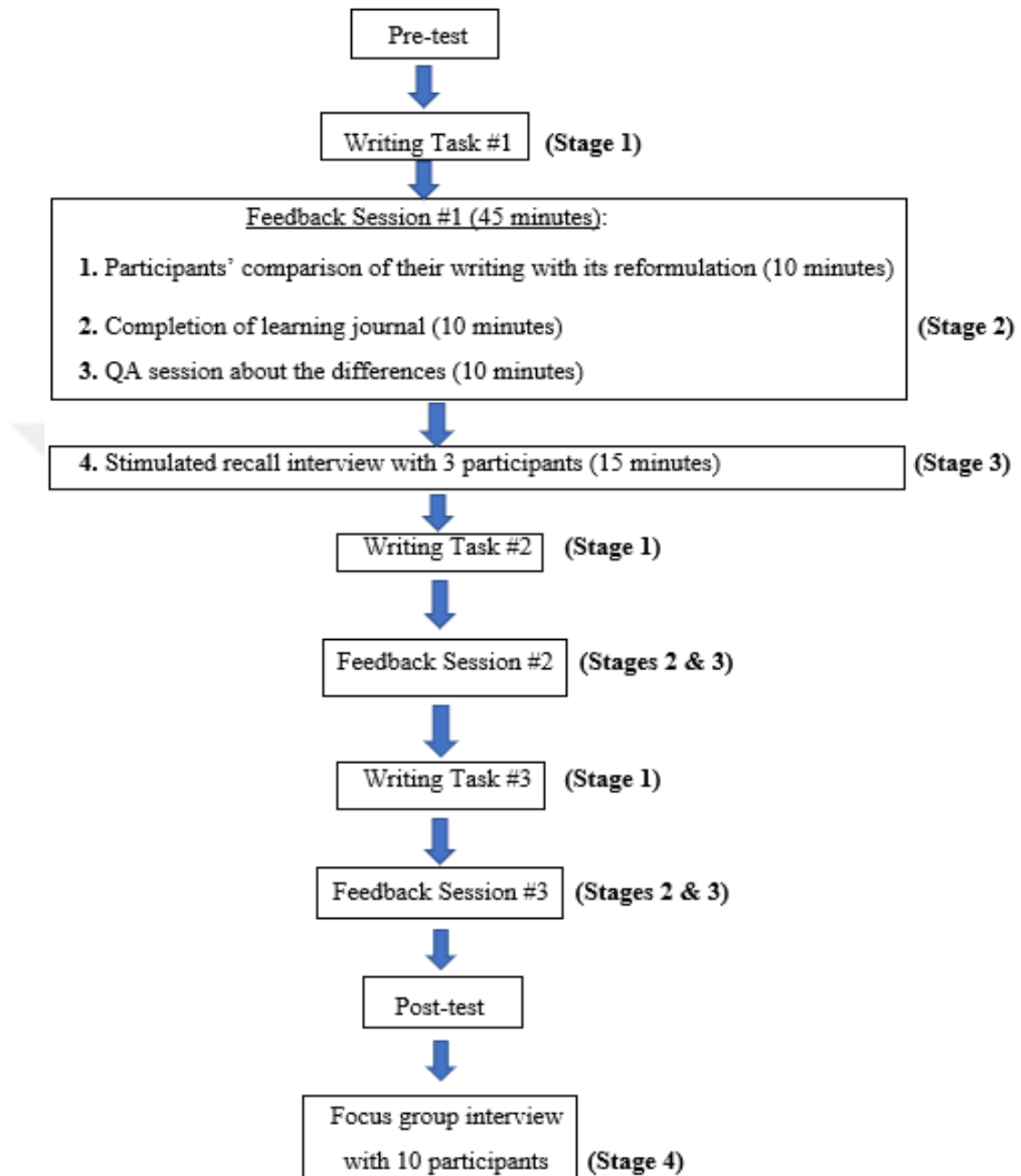
**Stage 2:** During the feedback session (45 minutes), the participants were given their own writing along with its reformulated version as feedback, without receiving any explicit marking of their grammatical errors (See Appendices F and G for sample student writing and its reformulated version respectively). They were given 10 minutes and asked to compare the two versions of their writing to notice any differences and underline them. The participants were then given 10 more minutes and asked to complete their learning journal based on the differences they had noticed (see Appendix H for sample student learning journal). They were given prompts to identify the differences between the two versions and note down the mismatches that they noticed. After completion of the learning journals, the participants had 10 minutes of a question-answer session to ask any about any differences that were not clear to them.

**Stage 3:** At the end of the feedback session, three participants stayed for the stimulated recall interview for 15 minutes. They were guided by the prompts in the learning journal, and they reflected on their noticing.

**Stage 4:** The day after the administration of the post-test, a focus group interview was conducted with 10 participants to discuss their attitude towards this new feedback tool and its impact on the improvement of their grammatical accuracy in writing.

The stages of the procedure for the experimental group are demonstrated in Figure 3.

Figure 3

*Procedure for the Experimental Group*

### ***3.4.3.2. Procedure for the comparison group***

The procedure for the experimental group consisted of three stages in total:

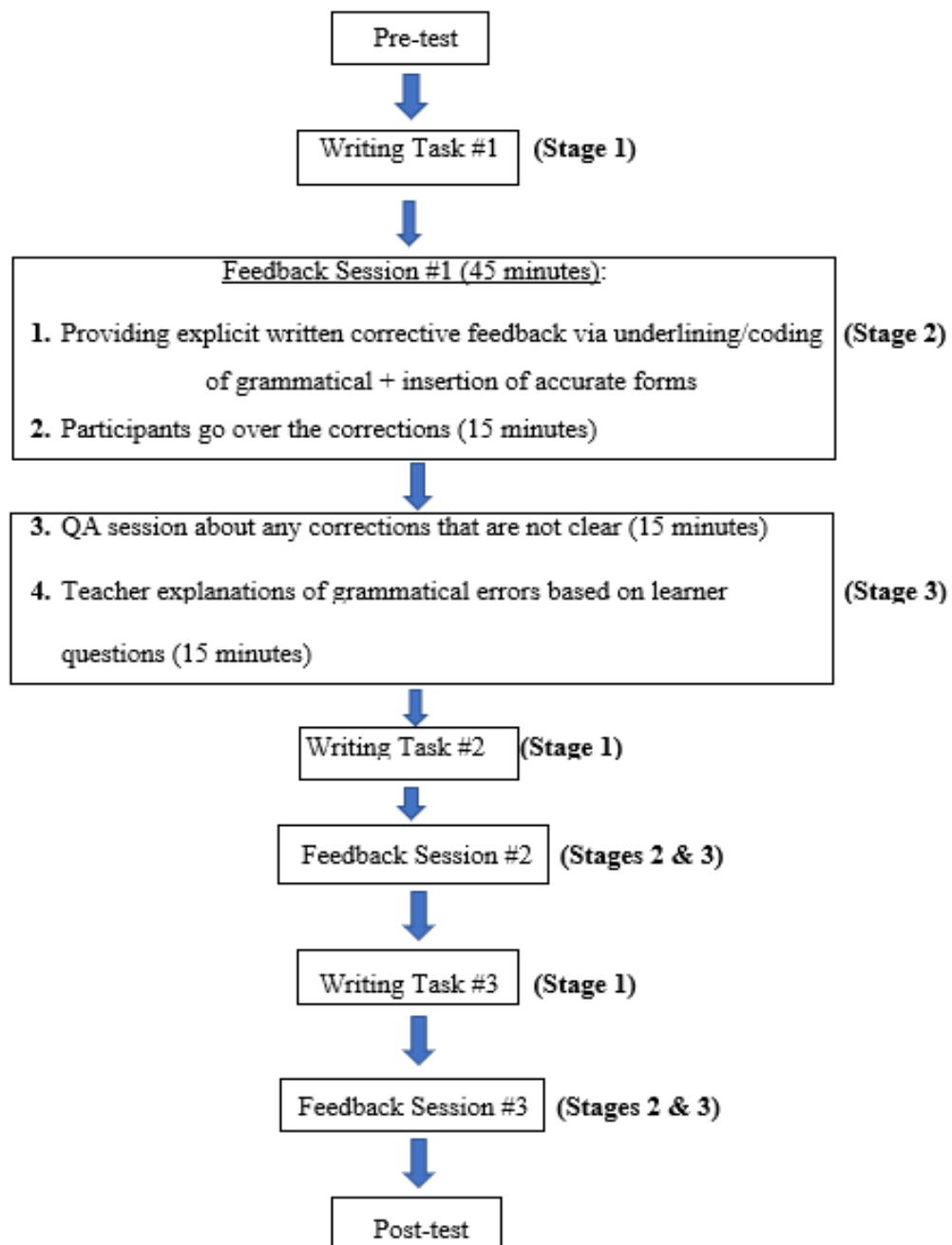
**Stage 1:** The same paragraph writing task (of 100-120 words) was given to the comparison group during class time under the same conditions. The participants in the comparison group were also allocated 40 minutes to write a descriptive paragraph on the given topic.

**Stage 2:** During the feedback session (45 minutes), the participants in this group received their regular feedback as usual in the form of explicit written corrective feedback by underlining and coding of the grammatical errors, and insertion of the accurate forms (See Appendices I and J for sample student writing and traditional corrective feedback). The participants were given 15 minutes to go over the corrected forms.

**Stage 3:** The participants were given 15 minutes to ask their teacher (i.e. the researcher) any corrections that were not clear or did not make sense. The teacher provided additional feedback and further grammatical explanations related to the specific learner questions of errors until the end of the feedback session. The participants in the comparison group did not receive any other form of feedback (e.g. learning journal, stimulated recall interview session).

The stages of the procedure for the comparison group are demonstrated in Figure 4.

Figure 4

*Procedure for the Comparison Group*

### 3.5. Data Analysis

#### 3.5.1. Quantitative data analysis

To answer Research Question #1 (What is the impact of reformulation and noticing tasks as feedback on B1 level of Turkish EFL learners' general accuracy in writing?), and Research Question #2 (What is the impact of reformulation and noticing tasks as feedback on B1 level of Turkish EFL learners' writing accuracy regarding target grammatical forms?), the quantitative data analysis consisted of a pre- and post-test. The initial data were collected from the pre-test according to the common grammatical errors of the participants in the experimental and comparison group. The errors were identified and initially classified into two main categories as General Accuracy and Target Grammar.

The two main categories were further classified into sub-categories for each as Articles, Verb Tense-Form, Pronoun Reference, Prepositional Phrases for General Accuracy; and Past Tense, Modal Verbs, If Clause Type 1, If Clause Type 2 for Target Grammar. The errors related to verb tense and verb form occurred simultaneously in most of the papers, therefore, they were tallied under the same sub-category. Similar to Adams' (2003) study on L2 Output, Reformulation and Noticing, the errors due to spelling were counted as an orthographic error, therefore, not included for further analysis. In addition, since the learners were at B1 level of proficiency, problems with word order were not commonly observed, therefore, not analysed as a separate category. Problems with word order, spelling errors, and any other occasional errors, such as pluralization of nouns, or use of lexis were tallied under 'Other' category. Following Mackey (2006) and Uggen (2012), only the target-

like use of the categorized grammatical forms was counted, and 1 point was given to each target-like use.

The quantitative data were then analyzed using SPSS v26.0. For data analysis, frequency, percentage, mean, and standard deviation values were used as part of descriptive statistics. Since there was no randomization in the selection of the participants, the Kolmogorov-Smirnov test, as the normality distribution test, was used, therefore, parametric tests were applied in the data analysis. Paired Samples T-Test was used to compare the means of pre- and post-tests of each group. Independent Samples T-Test was used to compare the means of pre- and post-tests of the experimental and comparison groups. Pearson correlation coefficient was used to measure the direction of the relation between General Accuracy and Target Grammar scores of both groups. For the reliability analysis of the scales, Cronbach's Alpha coefficient was used. The level of significance was taken as  $<0,05$  in all test results in order to test the null hypothesis, which was then used to identify and interpret the effect of reformulation and noticing tasks as feedback on Turkish B1 level learners' grammatical accuracy in writing.

### **3.5.2. Qualitative data analysis**

To answer Research Question #3 (To what extent do B1 level of Turkish EFL learners accomplish noticing the grammatical differences as they compare their written output to its reformulated version?), the qualitative data (to understand what the learners in the experimental group were able to notice) was obtained from learning journal entries and stimulated recall interview sessions. The qualitative data were coded to identify any existing patterns similar to the sub-categories of errors that emerged for the quantitative data with respect to General Accuracy (i.e. Articles, Verb

Tense/Form, Pronoun Reference, Prepositional Phrases) and Target Grammar (i.e. Past Tense, Modal Verbs, If Clause Type 1, If Clause Type 2). During coding of the qualitative data, the researcher also used an inductive approach in order to find emerging themes. The reason for an inductive approach is to be responsive to new ideas, and to include the participants' perspectives as a learner in the research context. Since the starting point of the researcher in the present study is based on reformulation and noticing frameworks in the existing literature, in order to obtain recursivity, there was definitely a transition between inductive and deductive approaches during formation of the themes and categories.

For analysis of the qualitative data from the learning journal entries, the noticed features were tallied according to the reformulations made, which meant the same categories and sub-categories formed for the quantitative data analysis. The reason for having the same categories was to measure to what extent the participants were able to notice the reformulated grammatical errors. Any noticed features other than the existing categories were coded under 'Other' category. The themes that emerged as a result of content analysis were then organized into categories based on the research questions.

For analysis of the data from the stimulated recall interview sessions, the audio recordings of the interviews were transcribed verbatim and coded by two independent raters, the researcher and a colleague as a trained rater, to increase reliability in coding. Interrater reliability was measured using Cohen's Kappa coefficient. Each noticing episode was marked, regardless of whether it was grammatical features or not (Uggen, 2012), to form new themes and to triangulate the findings of the qualitative data from the learning journal entries. The noticed features were categorized into recurring themes.

To answer Research Question #4 (a. What is B1 level of Turkish EFL learners' attitude towards reformulation and noticing tasks as a feedback tool? b. How does their attitude correspond to the development of their writing accuracy?), the focus group interview data was used as the final qualitative data analysis. The audio-recording of the focus group interview was transcribed verbatim, and emerging themes were investigated through content analysis. The themes that emerged as a result of content analysis were then organized into categories based on the final research question.



## 4. RESULTS

### 4.1. Overview of the Results

This chapter presents the results gathered from the quantitative and the qualitative analysis of the collected data with the aim of investigating the role of reformulation and noticing tasks in improving the grammatical accuracy of B1 level Turkish EFL learners. The findings of the quantitative and the qualitative data are presented in the order of the research questions.

### 4.2. Quantitative Data Findings

#### 4.2.1. Research Question #1: The impact of reformulation and noticing tasks on general accuracy

Research Question #1 asked “What is the impact of reformulation and noticing tasks as feedback on B1 Level of Turkish EFL learners’ general accuracy in writing?”. To answer the first question, the learners’ grammatical errors in the pre-test regarding general accuracy were initially identified and tallied. The findings revealed that most common grammatical errors in both groups were due to the incorrect use of articles, verb tense or forms, pronoun cases and prepositional phrases. Each fully target-like form in these categories was given 1 point to determine the mean scores regarding general grammatical accuracy using descriptive statistics on SPSS v26.0.

##### *4.2.1.1. The normality distribution of pre-test and post-test scores*

Since there was no randomization in the selection of the participants, the Kolmogorov-Smirnov test, as the normality distribution test, was initially used before comparison of the pre- and post-test to answer the first research question. Table 2

shows the normality distribution of the pre-test and post-test scores of experimental and comparison groups according to their general grammatical accuracy in writing. The test results showed a normal distribution of the general accuracy scores of the groups ( $p>0.05$ ).

Table 2

*Normality Distribution Analysis of General Accuracy Scores*

			Kolmogorov-Smirnov			Skewness	Kurtosis
			Statistics	Df	p		
Articles	Experimental	Pre	.142	15	.200*	.783	1.050
		Post	.138	15	.200*	.714	-.142
	Comparison	Pre	.219	15	.050*	.820	-.312
		Post	.212	15	.075*	.559	-1.115
Verb Tense/Form	Experimental	Pre	.151	15	.200*	-.396	-.332
		Post	.144	15	.200*	-.334	-1.133
	Comparison	Pre	.211	15	.055*	.581	.322
		Post	.138	15	.200*	.612	.315
Pronoun Reference	Experimental	Pre	.142	15	.200*	-.148	-.137
		Post	.127	15	.200*	.254	.316
	Comparison	Pre	.141	15	.200*	.017	-.031
		Post	.180	15	.200*	-.530	-.399
Prepositional Phrases	Experimental	Pre	.163	15	.200*	.477	-.371
		Post	.175	15	.200*	-.742	1.190
	Comparison	Pre	.193	15	.136	.983	.228
		Post	.191	15	.147	.677	-.618
General Accuracy Total	Experimental	Pre	.155	15	.200*	-.124	.020
		Post	.153	15	.200*	-.437	-.070
	Comparison	Pre	.137	15	.200*	.343	-.500
		Post	.149	15	.200*	-.104	-1.116

\* $p>0.05$

Regarding overall general accuracy, for the experimental group, the skewness and the kurtosis values of the pre-test and the post-test indicate that the experimental group had a relatively normal distribution in the pre-test. In the post-test, a more negative skewness of  $-.437$  and a kurtosis of  $-.070$  indicate a more flattened and broader distribution. For the comparison group, the skewness and the kurtosis values indicate similar results for the post-test, which show a more flattened and broader distribution. The p values indicate that both groups were normally distributed ( $p = .200 > 0.05$ ).

#### ***4.2.1.2. The mean score comparison of the groups in the pre-test***

According to the normality scores of the experimental and comparison group, the target-like grammatical forms were compared to determine the homogeneity of the groups in the pre-test. Table 3 indicates the average scores of fully target-like forms in the learners' pre-test regarding general grammatical accuracy.

Table 3

#### *Target-like Use of General Grammatical Accuracy in the Pre-test*

		N	M	SD
Articles	Experimental	15	4.33	2.09
	Comparison	15	4.67	2.19
Verb Tense/Form	Experimental	15	9.33	2.23
	Comparison	15	8.40	3.02
Pronoun Reference	Experimental	15	7.13	2.17
	Comparison	15	6.20	2.65
Prepositional Phrases	Experimental	15	6.87	1.96
	Comparison	15	6.13	2.75
General Accuracy Total	Experimental	15	28.20	6.69
	Comparison	15	25.40	8.00

Based on the findings, with respect to the accurate use of articles, the experimental group had a slightly lower mean ( $M = 4.33$ ) with an SD of 2.09 compared to the mean of comparison group ( $M = 4.67$ ) with an SD of 2.19. With respect to verb tense/form ( $EG = 9.33$ ,  $SD = 2.23$ ;  $CG = 8.40$ ,  $SD = 3.02$ ), pronoun reference ( $EG = 7.13$ ,  $SD = 2.17$ ;  $CG = 6.20$ ,  $SD = 2.65$ ), and prepositional phrases ( $EG = 6.87$ ,  $SD = 1.96$ ;  $CG = 6.13$ ,  $SD = 2.75$ ) the means of the experimental group were found to be slightly higher than those of the comparison group. The total means of target-like forms regarding general accuracy indicated that both groups ( $EG = 28.20$ ;  $CG = 25.40$ ) were homogeneous and at a similar level of proficiency regarding their writing performance in the pre-test.

#### ***4.2.1.3. Within group comparison of pre-test and post-test mean scores***

The pre-test and the post-test scores of experimental and comparison groups were then compared with respect to their general grammatical accuracy using Paired Samples T-Test on SPSS v26.0. Table 4 summarizes the average scores of both groups on the pre-test and the post-test.

Table 4

*Paired Samples T Test Results of General Accuracy Scores in Pre- and Post-test*

			M	SD	t	df	p
Articles	Experimental	Pre	4.33	2.09	-8.900	14	<0.001***
		Post	7.40	2.20			
	Comparison	Pre	4.67	2.19	-4.183	14	0.001***
		Post	5.67	2.41			
Verb Tense/Form	Experimental	Pre	9.33	2.23	-5.490	14	<0.001***
		Post	11.07	2.52			
	Comparison	Pre	8.40	3.02	-4.934	14	<0.001***
		Post	9.73	3.03			
Pronoun Reference	Experimental	Pre	7.13	2.17	-2.467	14	0.027
		Post	7.80	2.01			
	Comparison	Pre	6.20	2.65	0.673	14	0.512
		Post	5.93	1.98			
Prepositional Phrases	Experimental	Pre	6.87	1.96	-5.172	14	<0.001***
		Post	9.00	2.00			
	Comparison	Pre	6.13	2.75	-6.439	14	<0.001***
		Post	8.07	2.63			
General Accuracy Total	Experimental	Pre	28.20	6.69	-8.897	14	<0.001***
		Post	35.20	5.88			
	Comparison	Pre	25.40	8.00	-7.623	14	<0.001***
		Post	29.53	8.24			

Paired samplest t test, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001

The results indicate a significant increase between the pre-test and the post-test mean scores of the experimental group regarding articles. The use of articles in the post-test (M = 7.40, SD = 2.20) was significantly higher than the average scores in the pre-test (M = 4.33, SD = 2.09) ( $p < 0.001$ ). Similarly, the mean scores of the post-test (M = 11.07, SD = 2.52) with respect to verb tense/form indicated a significant relation compared to the mean scores of the pre-test (M = 9.33, SD = 2.23) ( $p < 0.001$ ). In terms of prepositional phrases, the mean scores of the experimental group increased significantly from the pre-test (M = 6.87, SD = 1.96) to the post-test (M = 9.00, SD =

2.00) ( $p < 0.001$ ). Similar results were found in the comparison group regarding articles, verb tense/form and prepositional phrases. The mean scores of accurate use of articles in the comparison group showed a significant increase from the pre-test ( $M = 4.67$ ,  $SD = 2.19$ ) to the post-test ( $M = 5.67$ ,  $SD = 2.41$ ) ( $p < 0.001$ ). As for verb tense/form, a significant relation between the pre-test and the post-test was found as  $M = 8.40$  with an  $SD$  of  $3.0$  and  $M = 9.73$  with an  $SD$  of  $3.03$  respectively ( $p < 0.001$ ). This means the comparison group also performed significantly better at the use of prepositional phrases in the post-test ( $M = 8.07$ ,  $SD = 2.63$ ) compared to the pre-test ( $M = 6.13$ ,  $SD = 2.75$ ) ( $p < 0.001$ ). However, there was a significant difference between the experimental and comparison group regarding their mean scores of accurate use of pronoun reference. Although both groups have shown progress in the post-test, the difference between the mean scores of the pre-test ( $M = 7.13$ ,  $SD = 2.17$ ) and the post-test ( $M = 7.80$ ,  $SD = 2.01$ ) indicate a sharp increase for the experimental group ( $p = 0.027 < 0.05$ ). On the other hand, no meaningful difference was found between the average pre-test and post-test scores of the comparison group regarding accurate use of pronoun reference ( $p = 0.512 > 0.05$ ). The total average scores of both groups also revealed a significant increase between their pre-test (EG =  $M = 28.20$ ,  $SD = 6.69$ ; CG =  $M = 25.40$ ,  $SD = 8.00$ ) and the post-test (EG =  $M = 35.20$ ,  $SD = 5.88$ ,  $p < 0.001$ ); CG =  $M = 29.53$ ,  $SD = 8.24$ ,  $p < 0.001$ ) performance with respect to general grammatical accuracy.

#### ***4.2.1.4. Between-groups comparison of the mean scores in the post-test***

The first research question asked whether there was an effect of reformulation and noticing on the improvement of B1 level of Turkish learners' general accuracy in writing. To answer this question, the post-test mean scores of experimental and

comparison group were compared using Independent Samples T-Test on SPSS v26.0.

The findings varied according to the learners' improvement in the error categories.

Table 5 summarizes the mean scores of both groups in the post-test.

Table 5

*Independent Samples T Test Results of General Accuracy Scores in the Post-test*

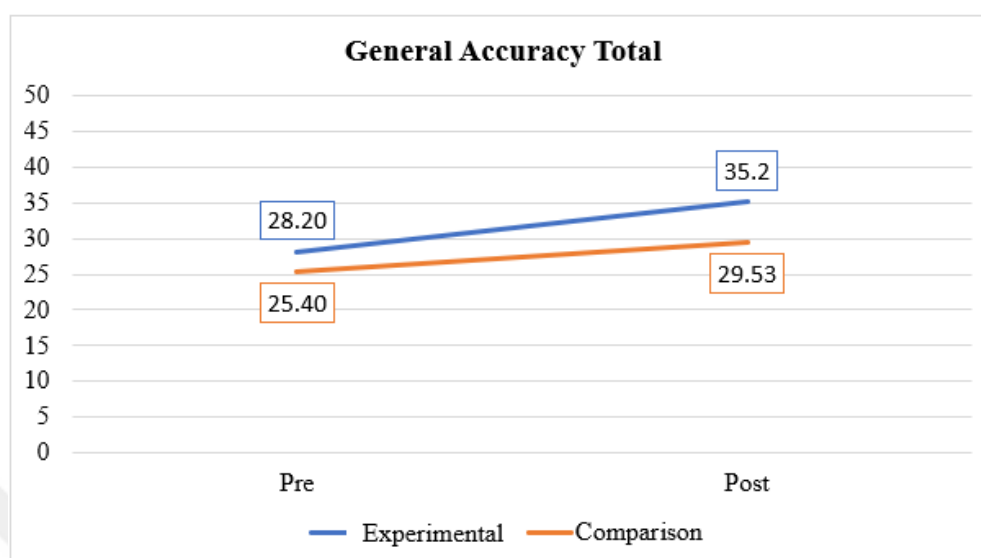
		N	M	SD	t	df	p
Articles	Experimental	15	7.40	2.20	2.058	28	0.049*
	Comparison	15	5.67	2.41			
Verb Tense/Form	Experimental	15	11.07	2.52	1.309	28	0.201
	Comparison	15	9.73	3.03			
Pronoun Reference	Experimental	15	7.80	2.01	2.564	28	0.016*
	Comparison	15	5.93	1.98			
Prepositional Phrases	Experimental	15	9.00	2.00	1.094	28	0.283
	Comparison	15	8.07	2.63			
General Accuracy Total	Experimental	15	35.20	5.88	2.168	28	0.039*
	Comparison	15	29.53	8.24			

Independent samplest t test, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001

The results showed that the experimental group improved significantly in the use of articles (EG/articles = M = 7.40, SD = 2.20,  $p = 0.049 < 0.05$ ) and pronoun reference (EG/pronoun reference = M = 7.80, SD = 2.01,  $p = 0.016 < 0.05$ ) when compared to the comparison group's mean scores in the post-test (CG/articles = M = 5.67, SD = 2.4; CG/pronoun reference = M = 5.93, SD = 1.98). However, no significant differences were found specifically to verb tense/form or prepositional phrases. Figure 5 illustrates the improvement of experimental and comparison group from the pre-test to the post-test based on their total mean scores of general grammatical accuracy in their writing.

Figure 5

*General Accuracy Total Pre-Post Average Scores by Groups*



When the total average scores of both groups in the post-test were compared, the experimental group ( $M = 35.20$ ) with an SD of 5.88 was found to score significantly higher than the comparison group ( $M = 29.53$ ) with an SD of 8.24 ( $p = 0.039 < 0.05$ ) with respect to general grammatical accuracy.

#### **4.2.2. Research Question #2: The impact of reformulation and noticing tasks on target grammatical accuracy**

Research Question #2 asked: “What is the impact of reformulation and noticing tasks as feedback on B1 level of Turkish EFL learners’ writing accuracy regarding target grammatical forms?”. To answer the second question, the learners’ grammatical errors in the pre-test according to the target grammatical structures covered at B1 level of proficiency (Past Tense, Modal Verbs, If Clause Type 1, If Clause Type 2) were initially identified and tallied. Each fully target-like form in these categories was given 1 point to determine the mean scores of the target grammatical forms using descriptive statistics on SPSS v26.0.

#### 4.2.2.1. The normality distribution of pre-test and post-test scores

Due to the intact group of participants, one of the normality distribution tests, the Kolmogorov-Smirnov test, was used before the comparison of the pre and post-test to answer the second research question. Table 6 shows the normality distribution of the pre-test and post-test scores of experimental and comparison groups according to their grammatical accuracy of target forms in writing.

Table 6

#### *Normality Distribution Analysis of Target Grammar Scores*

			Kolmogorov-Smirnov			Skewness	Kurtosis
			Statistics	Df	p		
Past Tense	Experimental	Pre	.183	15	.200*	-.171	-1.429
		Post	.149	15	.200*	.154	.723
	Comparison	Pre	.187	15	.169*	-.371	-1.282
		Post	.134	15	.075*	-.143	-.761
Modal Verbs	Experimental	Pre	.136	15	.200*	.646	.848
		Post	.183	15	.200*	1.235	1.221
	Comparison	Pre	.125	15	.200*	.351	-.484
		Post	.132	15	.200*	.967	.556
If Clause Type I	Experimental	Pre	.171	15	.200*	-.092	-.699
		Post	.119	15	.200*	-.788	-1.615
	Comparison	Pre	.163	15	.200*	.574	.094
		Post	.128	15	.200*	-.113	-.484
If Clause Type II	Experimental	Pre	.150	15	.200*	.149	-1.308
		Post	.139	15	.200*	.740	-.025
	Comparison	Pre	.116	15	.200*	.104	-.127
		Post	.171	15	.200*	.092	-.669
Target Grammar Total	Experimental	Pre	.111	15	.200*	-.350	-.505
		Post	.158	15	.200*	-.224	.522
	Comparison	Pre	.181	15	.199*	.197	-1.025
		Post	.162	15	.200*	-.264	-1.103

\*p>0.05

Regarding overall target grammar scores, the slightly smaller negative skewness value (-.224) and the more positive kurtosis value (.552) for the experimental group indicate that the distribution is more peaked in the post-test compared to the pre-test. For the comparison group, the slightly smaller negative skewness value (-.264) and a more negative kurtosis value (-1.103) indicate that the distribution in the post-test is less peaked compared to the pre-test distribution. The overall results of target grammar showed a normal distribution of the target grammar scores of the experimental and comparison group ( $p > 0.05$ ).

#### ***4.2.2.2. The mean score comparison of the groups in the pre-test***

Based on the results of Kolmogorov-Smirnov test, the target-like grammatical forms in the pre-test were then compared to determine the homogeneity of the two groups. Table 7 indicates the mean scores of fully target-like forms in the pre-test regarding the target grammatical structures.

Table 7

#### ***Target-like Use of Target Grammatical Forms in the Pre-test***

		N	M	SD
Past Tense	Experimental	15	4.47	2.39
	Comparison	15	4.07	1.83
Modal Verbs	Experimental	15	2.47	1.60
	Comparison	15	2.13	0.92
If Clause Type I	Experimental	15	1.07	0.70
	Comparison	15	1.07	0.88
If Clause Type II	Experimental	15	0.47	0.52
	Comparison	15	0.87	0.64
Target Grammar Total	Experimental	15	8.47	2.72
	Comparison	15	8.13	2.75

The means of target-like use of target grammatical structures in the pre-test show that both experimental and comparison groups scored similarly. In the use of past tense forms, the experimental group had a slightly higher mean ( $M = 4.47$ ) with an SD of 2.39 than the comparison group with a mean of 4.07 ( $SD = 1.83$ ). With the use of modal verbs, the experimental group's mean ( $M = 2.47$ ,  $SD = 1.60$ ) was, in the same way, slightly higher than the comparison group's mean ( $M = 2.13$ ,  $SD = 0.92$ ). Both groups scored the same ( $M = 1.07$ ) in the use of If Clause Type I with slightly different SDs ( $EG = 0.70$ ;  $CG = 0.88$ ). The total mean scores of the pre-test ( $EG/Total = 8.47$ ;  $CG/Total = 8.13$ ) also indicated that at the beginning of the current study, the two groups were homogeneous and parallel to each other in terms of the use of target grammatical forms.

#### ***4.2.2.3. With-in group comparison of pre-test and post-test mean scores***

After the initial mean scores were obtained, the pre-test and the post-test scores of the experimental and comparison group were compared with respect to the accuracy of target grammar using Paired Samples T-Test on SPSS v26.0. Table 8 summarizes the average scores of both groups in the pre-test and the post-test with respect to target grammatical forms.

Table 8

*Paired Samples T Test Results of Target Grammar Scores in the Pre- and Post-test*

			M	SD	t	df	p
Past Tense	Experimental	Pre	4.47	2.39	-3.012	14	0.009**
		Post	5.60	1.88			
	Comparison	Pre	4.07	1.83	-4.000	14	0.001***
		Post	4.87	1.55			
Modal Verbs	Experimental	Pre	2.47	1.60	-5.392	14	<0.001***
		Post	3.67	1.40			
	Comparison	Pre	2.13	0.92	-4.000	14	0.001***
		Post	3.20	1.21			
If Clause Type I	Experimental	Pre	1.07	0.70	-3.154	14	0.007**
		Post	1.67	0.49			
	Comparison	Pre	1.07	0.88	-2.432	14	0.029*
		Post	1.53	.92			
If Clause Type II	Experimental	Pre	0.47	0.52	-7.432	14	<0.001***
		Post	2.67	1.23			
	Comparison	Pre	0.87	0.64	-5.870	14	<0.001***
		Post	1.93	0.70			
Target Grammar Total	Experimental	Pre	8.47	2.72	-12.444	14	<0.001***
		Post	13.60	2.72			
	Comparison	Pre	8.13	2.75	-10.601	14	<0.001***
		Post	11.53	2.97			

Paired samplest t test, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001

The findings show that both experimental and comparison group improved significantly from the pre-test to the post-test with respect to the level-based target grammatical forms.

The past tense mean scores of the experimental group increased significantly from 4.47 (SD = 2.39) to 5.60 (SD = 1.88), in the same way, the mean scores of the comparison group revealed a significant increase from 4.07 (SD = 1.83) to 4.87 (SD = 1.55). Regarding the use of modal verbs, both groups scored significantly higher in the post-test (EG/past tense= M = 3.67 with an SD of 1.40; CG/past tense = M = 3.20

with an SD of 1.21) compared to their pre-test mean scores (EG/past tense = 2.47, SD = 1.60; CG/past tense = 2.13, SD = 0.92). Similar results were found with both groups in the use of If Clauses Type 1 and 2. The difference between the pre-test and the post-test mean scores showed that both groups demonstrated a significant improvement in the accuracy of the use of If Clause Type 1 (EG =  $p = 0.007$ ,  $p < 0.01$ ; CG =  $p = 0.029$ ,  $p < 0.05$ ). The mean scores also increased sharply from the pre-test (EG/type II =  $0.47 < 2.67$ ; CG/type II =  $0.87 < 1.93$ ) to the post-test within the groups. The with-in groups comparisons of the total mean scores of target grammar revealed that the experimental ( $p < 0.001$ ) and the comparison ( $p < 0.001$ ) group both improved significantly in the study.

#### ***4.2.2.4. Between-groups comparison of the mean scores in the post-test***

The second research question asked whether there was an effect of reformulation and noticing tasks on the improvement of B1 level of Turkish learners' target grammatical forms in writing. To answer this question, the post-test mean scores of experimental and comparison groups were compared using Independent Samples T-Test on SPSS v26.0.

The findings indicated no significant differences between the experimental and comparison groups in terms of level-based target grammatical forms ( $p > 0.05$ ). That is to say, both groups showed a parallel improvement in the accuracy of target grammatical forms in their writing. Table 9 summarizes the mean scores of the experimental and the comparison group in the post-test.

Table 9

*Independent Samples T Test Results of Target Grammar Scores in the Post-test*

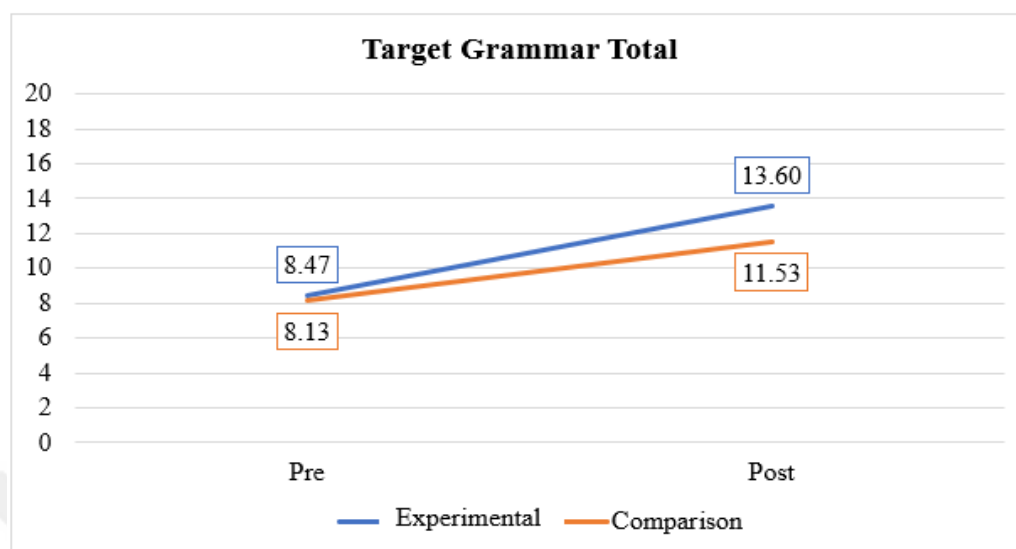
		N	M	SD	t	df	p
Past Tense	Experimental	15	5.60	1.88	1.164	28	0.254
	Comparison	15	4.87	1.55			
Modal Verbs	Experimental	15	3.67	1.40	0.979	28	0.336
	Comparison	15	3.20	1.21			
If Clause Type I	Experimental	15	1.67	0.49	0.498	21.36	0.624
	Comparison	15	1.53	0.92			
If Clause Type II	Experimental	15	2.67	1.23	1.999	22.23	0.058
	Comparison	15	1.93	0.70			
Target Grammar Total	Experimental	15	13.60	2.72	1.986	28	0.057
	Comparison	15	11.53	2.97			

Independent samples t test, \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

Although the experimental group displayed a greater improvement from the pre-test to the post-test compared to the comparison group in terms of the use of target grammatical forms, this improvement did not show a significant difference ( $0.057 > 0.05$ ). Figure 6 illustrates the improvement of the experimental and the comparison group from the pre-test to the post-test based on their total mean scores of target grammatical accuracy in their writing.

Figure 6

*Target Grammar Total Pre-Post Average Scores by Groups*



#### 4.2.3. Correlation analysis of general accuracy and target grammar scores

In order to determine whether there was a relation between the mean scores of general grammatical accuracy and target grammatical accuracy, Pearson Correlation Test was used. However, the evaluation of the test indicated no significant relation (correlation) between general grammatical accuracy and target grammatical accuracy ( $p > 0.05$ ). The improvement in grammatical accuracy with respect to both variables were found to be independent from each other, therefore, not inter-related. Table 10 shows the correlation analysis results of general accuracy and target grammar scores in the experimental and comparison groups.

Table 10

*Correlation Analysis Results of General Accuracy and Target Grammar Scores in Experimental and Comparison Groups*

			General Accuracy Scores	Target Grammar Scores
Experimental (n=15)	General Accuracy Scores	r	1	
		P		
	Target Grammar Scores	r	-.514	1
		p	.050	
Comparison (n=15)	General Accuracy Scores	r	1	
		P		
	Target Grammar Scores	r	.115	1
		p	.683	

Pearson Correlation, \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

### 4.3. Qualitative Data Findings

The qualitative part of the present study was conducted with the experimental group to answer Research Questions 3 and 4. This part of the study involved learning journal entries completed by the learners during the reformulated feedback sessions, stimulated recall interviews at the end of each feedback session, and the focus group interview held after the post-test. The emerging themes and sub-themes as a result of the content analysis are explained in detail with respect to each research question.

#### 4.3.1. **Research Question #3: The extent of noticing of grammatical errors and reformulations**

Research Question #3 asked: “To what extent do B1 level of Turkish EFL learners accomplish noticing the grammatical differences as they compare their written output to its reformulated version?”. To answer the third question, initially,

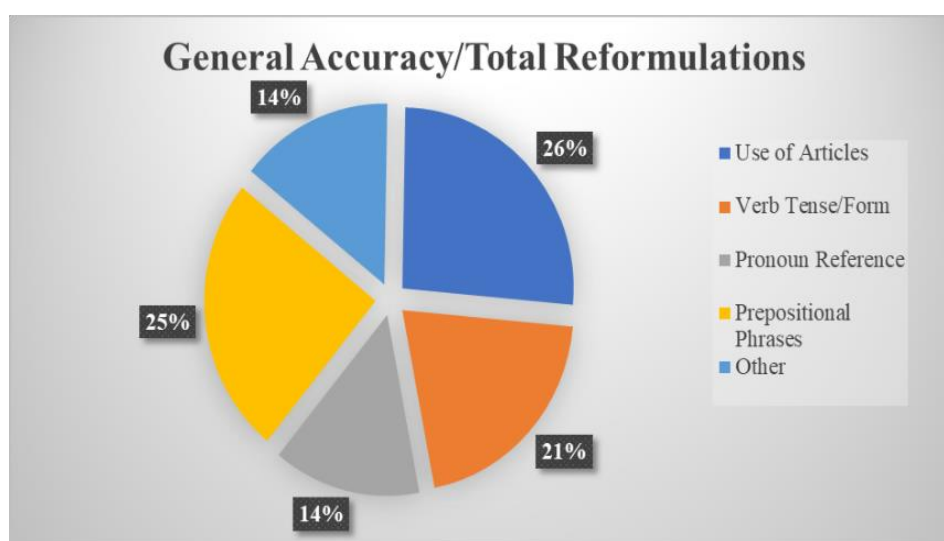
each learner's learning journal entry was collected, and their reporting of the noticed forms were coded and tallied according to the reformulations made in their writing tasks. In order to find the noticed forms, the reformulations of the learners' grammatical errors of general accuracy and target grammar formed the basis of the existing themes in the qualitative analysis.

#### ***4.3.1.1. Reformulations of general grammatical accuracy***

When general accuracy was considered, out of the total reformulations made in the learners' writing tasks, 26% formed reformulations of articles, 25% of them were due to prepositional phrases, 21% of the reformulations were about verb tense/form, and 14% was on pronoun reference. All the other reformulations, such as word order, lexis, pluralization, or the use of possessive's fell under the 'Other' category, and formed 14% of the total reformulations. Figure 7 illustrates the percentages of the reformulations made to the learners' writing tasks.

Figure 7

#### ***Total Reformulations of General Grammatical Accuracy***



Reformulations were made to the learners' grammatical errors without changing the original meaning of their sentences. Sample reformulations of general grammatical accuracy regarding incorrect use of articles, verb tense/form, pronoun reference and prepositional phrases found in writing task 1 of a learner are described as follows:

Participant #1 - Grammatical errors/reformulations of general accuracy

- *Articles*: Omission of the definite article "the"

Learner generated sentence - "*We went to beach and night clubs*"

Reformulated sentence - "We went to the beach and night clubs"

- *Verb tense/form*: Omission of 3rd person singular "s"

Learner generated sentence - "*My boyfriend live in Nottingham*"

Reformulated sentence - "My boyfriend lives in Nottingham"

- *Pronoun reference*: Incorrect use of 3rd person possessive pronoun

Learner generated sentence - "*If he successful for him job*"

Reformulated sentence - "If he wants to be successful at his job"

(Here, the learner also had incorrect use of If Clause Type 1 and prepositional phrase)

- *Prepositional phrases*: Omission of "to" in "listen to"

Learner generated sentence - "*We listened music and danced*"

Reformulated sentence - "We listened to music and danced"

In total, 454 reformulations were made in all three writing tasks regarding general grammatical accuracy: 139 for articles, 109 for verb tense/form, 74 for

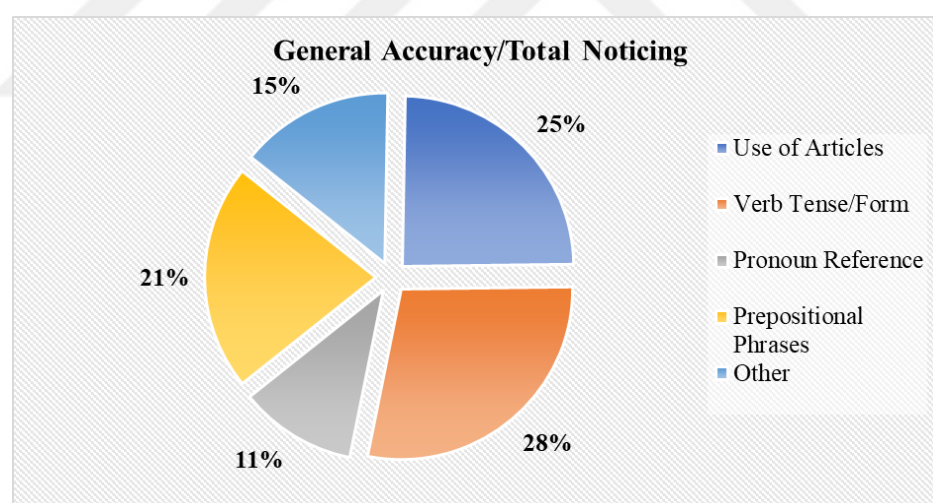
pronoun reference, and 132 for prepositional phrases. On the other hand, the total number of reformulations made for the “Other” category was 77.

#### *4.3.1.2. Features of general accuracy noticed in learning journals*

The learning journal reports of 15 students in the experimental group indicated higher levels of noticing of verb tense/form and articles compared to their noticing levels of pronoun reference and prepositional phrases. When the noticing levels of pronoun reference and prepositional phrases were taken into account, a higher level of noticing was found with respect to prepositional phrases. Figure 8 illustrates the total percentages of the noticed features of general grammatical accuracy.

Figure 8

#### *Total Noticing of General Grammatical Accuracy*



The figure indicates that during Stage 2 of the reformulated feedback given to the learners, the grammatical features that they accomplished noticing were mostly in line with the percentages of reformulations made for each grammatical feature. That is to say, they were able to notice the mismatches regarding the grammatical features

between their original writing and its reformulated version to a great extent during the comparison phase.

Moreover, the learners reported noticing of more grammatical features (89%) than lexical features or occasional grammatical errors (Other) (11%), which shows they also find grammar to be problematic in their writing. The following extracts from the learning journals also support this finding:

Participant #4: *“to, the, there ... Don’t forget to add these”* (Writing Task #1/Learning Journal)

Participant #6: *“Sometimes I forget to use a/an”; “I get confused when I use phrasal verbs”* (Writing Task #1/Learning Journal)

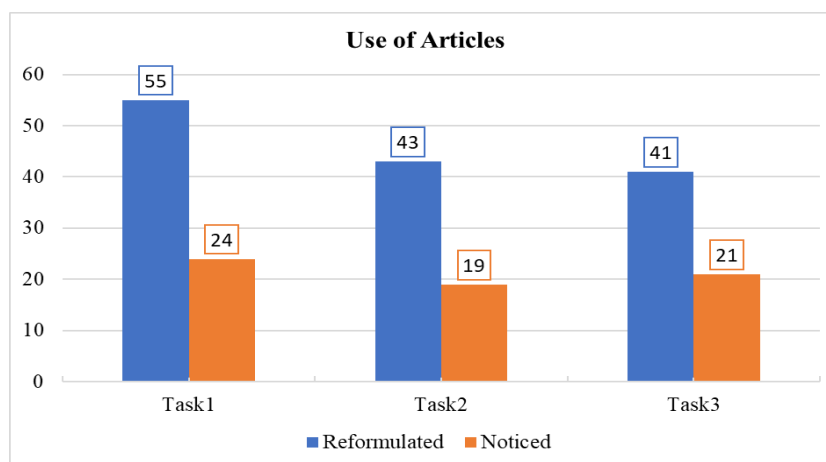
Participant #5: *“I forget to add -s when I use singular person with verbs”* (Writing Task #2/Learning Journal)

Participant #7: *“give money ~~for~~ to sick people” - grammar mistake* (Writing Task #3/Learning Journal)

Participant #15: *“again grammar mistakes”* (Writing Task #3/Learning Journal)

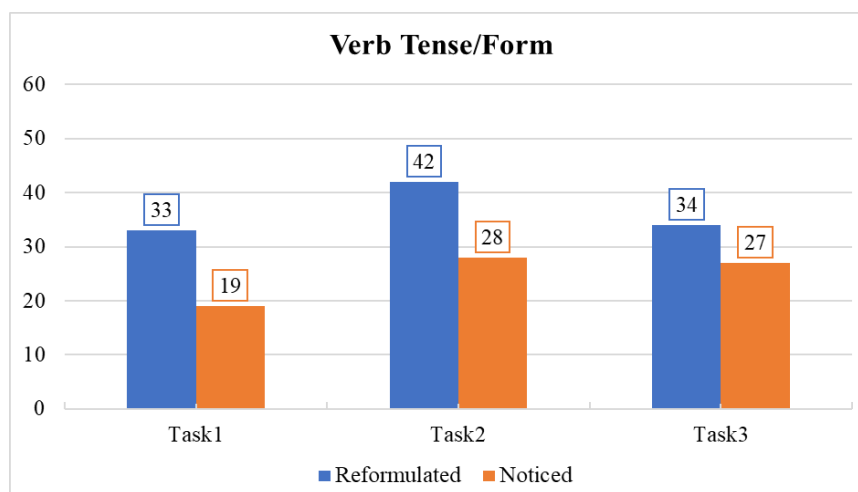
The qualitative findings from the reformulations and the noticed features in the learning journals also revealed that the learners noticed linguistic features of general accuracy that were more salient in their writing, or the features that they felt they had more problems with, such as verb tense/forms (28%) and articles (25%), compared to less noticed forms, such as pronoun reference (15%). This finding is also supported with the frequency of reformulations and noticed features in each writing task for each existing sub-theme. Figures 9-12 display the reformulated and noticed forms of general grammatical accuracy for each writing task.

Figure 9

*Frequency of Reformulated and Noticed Features - Articles*

The frequency of reformulated and noticed data show that the number of reformulated forms related to articles decrease from writing task one ( $n = 55$ ) to writing task three ( $n = 21$ ). Noticing was found to be greater particularly in the third reformulated feedback given to writing task three, which indicates the learners became more conscious of their repeated errors related to the use of articles. This finding also triangulates with the quantitative results of the significant difference found in the experimental group's mean scores ( $p = 0.049$ ,  $p < 0.05$ ) in the post-test.

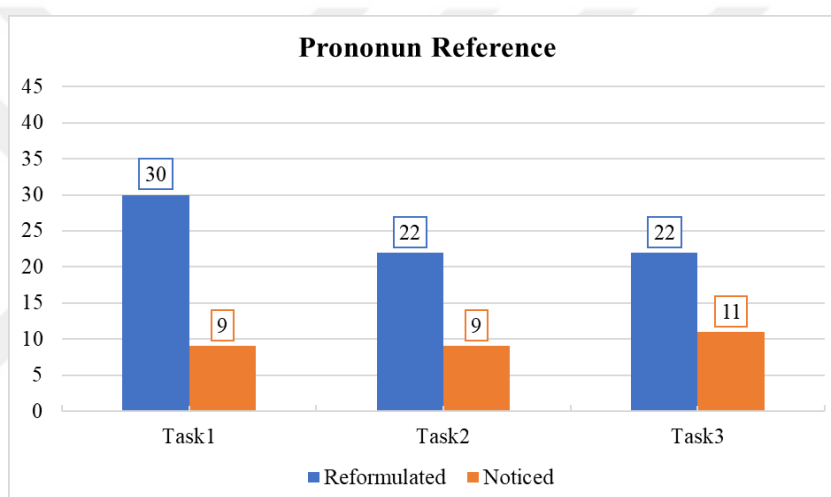
Figure 10

*Frequency of Reformulated and Noticed Features - Verb Tense/Forms*

Similar findings were obtained with respect to the level of noticing of verb tense/forms. The number of reformulations increased from task one ( $n = 33$ ) to task two ( $n = 42$ ). However, as the learners progressed from writing task one to task three, their noticing of the differences between their errors and the reformulations regarding verb tense/forms increased, which indicates an increasing awareness of more salient linguistic features.

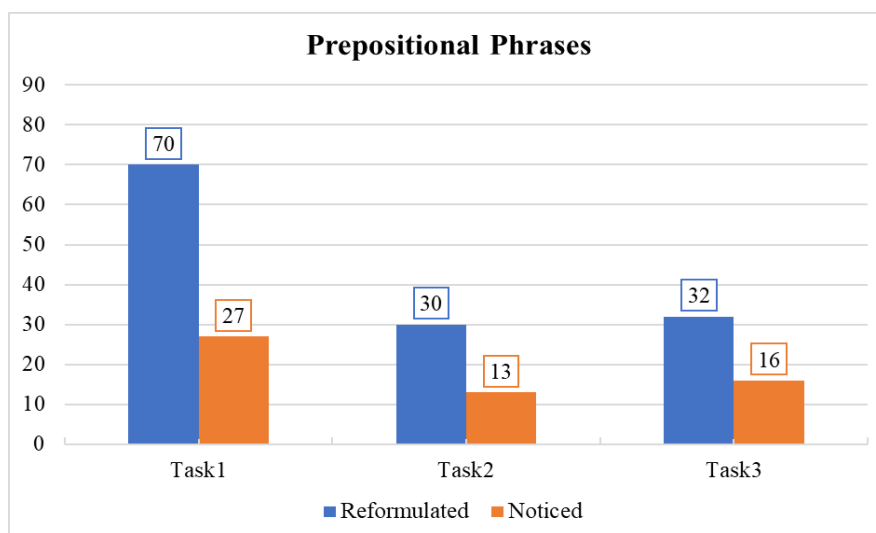
Figure 11

*Frequency of Reformulated and Noticed Features - Pronoun Reference*



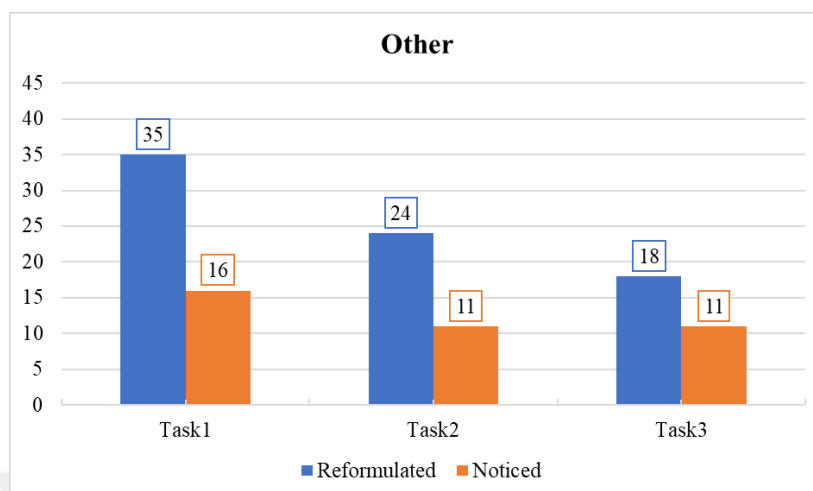
Unlike the higher levels of noticing of articles and verb tense/forms, the learning journals indicated much lower noticing of linguistic features related to pronoun reference. Although the frequency of reformulations slightly decreased in tasks two and three ( $n = 22$ ), the level of noticing remained the same in tasks one and two ( $n = 9$ ) with a slight increase in writing task three ( $n = 11$ ), which was much lower than the other noticed features of general grammatical accuracy. However, it can still be inferred that the gap between the reformulations and noticing of pronoun reference was the smallest at writing task three, which indicates a progress towards this grammatical feature's becoming more salient to the learners.

Figure 12

*Frequency of Reformulated and Noticed Features - Prepositional Phrases*

The frequency of reformulations made for incorrect use of prepositional phrases displayed a sharp decline from writing task one ( $n = 70$ ) to task two ( $n = 30$ ), and it remained almost the same in task three ( $n = 32$ ). Similarly, the learning journal reports indicated diminishing noticing of prepositional phrases. However, when the smaller number of reformulations is taken into account in task three ( $n = 32$ ), we can say that the noticed features of prepositional phrases ( $n = 16$ ) indicate learners' higher awareness of the mismatches between their incorrect use of the forms and their target-like versions.

Figure 13

*Frequency of Reformulated and Noticed Features - Other*

The reformulations that were included in the ‘Other’ category were the ones made with respect to occasional grammatical errors, such as word order, pluralization of nouns, the use of possessive ‘s, or lexical limitations - linkers, replacement of a word with its native-like version - of the learners in the experimental group. The number of reformulations made indicates a decline from task one to task three ( $n = 35, 24, 18$  respectively). Whereas, the level of noticing does not indicate a sharp decline. On the other hand, it remains the same in tasks two and three ( $n = 11$ ), which shows an improvement in the learners’ occasional grammatical errors and lexical diversity.

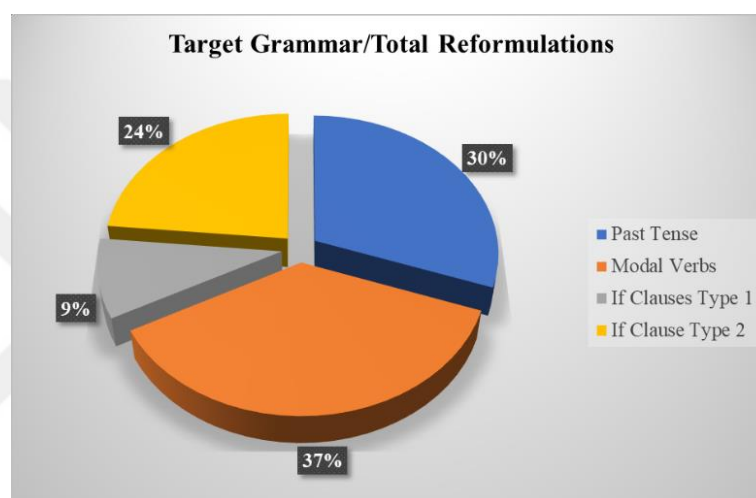
**4.3.1.3. Reformulations of target grammatical accuracy**

Reformulations that were made in the learners’ writing tasks regarding target grammatical forms differed from the ones related to general grammatical accuracy for the reason that each writing task focused on practicing a different target grammatical structure. For instance, task one had a particular focus on Past Simple Tense and Modal Verbs, whereas task two aimed to further practice If Clause Type 1.

In the same way, task three focused on practicing If Clause Type 2. However, the use of Past Simple and Modal Verbs continued to occur in the learners' subsequent tasks, therefore, these target forms were also included in the qualitative analysis of noticing. Figure 14 displays the total percentages of the reformulations made according to the target grammatical forms.

Figure 14

*Total Reformulations of Target Grammatical Accuracy*



As a result of coding of the reformulated and noticed forms with respect to target grammar, 37% of the reformulations were due to Modal Verbs, 30% of them included Past Tense, which formed the majority of the total reformulations. The remaining of the reformulations involved 24% If Clause Type 2 and 9% If Clause Type 1. Sample reformulations of target grammatical accuracy regarding the use of Past Tense, Modal Verbs, and If Clauses Type 1 and 2 are described as follows:

Participant #2/Writing Task 1

- Past Simple Tense*: Insertion of Past Simple auxiliary verb in positive forms

Learner generated sentence - “*My mum and dad did liked this place.*”

Reformulated sentence - “*My mum and dad liked this place.*”

## Participant #8/Writing Task 1

- *Modal Verbs*: Omission of the negative auxiliary verb with ‘have to’  
Learner generated sentence - “*But now I not have to think these things.*”  
Reformulated sentence - “But now, I don’t have to think about these things.”  
(Here, the learner also had a problem with the use of prepositional phrases)

## Participant #1/Writing Task 2

- *If Clause Type I*: Incorrect use of verb forms in If Clause Type 1  
Learner generated sentence - “*If someone want to be good student, he/she work hard.*”  
Reformulated sentence - “If someone wants to be a good student, he/she should work hard.”  
(Here, the learner also had a problem with the use of indefinite article ‘a’.)

## Participant #13/Writing Task 3

- *If Clause Type II*: Insertion of an extra Past Tense verb in the main clause  
Learner generated sentence - “*If I had one million dollars to spend in a day, I would went to go to shopping.*”  
Reformulated sentence - “If I had one million dollars to spend in a day, I would go shopping.”  
(Here, the learner also had a problem with the use of prepositional phrases)

In total, 217 reformulations were made in all three writing tasks regarding target grammatical accuracy: 80 for Modal Verbs, 66 for Past Simple Tense, 51 for If Clause Type 2, and 20 for If Clause Type 1. The reformulations made for Modal

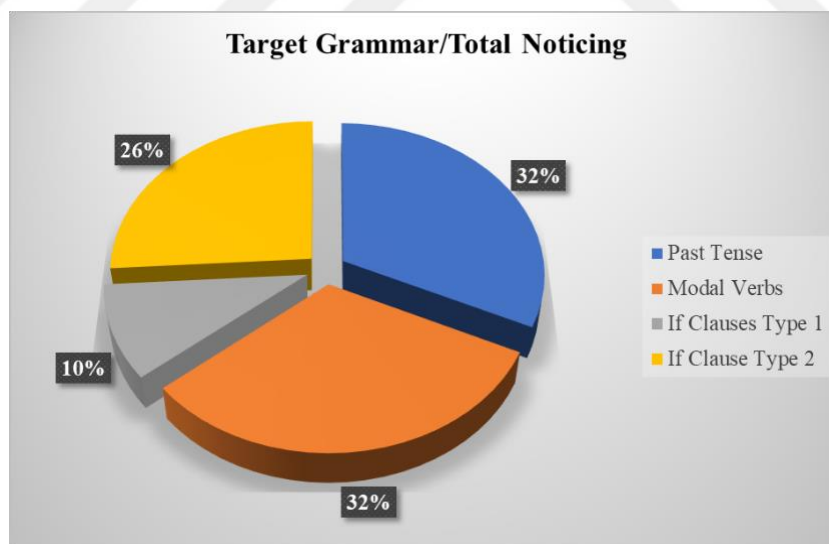
Verbs and Past Tense were greater with respect to the use of If Clauses due to recurring use of these forms in subsequent writing tasks.

#### *4.3.1.4. Features of target grammar noticed in learning journals*

The learning journal reports of 15 students in the experimental group indicated higher levels of noticing of Modal Verbs and Past Simple Tense compared to their noticing levels of If Clause Type 1 and Type 2. When the noticing levels of If Clauses were taken into account, a higher level of noticing was found with respect to the use of If Clause Type 2. This means the levels of noticed features were in line with the number of reformulations made in all three writing tasks for each feature. Figure 15 illustrates the total percentages of the noticed features of target grammatical accuracy.

Figure 15

*Total Noticing of Target Grammatical Accuracy*



The total percentages of noticing indicates that the learners were able to notice the mismatches between their original writing its reformulated version due to the use of target grammatical forms to a great extent during the comparison phase (Stage 2). Moreover, the learners reported noticing of Past Tense forms (32%) equally as Modal

Verbs (32%) although the reformulations made to Modal Verbs constitute a slightly greater percent. This finding shows they find the use of tenses to be more problematic their writing, which makes this feature more salient. The following extracts from the learning journals also support this finding:

Participant #3: “*We ~~don't~~ didn't have to stay- it must be didn't because it's past tense*” (Writing Task #1/Learning Journal)

Participant #12: “*want - wanted - Past Tense mistake*” (Writing Task #1/Learning Journal)

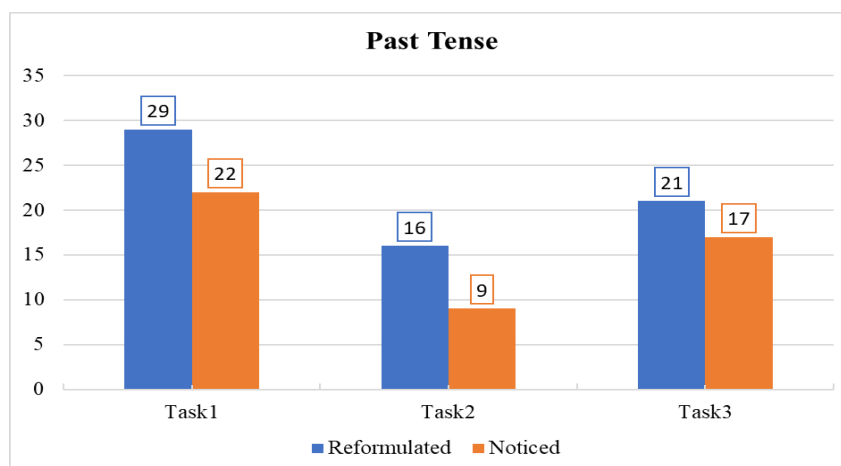
Participant #6: “*I had a lot of tense mistakes. I used Past Tense but it was not true. I don't have to use Past Tense*” (Writing Task #2/Learning Journal)

Participant #4: “*If I were die - If I died - wrong verb/Past Tense verbs*” (Writing Task #3/Learning Journal)

Participant #2: “*leaved- left*” - *verbs are wrong/look at the verbs again*” (Writing Task #3/Learning Journal)

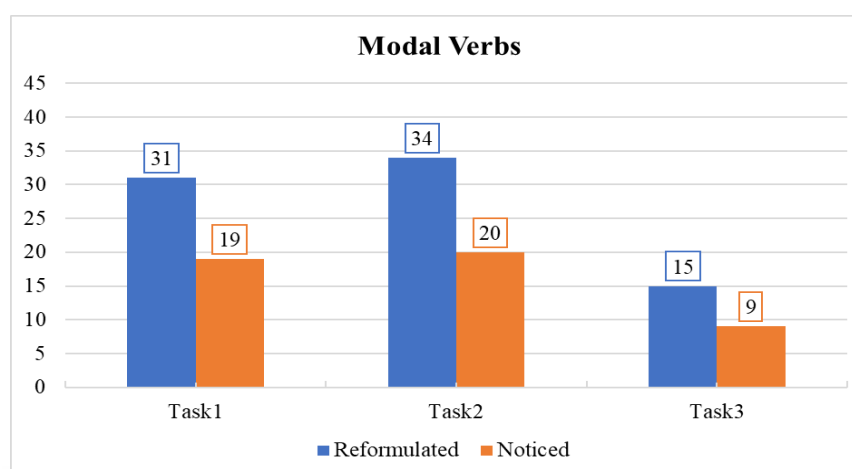
This finding is also supported with the frequency of reformulations and noticed features in each writing task for each existing sub-theme. Figures 16-19 display the reformulated and noticed forms of target grammatical accuracy for each writing task.

Figure 16

*Frequency of Reformulated and Noticed Features - Past Simple Tense*

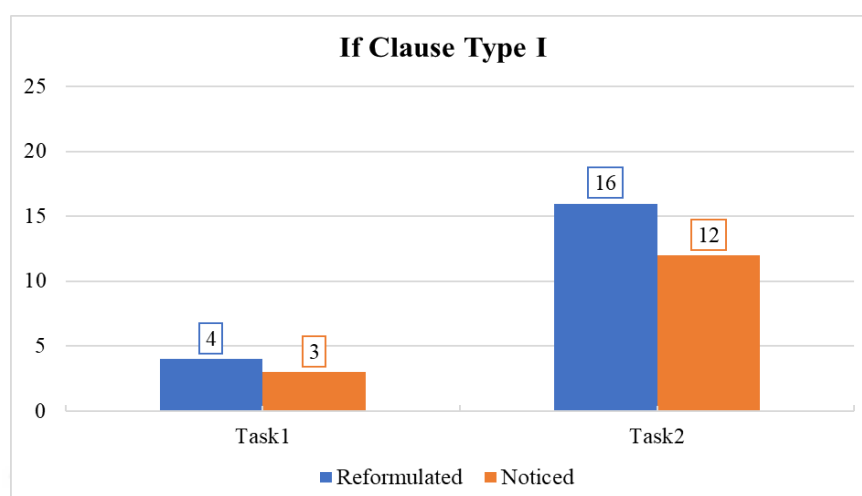
The frequency of reformulated and noticed data show that the number of noticed forms related to the use Past Simple Tense decrease from writing task one ( $n = 22$ ) to writing task two ( $n = 9$ ), which is in line with the number of reformulations. The decline in the number of reformulations, therefore, that of noticing in task two was also due to the task topic of possibilities and the focus being First Conditionals. The level of noticing was found to be higher again in the third reformulated feedback ( $n = 17$ ), which indicates that the learners continued to notice their errors related to Past Tense verb forms in the use of Second Conditionals in task three.

Figure 17

*Frequency of Reformulated and Noticed Features - Modal Verbs*

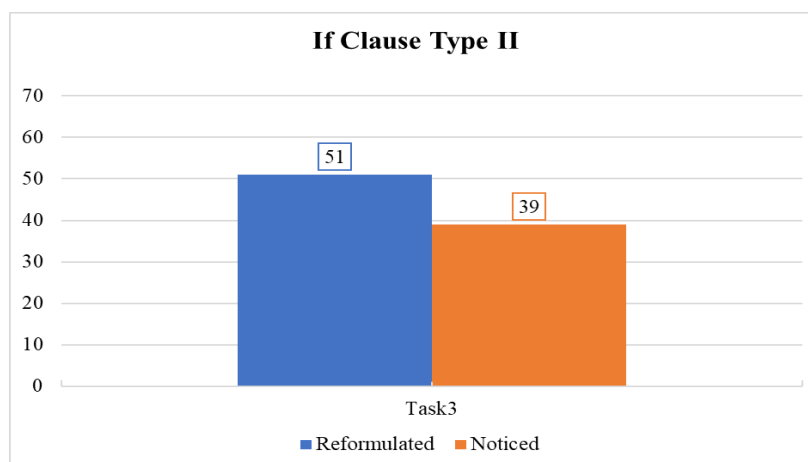
Although the target focus of Modal Verbs was particularly aimed in writing task one, their use was found in all three writing tasks since the use of If Clauses also necessitated the use of modals, such as can, will, should, would, or could. Therefore, the findings with respect to the noticing level of Modal Verbs were found in all the tasks. In light of this finding, the levels of noticing seem to be greater in task one ( $n = 19$ ) and task two ( $n = 20$ ). However, as the learners progressed from task one to task three, the reformulations of Modal Verbs decreased, which indicates an improvement due to the learners' increasing awareness of this feature in their writing.

Figure 18

*Frequency of Reformulated and Noticed Features - If Clause Type I*

Unlike the higher levels of noticing of Past Tense forms and Modal Verbs in all three tasks, the learning journal reports indicated noticing of linguistic features related to If Clause Type 1 only in tasks one and two. This was due to the topic and the target focus being more appropriate for Second Conditional use in task 3. Although a small number of reformulations ( $n = 4$ ) was made in task one, since the primary focus of the task was not First Conditional, the use of this feature was mostly arbitrary. Still, the noticing level was found to be quite high ( $n = 3$ ) considering the number of reformulations made for task one. That is to say, this target feature was salient to the majority of the learners even though it was not included in the focus of the task. The number of reformulations ( $n = 16$ ) and the level of noticing ( $n = 12$ ) were particularly higher in task two due to the task focus being First Conditional use. This finding again reveals that the majority of the learners accomplished noticing the differences between their non-target like use and its native-like version in the feedback.

Figure 19

*Frequency of Reformulated and Noticed Features - If Clause Type II*

Due to the primary focus of the task being Second Conditional use only in task three, the reformulations of this target form constitute to this task only. Furthermore, considering the fact that the learners were introduced to If Clause Type 2 for the first time in this particular level, their errors with this feature was more salient to them in their writing, which explains the higher number of reformulations ( $n = 51$ ) and noticing ( $n = 39$ ).

#### ***4.3.1.5. Overview of the qualitative findings in learning journals and emergent themes***

The overview of the qualitative findings revealed that although no significant results were obtained in the quantitative data analysis with respect to the use of target grammatical forms ( $0.057 > 0.05$ ), the qualitative findings of the learning journals indicate the effect of noticing on the slightly greater improvement in the experimental group's total mean scores of target grammar (see Figure 6) in the post-test. The emerging themes from the content analysis of the learning journals also support the finding that the learners in the experimental group accomplished noticing the grammatical differences as they compared their written output to its reformulated

version (Research Question #3). Three major themes emerged from the content analysis of the learning journals: 1) noticing of grammatical errors, 2) noticing of target-like forms, 3) comments on the reasons and solutions for their grammatical errors.

With respect of the first emergent theme, “noticing of grammatical errors”, the learners’ notes in their learning journal entries indicated an awareness of their limitations with the use of grammatical forms, such as verb tense or form, the use of articles, modal verbs, and conditionals. The following excerpts support this finding:

[...] *“I made grammar and Past Simple mistakes”* (Participant #9/LJ 2)

[...] *“I got confused with the use of Modal Verbs”* (Participant #4/LJ 2)

[...] *“I used wrong possessive pronoun: his, not him”* (Participant #10/ LJ 1)

Regarding the second theme, “noticing of target-like forms”, the learners’ notes of the correct forms of their grammatical limitations show an awareness of the reformulated versions in the feedback. This finding is supported in the following excerpts:

[...] *“If I were spent × - If I spent ✓; don’t forgot × - wouldn’t forget ✓”*

(P#4 / LJ 3)

[...] *“I saw (a) fish - Be careful with a/an”* (P#9 / LJ 1)

[...] *“Look the rules × - Look at the rules”* (P#9 / LJ 1)

The third theme that emerged indicated the learners’ awareness of “the reasons and solutions” for their grammatical limitations in the form of comments or self-

reminders in their learning journals. The following excerpts support this emergent theme:

[...] *“I totally understood the relation between if and would. If past simple + would”* (P#4 / LJ 3)

[...] *“I had a lot of tense mistakes. I used Past Simple but it was not true. I don't have to use Past Simple”* (P#7 / LJ 2 for If Clause Type 1)

[...] *“Tense and grammar (form) mistake. No tense was not new for me but grammar form yes”* (P#11 / LJ 1)

#### **4.3.1.6. Stimulated recall interviews and emergent themes**

The noticing episodes in the learning journals also indicated that 4 out of 15 participants, who were also low-achievers in the class, did not fully accomplish completing their learning journal entry. Therefore, in order to validate the qualitative findings of noticing in the learning journals, the noticing episodes in the stimulated recall interviews included participants from high, mid and low achievement levels. The transcribed interviews of noticing episodes by nine participants were coded by two independent raters, the researcher and a trained rater. Cohen's Kappa was used for the interrater reliability analysis. According to Cohen's Kappa analysis, 0.01 - 0.20 is interpreted as slight reliability, 0.21 - 0.39 as fair reliability, 0.40 - 0.59 as moderate reliability, 0.60 - 0.79 as substantial reliability, 0.80 - 0.90 as agreement, and 0.90 - 1.00 as almost perfect agreement (McHugh, 2012).

In the present study, the evaluation of the interrater reliability results of noticed features in the stimulated recall interviews regarding general grammatical accuracy was found as 0.896 (agreement, 0.80-0.90). The Kappa results regarding target

grammatical accuracy were found to be 1.000 (almost perfect agreement, > 0.90).

Table 11 shows the interrater reliability scores of the noticed features regarding general grammatical and target grammatical accuracy in the stimulated recall interview data.

Table 11

*Interrater Reliability Scores for Each Qualitative Dataset*

	General Accuracy	Target Grammar
No. of codes included by both raters	6	9
No. of codes excluded by both raters	3	0
No. of codes included only by the first rater	1	1
No. of codes included only by the second rater	0	0
Total number of categories	4	5
Cohen's kappa	0.896	1.000

The coding of noticed features in the stimulated recall interview sessions with nine participants indicated similar findings with the level of noticing in the learning journal reports. Based on the recurring themes, out of 9 participants, 5 reported noticing of their errors with the use of articles, 8 reported noticing of verb tense/forms, and 6 reported noticing of prepositional phrases regarding general grammatical accuracy. With respect to target grammar, 5 out of 9 participants reported noticing of Past Tense, 3 reported noticing of errors with Modal Verbs, and 5 participants reported noticing their linguistic limitations with If Clause Type 2. Regarding any sub-themes from the 'Other' category, 3 out of 9 participants, additionally, reported noticing of lexical limitations due to lexical choice, or the use of linkers, and 2 out of 9 participants reported noticing of pluralization errors. The following excerpts from the stimulated recall interviews support these findings:

- Stimulated Recall Interview 1/Task 1 - Participant #1

R: *Did you notice any differences between the two versions of you writing?*

P: *I forget to use a an, I use at instead of in and in instead of at. I sometimes change was and were, I make mistakes with these.*

R: *So, you mostly saw differences with ...*

P: *Grammar. I don't have a lot of problems with vocabulary, but I have a lot of problems with grammar.*

[...]

P: *And sometimes I use don't instead of didn't when I talk about the past.*

[...]

---

- Stimulated Recall Interview 1/Task 2 - Participant #4

P: *Generally, I made grammar mistakes. And from the new grammar, I confused the if's.*

R: *OK, so you have mistakes with if clauses.*

P: *Yes, I mixed them up.*

R: [...] *Did you notice any other differences?*

P: *General grammar, yes, mixed. I have incomplete sentences.*

R: *So, did you forget the verbs?*

P: *Yes. [...]*

---

- Stimulated Recall Interview 3/Task 3 - Participant #9

[...]

P: *I made some grammar mistakes. I forgot to plural -s.*

R: *OK, any other mistakes apart from plural forms?*

P: *I used Present Tense when I had to use Past Tense, or I wrote I was instead of I were in Second Conditional. [...]*

Moreover, the stimulated recall data indicated that the quality of noticing varied among the participants due to several factors, such as their level of achievement, motivation, aptitude (Adams, 2003), and attention to their limitations. For instance, high achievers were found to be more specific with what forms they noticed in the reformulated feedback, whereas, low achievers mostly noticed the category, i.e. general grammar, but did not accomplish noticing specific linguistic forms. This finding is also supported in the following excerpts from the stimulated recalls by a high achiever and a low achiever respectively:

- Stimulated Recall Interview 3/Task 1 - Participant #3

[...]

P: *I learned the difference between at and in. I didn't know it. I don't think I'll forget it, for example, I wouldn't normally notice it and it would go wrong.*

R: *OK, great. Anything else?*

P: *I learned the difference between for and on. I learned which one suits or does not suit with where I use it.*

P: *I also knew the difference of must from others, but I didn't know the past. I learned how to use must in past tense. [...]*

- Stimulated Recall Interview 2/Task 1 - Participant #2

[...]

R: *So, are there any differences between the two writings other than a/an?*

P: *I don't think I have any other mistakes in grammar.*

R: *Verb forms? Did you notice any differences with the verb forms?*

P: *No, not with verb forms.*

R: *What about tense?*

P: *I mean ... nothing really important [...]*

In addition to the verification of the noticed features and to what extent the learners accomplished noticing the differences, the emerging themes from the stimulated recall interviews were also in line with those in the learning journals. The content analysis of the transcribed interviews revealed three major themes related to noticing: 1) noticing of the incorrect forms, 2) noticing the reasons for the errors, 3) noticing the correct use of the forms. The following three excerpts support these emergent themes:

- [...] *"I should have written shopping malls don't, not shopping malls doesn't. I have problems with singular-plural agreement. I used to do it more in the past, but I don't have that many mistakes now"* (Stimulated Recall Interview 2/Task 2 - Participant #5).
- [...] P: *I wrote when you be a rich person. It must be if you were a rich person.*  
 R: *OK, let's take a look at that form. Why do you think there is a difference?*  
 P: *It should be past, were is past.*  
 R: *OK, it should be past because ...?*

P: *It's asking with if. If you were a rich person, what you could do.*

(Stimulated Recall Interview 2/Task 3 - Participant #8)

- [...] R: *What kind of differences did you notice?*

P: *In terms of grammar, second conditional.*

R: *Why do you think your version was not ok?*

P: *Because you used verb one, mine is wrong, I guess.*

R: *Where did I use verb one?*

P: *After would.*

(Stimulated Recall Interview 1/Task 3 - Participant #7)

#### **4.3.2. Research Question #4: The learners' attitude towards reformulation and noticing tasks**

Research Question #4 asked: a) “What is B1 level of Turkish EFL learners’ attitude towards reformulation and noticing tasks as a feedback tool?”, b) “How does their attitude correspond to the development of their writing accuracy?”. To answer the fourth question, the focus group interview, held with ten participants, was transcribed verbatim for a content analysis. The content analysis of the interview revealed four major themes regarding the participants’ attitude to reformulation and noticing tasks : a) noticing of errors due to salience of ungrammatical forms, b) retaining noticed features in memory through learning journal, c) positive effect of reformulations on recurring general grammatical errors, d) L1 transfer due to inner thinking. The emergent themes are supported in the following excerpts from the focus group interview:

#### **4.3.2.1. Noticing due to salience of ungrammatical forms**

When the participants were asked about whether this new way of given feedback helped them to notice the ungrammatical forms in their writing, 6 out of 10 participants reported the benefits of reformulations as making their grammatical errors more salient, therefore, easier to catch the eye and be noticed by themselves.

The following excerpts are in line with this theme:

[...] *“There were some general grammar mistakes that I did. They caught my eye much easier because I found them myself, I noticed more”* (Focus Group Interview / Participant #1)

[...] *“It helped me to see my errors much easier. It was really good, actually”* (Focus Group Interview / Participant #2)

[...] *“Because we look at our writing as a whole, we can see all kinds of errors. We can understand our former mistakes”* (Focus Group Interview / Participant #4)

#### **4.3.2.2. Retention of noticed features in long-term memory**

When the participants in the focus group interview were asked whether reformulated feedback and noticing tasks helped them retain the noticed forms in memory, 5 out of 10 reported positive, and commented particularly on the advantages of taking notes in the learning journals in helping them to retain the noticed features in long-term memory.

This theme is supported in the following excerpts:

[...] *“In fact, writing them down helped me retain the correct forms more. For example, I kept forgetting to use the articles. I mean I forgot it a couple of times and*

*when I took notes, I saw them more and retained more in my mind*” (Focus Group Interview / Participant #1)

[...] *“It remained in our mind because we took notes, so it caught our eye again. I believe it remains longer and more in our minds”* (Focus Group Interview / Participant #5).

[...] *“I think it was more effective for us to complete a form. It gave us the chance to see our mistakes again and take a look at them. This was the most effective part”* (Focus Group Interview / Participant #6).

#### **4.3.2.3. Positive effect of reformulations and noticing tasks**

The participants were also asked about whether this way of feedback was effective in improving their grammatical accuracy in writing. 7 out of 10 reported about the positive effect of reformulation and noticing tasks on their general grammatical accuracy recurrent errors particularly with the use of articles, verb forms and past tense. One participant (#10) requested reformulated feedback specifically on their vocabulary, style and organization as well: *“It has an awareness raising feature but I really would like to receive this way of feedback on a longer and detailed writing, more academic including everything”*. The following excerpts from the interview support the positive effect of reformulations and noticing tasks from the learners’ point of view:

[...] *“Some structures were particularly beneficial for me, and remained in my mind. In this way, I think it affected me positively”* (Focus Group Interview / Participant #1)

[...] *“For example, I make Past Simple mistakes. I saw these mistakes and it was good”* (Focus Group Interview / Participant #2)

[...] *“I think it helped me generally in general writing accuracy because, like you said, you wrote like a native speaker so it was effective for me for repeating errors”* (Focus Group Interview / Participant #3)

#### **4.3.2.4. L1 Transfer due to inner thinking**

The focus group participants were also asked whether they could understand the reasons for the differences between their original writing and its reformulation without the guidance of a teacher. 4 out of 10 participants reported the common reason as L1 transfer due to thinking in their L1 (Turkish) for their general grammatical errors. Interestingly, this response was not anticipated by the researcher while preparing the interview prompts. The expected response was whether they needed scaffolding by a teacher during or after the noticing phase (Stage 2). However, since 3 participants out of 10 agreed on L1 interference as being the main reason for their general grammatical errors, it was worthy of coding. The following excerpts support this emergent theme:

[...] *“I misunderstood because I wrote like Turkish”* (Focus Group Interview / Participant #7)

[...] *“I think it is because of my limitations with grammar and as my friend said, thinking in Turkish. It will take some time to lose this habit. We have always thought in Turkish so far, so it is more difficult to think and write in English”* (Focus Group Interview / Participant #8)

The overview of the qualitative findings of the focus group interview indicated a positive attitude towards reformulations and noticing tasks provided as feedback. Most of the participants (70%) reported this feedback tool helped them to improve their general grammatical accuracy. This attitude corresponds to the quantitative findings of significant difference in the experimental group's post-test mean scores of general grammatical accuracy ( $p = 0.039 < 0.05$ ).



## 5. DISCUSSION AND CONCLUSION

### 5.1. Discussion of the Findings

The main aim of the present study was to investigate the role of reformulation and noticing tasks as a feedback tool on the improvement of B1 level Turkish EFL learners' grammatical accuracy in writing regarding general accuracy and target grammatical forms. To fulfil these aims, both quantitative and qualitative research methods were implemented in a concurrent design to collect data from the participants. The remainder of this chapter investigates the key findings of the study by examining each of the four research questions in depth, and concludes with the limitations, pedagogical implications and recommendations for future research.

#### **5.1.1. Discussion of the findings of RQ 1: What is the impact of reformulation and noticing tasks as feedback on B1 level of Turkish EFL learners' general accuracy in writing?**

The first research question aimed to investigate whether providing learners reformulation of their original writing accompanied with noticing tasks as an alternative feedback tool had an impact on the improvement of their writing accuracy regarding their recurrent general grammatical errors. To accomplish this aim, each learner in the experimental group was given a reformulated version of their own written output for comparison, and asked to complete a learning journal to guide them towards noticing the mismatches. As Thornbury (1997) and Batsone (1996) claimed, learners need to be guided during cognitive processing of the linguistic features of the input to be able to notice the gaps. Also, in a similar context in Turkey, Demir (2019) found that positive feedback alone is not enough for learners to notice the target forms, and learners' attention specifically needs to be drawn to the differences

between their output and the target structure by the use of prompts to assist noticing. Therefore, the prompts in the learning journals served to the purpose of verifying this view. After providing the learners three cycles of reformulated feedback, the mean scores of the experimental and comparison groups in the post-test were compared. According to the results of total mean scores, significant differences were found between the experimental and the comparison group. This result suggests that reformulation and noticing had a significant impact on the improvement of general accuracy of the learners in the experimental group. This finding was in line with the findings of the previous studies by Qi and Lapkin (2001), Swain and Lapkin (2002), Adams (2003), Yang and Zhang (2010) that providing students access to reformulations of their text, which is incorporated with a discussion of the differences to stimulate noticing, contributes to the improvement of their accuracy in their subsequent writing.

Furthermore, Swain and Lapkin's study (2002) also revealed that reformulation of learners' writing is an effective technique in stimulating noticing, which provides learners the opportunity to reflect on their L2 limitations. This finding is consistent with the results of the present study with respect to the improvement of general grammatical accuracy due to the learners' attention to, awareness and noticing of the native-like grammatical forms of in the reformulated feedback. When the learners were asked to complete their learning journal during reformulated feedback, for general grammatical accuracy, they mostly attended to the reformulations of articles (26%), prepositional phrases (25%), verb tense or form (21%), which is investigated in detail in discussion of the findings for research question three.

On the other hand, while reformulation and noticing in the present study were found to have an impact on the learners' total mean scores of general grammatical

accuracy, the key findings varied with respect to each grammatical form. That is to say, reformulation and noticing had a significant effect on some of the grammatical forms of general accuracy that the learners received reformulated feedback on, whereas no significant differences were found between the groups in the post-test regarding others. For instance, the findings of the study suggest a strong relationship between reformulated feedback, noticing and improvement of the use of articles and pronoun reference. This result was supported in the comparison of the post-test scores of the groups, which revealed significant differences. However, an unexpected key finding regarding the use of prepositional phrases, and verb tense or forms was that, despite higher levels of noticing during the comparison phase (Stage 2), the incorporation of noticing of these forms in the learners' subsequent writing (post-test) did not create a significant difference between the groups. Similar results were obtained in Mackey's study (2006) on feedback, noticing and instructed second language learning. Mackey also found that noticing was not associated with learning of past tense forms, unlike noticing and a significant improvement of question forms in his study.

These findings reveal the complexity of noticing and uptake of grammatical forms in second language acquisition (SLA). Previous studies showed that as much as noticing plays an important role in improving EFL learners' writing, the quality of noticing is also a significant factor in the improvement of learners' accuracy (Qi & Lapkin, 2001). Adding to the views on the quality of noticing, about the Noticing Hypothesis and its implications for teaching a language, Schmidt and Frota discussed three features of noticing: surface forms, rules, and the gap between the learner's output and the target-like form to be essential for noticing to become uptake (Unlu, 2015). That is to say, the learners both need to notice the surface structures in the

target-like form, infer the rules from these surface structures, and notice the gap between their use and the target form for noticing to turn into intake. These views are consistent with the findings of the present study that despite a high level of noticing found for verb tense or form (28%), or prepositional phrases (21%) during the comparison phase (Stage 2) of the reformulated feedback, this noticing did not lead to a complete uptake to create a difference between the comparison group.

To sum it up, although no significant effect was found between the groups in terms of the use of prepositional phrases, and verb tense or forms, reformulated feedback and noticing still led to an improvement in the learners' interlanguage, which was reflected in their pre-test and post-test averages. Research in written corrective feedback also suggests that more treatable errors, such as learners' problems with verbs, subject-verb agreement, articles, pronouns, and spelling have a specific pattern, so they can be identified and treated easier by EFL learners (Ferris, 1999 as cited in Hyland & Hyland, 2006), and help them to gradually decrease the number of linguistic errors in their written output. Therefore, it can be claimed that reformulation and noticing have a significant impact on the use of articles, pronoun reference and overall general grammatical accuracy of B1 level Turkish EFL learners' writing.

### **5.1.2. Discussion of the findings of RQ 2: What is the impact of reformulation and noticing tasks as feedback on B1 level of Turkish EFL learners' target grammatical accuracy in writing?**

The second research question aimed to investigate whether reformulation of the learners' original writing and noticing tasks as feedback had an impact on the improvement of their writing accuracy regarding level-based target grammatical forms. After providing the experimental group learners three cycles of reformulated

feedback and the completion of learning journals to trigger noticing, the mean scores of the experimental group's pre-test and post-test, as well as the difference between the comparison group in the post-test were analyzed using descriptive statistics. Based on the significant results between the pre-test and the post-test mean scores, it is possible to claim that reformulation and noticing contribute to the improvement of the learners' target grammatical accuracy in writing.

On the other hand, regarding the post-test scores, the difference between the groups did not indicate a significant improvement although the group that received reformulated feedback scored higher. Similar to the findings of Qi and Lapkin (2001), the results of the second research question in the present study, regarding target grammatical accuracy indicate that the quality of noticing also plays an important role in the improvement of the learners' subsequent writing (post-test) for the reason that although the learners' level of noticing of the reformulations with past tense (32%), modal verbs (32%) and If clause type 2 (26%) were high, the quality of noticing of these target forms did not lead to a significant improvement between the groups. However, it is also possible to claim that there are other factors involved in this finding based on the process of second language learning, which psycholinguists view as "acquisition of a complex cognitive skill" (Gitsaki, 1998, p. 94). During this cognitive process, L2 learners link new information to old information by organizing and restructuring the new information. Therefore, the learners' improvement in second language learning may not always follow an increasing pattern, and may indicate a decline, forming a U-shape (Lightbown, Spada & Wallace, 1980 as cited in Gitsaki, 1998).

Regarding the second research question, unlike If clauses type 1 and 2, the target grammatical forms of past tense and modal verbs were not completely new

information for the learners. However, during the reformulated feedback sessions, they were expected to notice and restructure their errors of these complex forms, where mastery and automatization may not be achieved with three treatments of reformulation and noticing, and significant results of learning may be obtained in a longitudinal study. Uggen's study (2012) on the noticing function of output also revealed that tasks which require more complex forms require more attention and awareness of the learners, where these complex grammatical forms can become more salient, and the linguistic gaps may be easier to notice. Therefore, the high level of noticing of the target grammatical features in the current study are consistent with this finding. On the other hand, it can be claimed that greater noticing does not immediately lead to a significant improvement in the learners' written output.

### **5.1.3. Discussion of the findings of RQ 3: To what extent do B1 level of Turkish EFL learners accomplish noticing the grammatical differences as they compare their written output to its reformulated version?**

The aim of the third research question was to investigate the experimental group learners' reporting of the noticed forms of general grammar and target grammar according to the reformulations made in their writing tasks. In order to find to what extent they were able to notice these forms, the reformulations of the learners' grammatical errors of general accuracy and target grammar formed the basis of the existing themes in the qualitative analysis of the current study.

Moreover, previous studies claimed that 66% of noticing by learner initiation was about lexical search (Mackey et al., 2000; Williams, 2001 as cited in Hanaoka, 2007). Hanaoka's study (2007) also showed that although most learners could notice the differences between their writing and its native-like version, the majority of the

noticed features were lexical instead of grammatical. Although the ultimate aim of the current study was to investigate the extent of noticing of grammatical features, noticing of lexical features was also classified under 'Other' category to confirm the findings of previous studies in the field. The findings of our study also indicated learners' awareness of and attention to lexical features, however, unlike other studies, the extent of noticing lexical features remained at 15%, and more attention was given to grammatical features (85 %). This finding shows that the learners in our context were more aware and in need of finding solutions to their grammatical limitations than lexical diversity. Another reason for the contradictory result is that lexical items may be more salient, therefore, much easier to notice without the guidance of a teacher. Whereas, to answer the research questions in the current study, the prompts also guided the learners towards noticing of grammatical features more than lexical ones. Regarding noticing of general grammatical features, greater levels of noticing of verb tense or forms, and the use of articles were found compared to the noticing levels of pronoun reference and prepositional phrases. Among the noticing levels of pronoun reference and prepositional phrases, a higher level of noticing was found with respect to the use of prepositional phrases. Although high levels of noticing of verb tense or forms, and prepositional phrases did not create a significant difference from the other group in the improvement of writing accuracy, still, this finding indicates that the majority of the learners were able to show an awareness of their grammatical limitations, particularly with less transparent forms, such as articles and pronouns. On the other hand, noticing was much greater with target grammatical features, particularly with modal verbs, past tense, and If clause type 2, which explains that complex grammatical forms can be more salient to the learners as they try to find solutions to their limitations.

Literature in second language acquisition (SLA) had concerns about how to collect and analyze noticing and L2 learning (Mackey, 2006). Previous studies (Qi & Lapkin, 2001; Swain & Lapkin, 2002; Adams, 2003; Hanaoka, 2007; Yang & Zhang, 2010; Uggen, 2012; Hanaoka & Izumi, 2012) used cognitive interviews with the learners in the form of stimulated recall interview or think-aloud protocol in order to observe the cognitive processing in the learners' mind. Uggen (2012) also claimed the stimulated recall interviews to be beneficial in terms of understanding the cognitive processes the learners go through during the comparison and noticing phases. Following previous studies, in the present study stimulated recall interviews were conducted with three different learners after each reformulated feedback session in order to validate evidence of conscious noticing in the learning journals, and investigate to what extent the learners noticed specific language features. The participants were guided by the teacher during the stimulated recall sessions to talk about the noticed features and revisit their notes on the differences in their journal so that they had multiple opportunities to reflect on their writing. The participants for the stimulated recall interviews were selected based on their pre-test average scores for the rationale that the proficiency level of learners influences the quality and the number of noticing related to linguistic forms (Swain & Lapkin, 1995, Williams, 2001 as cited in Hanaoka, 2007), and whether more proficient learners noticed more features than less able ones. The findings indicated that the quality of noticing varied among the participants due to several factors, such as their level of achievement, motivation, aptitude (Adams, 2003), and attention to their limitations of forms. For instance, high achievers were found to be more specific with what form they noticed in the reformulated feedback, whereas, low achievers mostly noticed their limitations of general grammar or target grammar, but could not notice specific linguistic forms,

such as prepositional phrases or modal verbs. This result is in line with Hanaoka's (2007) finding that more proficient learners noticed more features than less able ones during the comparison of their output with the model.

The other aim of research question three was to find any emerging themes in the stimulated recall interview transcripts. The content analysis of the transcribed interviews revealed three major themes related to noticing: noticing of the incorrect forms, noticing the reasons for the errors, and noticing the correct use of the forms. The learners expressed their noticing of these themes as, *"I don't have a lot of problems with vocabulary, but I have a lot of problems with grammar"*, *"Generally, I made grammar mistakes"*, *"I have problems with singular-plural agreement"*, or *"I learned the difference between at and in. I didn't know it. I don't think I'll forget it, for example, I wouldn't normally notice it and it would go wrong"*. These excerpts from the interviews suggest that the learners accomplished noticing the grammatical differences as they compared their written output to its reformulated version to a great extent. The learners' expression of their noticing was also found to be similar with another recent study in the Turkish context by Yilmaz (2016), a replication of Suzuki's (2012) study on using languaging for cognitive interviews with learners to have them notice and reflect on their grammatical errors, where the learners reported *"I used the verb in the wrong place. I should have been careful about the word order"* (Yilmaz, 2016, p. 416).

To sum up, these findings suggest these noticing tasks, such as learning journals or stimulated recall interviews are effective especially when L2 learners are asked to compare their writing with its reformulation as feedback.

**5.1.4. Discussion of the findings of RQ 4: a) What is B1 level of Turkish EFL learners' attitude towards reformulation and noticing tasks as a feedback tool? b) How does their attitude correspond to the development of their writing accuracy?**

The aim of the fourth research question was to investigate the experimental group learners' attitude to reformulation and noticing since this was a new way of receiving feedback for them. Learners often receive explicit error correction for feedback on their written output, particularly by detailed marking or underlining of the incorrect grammatical forms along with the correct versions provided by the teacher (Lee, 2016). Therefore, the learners' attitude to reformulation and noticing tasks was worth investigating. The emerging themes from the content analysis of the focus group interview revealed the learners' attitude to four major aspects of reformulation and noticing tasks: noticing of errors due to salience of ungrammatical forms, retention of the noticed features in long-term memory through learning journal, the positive effects of reformulation on recurring general grammatical errors, and L1 transfer due to inner thinking.

All of these emergent themes support the findings of the first three research questions in the present study. For instance, most of the focus group participants emphasized the benefits of reformulation as making their grammatical errors more salient in writing, therefore, easier to catch the eye and become noticed by themselves. This finding validates the high level of noticing of grammatical forms, such as verb tense or form (28%), articles (25%), or past tense (32%). is also supported. Therefore, it can be claimed that the cognitive involvement of the learners during noticing tasks makes linguistic features of the input more salient, so the learners are better able to notice the gaps, and the corrections do not go unnoticed.

Moreover, half of the participants (50%) in the focus group particularly expressed the advantages of taking notes in the learning journals in helping them to retain the noticed features in long-term memory. This supports the argument that reformulation as a feedback tool and noticing tasks can have a triggering function (Swain, 1995, 1998, 2005 as cited in Hanaoka, 2007), and help EFL learners retain the noticed linguistic features easier. These emergent themes also triangulate with the quantitative results of the current study regarding general grammatical accuracy, i.e. the use of articles and pronouns, by making less transparent linguistic forms more salient, so easier to notice and retain their native-like use in subsequent writing (post-test).

Another theme that emerged from the focus group interview to answer the fourth research question was the positive effects of reformulation on the learners' recurring general grammatical errors, which was aligned with the ultimate purpose of the study, and in fact the starting point of the research. The majority of the participants valued the positive effects of reformulation and noticing tasks on their general grammatical accuracy, particularly with their repetitive errors of the use of articles, verb forms, specifically past tense. This finding is supported in second language acquisition theories, also referred to as the Bottleneck Hypothesis (Slabakova, 2006, 2008, 2013), where some linguistic features in language, such as formation of past tense irregular verb forms, acquisition of articles, or subject-verb agreement in English are more difficult to acquire, and the mastery of their performance may take longer than other linguistic features. Therefore, the complexity of these linguistic features made them more salient in reformulated feedback, and enabled the learners in the present study to notice them easier. However, not all

noticing of these forms, e.g. past tense verb forms, created a significant change in the improvement of the learners' writing accuracy.

The final theme from the focus group interview came from the question of whether the learners could understand the reasons for the differences between their original writing and its reformulation without the guidance of a teacher. No direct response was received to this question, however, a key unexpected theme that emerged was L1 interference<sup>2</sup>, particularly L1 transfer due to inner thinking, since Turkish and English have great differences in terms of their sentence structure. The participants in the focus group agreed on L1 interference as being the main reason for their general grammatical errors since they claimed their grammatical errors were due to thinking in their native language. This finding explains the learners' common grammatical errors with the omission of articles, 3<sup>rd</sup> person singular -s, or prepositional phrases as they do not exist in Turkish.

In a nutshell, the participants in the focus group interview valued having means to a new way of receiving feedback via reformulation and noticing tasks. These views are consistent with the findings of a study in the field by Yang and Zhang (2010), conducted in an EFL class on the impact of reformulation. Similar to the learners in the current study, the students in their study also valued having means of an approach to a native-like model text (Yang & Zhang, 2010), which supports the claim that learners' cognitive engagement in the output task can increase their awareness of target-like linguistic features through exposure to positive feedback. What is more, most of the participants (70%) argued this feedback tool helped them to improve their general grammatical accuracy. This attitude corresponds to the quantitative findings

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<sup>2</sup> L1 Interference: The transfer of linguistic features from one language to another by a speaker.

of significant difference of general grammatical accuracy, and specifically, with the accurate use of articles and pronouns.

## **5.2. Limitations and Suggestions for Future Research**

One of the important limitations of the present study is the small sample size due to the intact group of participants. In addition, since this is a classroom-based study, randomization was not possible for data collection. Therefore, the results, particularly of the quantitative data, may not be generalizable to a large population (Packard, 1991 as cited in Mackey, 2006). For this reason, future research on the impact of reformulation and noticing tasks needs to be conducted with a larger group of participants, where randomization is a possibility, in order to generalize the findings of the effects of reformulation and noticing on EFL learners. In such case, due to the larger sample size, the design and procedures of the present study may need certain adaptations.

In addition, another limitation of the current study was due to time. Since the data were collected over a period of eight weeks, which comprised a quarter-term, it was not possible to conduct a delayed post-test. Therefore, in order to verify the results of the post-test, further investigate the impact of reformulation and noticing tasks on the learners' improvement of grammatical accuracy in writing in the long run, measure retention of the noticed features in long-term memory, and enhance learning of those features, learners need to be given a delayed post-test.

Last, but not least, future research might also benefit from paired discussions of noticing during the comparison phase in order to place the researcher in an outsider position during the noticing stage for a wider perspective of qualitative data. Additionally, the role of reformulation and noticing tasks on the improvement of

lexical diversity could be investigated for Turkish EFL learners in order to compare the findings with previous literature in the field regarding lexical search. Despite the limitations mentioned above, the present study contributed to the literature in terms of investigating the impact of reformulation and noticing tasks as an alternative feedback tool for the improvement of B1 level learners' grammatical accuracy. However, to validate these findings, it is necessary to do more research in a similar context on guiding L2 learners to notice the specific grammatical forms in their writing, and provide a better understanding of the role of reformulation and noticing tasks on the improvement of learners' writing accuracy.

### **5.3. Pedagogical Implications**


The study suggests pedagogical implications to researchers, teachers, curriculum advisors, and administrators with the intention of investigating giving positive feedback to learners' writing tasks instead of providing traditional negative feedback. It can be implied from the present study that reformulation and noticing tasks provided as feedback have a positive impact in the improvement of B1 level Turkish EFL learners' grammatical accuracy in writing regarding their recurrent general grammatical errors, such as the use of articles, or pronoun reference. As discussed earlier, this study aims to fill the gap in literature in Turkish context by giving positive feedback to learners by means of reformulation, and tasks to stimulate noticing the mismatches related to general and target grammatical accuracy. For this reason, reformulation practices can be implemented in writing instruction in class as an alternative or supplementary technique to train learners to find the differences between their erroneous grammatical forms and their native-like version to stimulate noticing and learning. However, it should be kept in mind that the quality of noticing

may differ based on the learners' proficiency level, and low achievers may need more scaffolding from the teacher in noticing of the mismatches via prompts or the teacher's monitoring and guidance throughout this cognitive processing of language. What is more, since providing written feedback to writing through reformulation is more effective for shorter texts due to practicality reasons, artificial intelligence (AI) tools, such as Chat GPT might be used for reformulation of longer texts when providing written feedback. This way, reformulation of learners' written output may become less time-consuming for teachers.

#### **5.4. Conclusion**

The present study aimed to investigate the role of reformulation and noticing tasks as feedback on the improvement of B1 level Turkish EFL learners' grammatical accuracy in writing. The study also contributes to the literature by exploring the extent of learners' noticing of reformulated grammatical features in the feedback, and their attitude to this new means of providing feedback to EFL learners' errors. The findings of the present study are in line with the major findings of previous research in the field (Swain & Lapkin, 2002; Adams, 2003; Mackey, 2006; Qi & Lapkin, 2001; Uggen, 2012; Hanaoka & Izumi, 2012; Farsi, 2016; Farsi & Barjesteh, 2016; Yang & Zhang, 2010; Unlu, 2015; Yilmaz, 2016). The quantitative findings of the study indicated positive effects of reformulation and noticing tasks on the learners' improvement of general grammatical accuracy in writing. Moreover, the learners accomplished noticing majority of the differences between their writing and its reformulated version. However, the findings did not demonstrate any significant differences between the group that received reformulated feedback and the one that did not, in terms of target grammatical forms.

To conclude, this study was beneficial in showing the significance of the implementation of reformulation and noticing tasks as an alternative feedback technique at the English preparatory program of a private university in order to provide positive feedback to learners' writing. In light of the principles of providing feedback to Turkish EFL learners' written output, the findings of this study suggest policy makers that universities could implement reformulation and noticing tasks as positive feedback to writing in their English preparatory program, in addition to the current means of providing feedback in their writing curriculum, to better achieve their learning goals.



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## APPENDIX C: Writing Task 1

 <p><b>Istanbul Bilgi University</b> English Language Programs</p>	<p>Level 3 Units 5 &amp; 2 Productive Written Task 1</p>	<p>Name: _____ Date: _____</p>
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**TASK:**

Describe your last holiday and write about your next holiday. Write about 100-120 words. Use Past Simple and Modal Verbs in your paragraph. Consider the following questions:

<i>Your last holiday</i>	<i>Your next holiday</i>
<i>When and where was it?</i>	<i>What are your predictions about your next holiday?</i>
<i>Did you have a good time? Why / Why not?</i>	<i>What is necessary to do now? What is not?</i>
<i>Did anything interesting happen?</i>	

## APPENDIX D: Writing Task 2



Istanbul  
Bilgi University  
English Language Programs

Level 3  
Units 9A  
Productive Written Task 2

Name: \_\_\_\_\_

Date: \_\_\_\_\_


**TASK:**

Describe **TWO** of the following things in 50-60 words each. Use If Clause Type 1 in your descriptions.

- A good student
- A good computer
- A good shopping mall
- A good holiday spot
- A good leader
- A good brother / sister



## APPENDIX E: Writing Task 3


 <p><b>Istanbul Bilgi University</b> English Language Programs</p>	<p>Level 3 Unit 10A Productive Written Task 3</p>	<p>Name: _____ Date: _____</p>
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**TASK:**


Choose **TWO** of the topics below and write **ONE** paragraph for **each** about **50-60** words. Use **If Clause Type 2** in your paragraph.

**1. What would you do if you had 24 hours to live? (Think about your family, friends, dreams and desires) Describe your dream day.**

**23:59:50**

 **2. What would you do if you had 1 million dollars to spend in a day? (Think about shopping; helping others and investing) Describe your dream day.**

**3. What would you do if you inherited a zoo? (Think about how to run the zoo; what to do with the employees and the animals inside) Describe your dream zoo.**



## APPENDIX F: Sample Student Writing (Experimental Group)

1. I went to Antalya with my friends last summer, and we did not stay in luxury  
hotel. We stayed in Pensione. and I was walking down the street when I saw my friend.  
after that. We went to night club but it was rainy when we left the night club  
we really enjoyed the holiday but we must not smoke in the pensione  
if we want to smoke, we have to go to outside. and we don't have to  
play gambling but I want to play gambling. I think I might go to Kibris for next holiday

**APPENDIX G: Sample Reformulation (Experimental Group)**

I went to Antalya with my friends last summer. We did not stay in a luxury hotel. We stayed at a hostel. When I was walking down the street, I saw my friend. We went to a night club, but it was raining when we left the night club. We really enjoyed the holiday but we couldn't smoke in the hostel. When we wanted to smoke, we had to go outside. And I couldn't gamble, but I wanted to gamble. So, I think I might go to Cyprus on my next holiday.

## APPENDIX H: Sample Student Learning Journal (Experimental Group)

Learning Journal

Name: .....13.....

Writing Task # .....1.....

Do you <b>notice</b> any general differences between your writing task and its native-like version? What are they?			
What do you <b>notice</b> in terms of <b>grammar</b> ? Write the differences between the two versions.	Why do you think your version is <b>not</b> native-like?	Was this grammar form <b>new</b> to you?	Notes to remember:
Past simple <del>was</del> wanted		Yes <input checked="" type="radio"/> No	
have to had to	<sup>duşucu</sup> had to <del>deği</del> had to geçmiş zamanda <del>hazır</del> olmuş	<input checked="" type="radio"/> Yes / No	
Pensione.	hostel Etiketel	<input checked="" type="radio"/> Yes / No	
we stayed at a hotel		<input checked="" type="radio"/> Yes / No	at a det. hospital yollar için in-room at-hotel hospital
I might go to Ibiza for next holiday	for/on	Yes <input checked="" type="radio"/> No	my holiday for/on de' fi'nd fi'ise
must not	Past simple couldn't	Yes <input checked="" type="radio"/> No	

## APPENDIX I: Sample Student Writing (Comparison Group)

I went to Izmir with my friends. I had to leave at 08.00 am but I couldn't leave  
 because of they were waiting me. I arrived to air port and we went to Izmir. It was  
 raining when we went to hotel. We did check in and we went to beach. We met  
 new people. We have a good time because we met new people, we went to beach and  
 played volleyball. We didn't have to buy ticket because we came back by car. Our next  
 holiday might be go Antalya because we have a friend there. We might go Antalya  
 by car but we mustn't smoke in the car. We have to fast because we are very  
 tired.

## APPENDIX J: Sample Traditional Corrective Feedback (Comparison Group)

