ISTANBUL MEDENIYET UNIVERSITY
INSTITUE OF GRADUATE STUDIES
DEPARTMENT OF FOREIGN LANGAUGES EDUCATION

An Experimental Study on the Effects of Automated Feedback on Writing Achievement, Writing Motivation and Anxiety

Master's Thesis

Gülnihan Altınay

June, 2024

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THESIS JURY APPROVAL

This MA thesis titled "An Experimental Study on the Effects of Automated Feedback on Writing Achievement, Writing Motivation and Anxiety" written by Gülnihan Altınay at the Department of Foreign Language Teaching was accepted by our jury.

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STATEMENTS

Style and Reference Manual Statement

Having reviewed this thesis written under my supervision, I confirm that it has been written in accordance with APA (7th Edition) Manual of Style and used its [footnote/in text] reference format consistently throughout the entire text.

Signature

Prof. Dr. Selami Aydın

Declaration of Originality

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

Signature

Gülnihan Altınay

GENİŞ ÖZET

Yabancı Dil Bağlamında Otomatik Geri Bildirimin Yazma Başarısı, Yazma Motivasyonu ve Anksiyetesi Üzerine Etkileri Üzerine Deneysel Bir Çalışma

Altınay, Gülnihan

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Yabancı dil öğretiminde yazma becerileri önemli olduğu kadar edinilmesi zor bir beceridir. Yazma becerileri ile yabancı dil öğrencisi, daha önce öğrenilmiş olan yapıları geliştirebilir, kelime bilgisini artırabilir, hedef dildeki hata ve eksiklikleri fark edebilir (Çakır, 2010). Buna bağlı olarak, öğrencilerin dil yeterliliklerinin gelişimine yol açar (Hyland, 2022) ve öğrencilerin akademik başarısını da önemli ölçüde etkiler (Harmer, 2004). Ayrıca yazma etkinliği boyunca öğrenciler dilbilgisi, fikir geliştirme, bilginin organizasyonu ve sunumu gibi birçok faktörü düşünmeleri gerektiğinden, yabancı dilde yazma etkinliği yaratıcılık (Syrewicz, 2023) ve eleştirel düşünme (Mehta ve Al-Mahrooqi, 2015) gibi bilişsel becerilerini de geliştirir. Sonuç olarak, yazma becerilerinin öğrencilerin diğer dil becerilerinin, akademik başarılarının ve bilişsel becerilerinin üzerinde oldukça önemli bir rolü bulunmaktadır.

Yazma becerileri hem bilişsel hem de duyuşsal faktörlerden doğrudan etkilenen kritik bir beceridir. Bu sebeple öğrencilerin yazma motivasyonu, kaygı seviyeleri ve geri bildirim alma imkanları yazma sürecini olumlu veya olumsuz etkileyebilir (Cleary, 1991; Aula Blasco, 2016). Öncelikle motivasyon bir destek mekanizması görevi üstlenerek ertelemeyi önler, daha sık pratik yapmasına olanak verir (Cleary, 1991). Dolayısıyla, öğrencinin yazma becerileri zaman içerisinde gelişerek yazma etkinliğine karşı daha olumlu tutumlara sahip olmasına neden olur (Oroujlou ve Vahedi, 2011). Bununla birlikte, dil öğrenirken olumsuz değerlendirilme korkusu veya yetersizlik duygusu gibi bazı sorunların ortaya çıkmasını engelleyerek öğrencilere başarı sürecinde yardımcı olur. Motivasyonun yanı sıra, yazma kaygısı da yazma becerilerini etkileyebilen önemli bir faktördür. İlk olarak, yazma kaygısının öğrencilerin psikolojik iyi oluşları üzerinde olumsuz etkileri vardır; stres ve sinirlilik gibi, öğrencilerin yazma etkinliğine ilişkin olumsuz düşünce ve inançlar geliştirmesine neden olmakla birlikte (Aula Blasco, 2016), titreme ve

terleme gibi fiziksel semptomlara da sebep olabilir. Bu sebeple öğrenciler yazmaktan tamamen kaçınabilirler (Horwitz ve diğerleri, 1986). Bunlara ek olarak, yapılan çalışmalar, yazma kaygısının kariyer seçimlerini değiştiren uzun süreli etkileri olduğunu da ortaya koymaktadır (Daly ve Miller, 1975b). Tüm bunlara ek olarak, yazma kaygısı öğrencilerin yazma performansını yadsınamaz bir şekilde olumsuz etkileyebilir. Yüksek seviyelerde yazma kaygısı yaşayan öğrencilerin yazdığı metinlerin nitelik ve nicelik olarak yazma kaygısı yaşamayan öğrencilerin metinlerinden daha başarısız olduğu ortaya konmuştur (Sabti vd., 2019; Horwitz ve diğerleri, 1986; Daly ve Miller, 1975a). Yazma motivasyonu ve kaygısına ek olarak, öğrencilerin yazma başarısında yazılı ürünlerin biçim ve içeriğine ilişkin geri bildirim almaları da birçok açıdan önemlidir. Yaptıkları hatalara geri bildirim alan öğrenciler, yazdıkları metinleri düzenlemek için birden fazla taslak yazmaktadırlar ve bu da sürekli yeniden yazma imkanı sağlayarak dilbilgisi, noktalama işaretleri ve organizasyon gibi performanslarında gelişme görülmesine (Zaman ve Kalam, 2012) ve edinilen bilgilerin uzun süreli belleğe aktarılmasına (Kamberi, 2013) sebep olabilir. Geri bildirimin bir diğer önemi ise öğrenciler ilerlemeleri hakkında ne kadar çok geri bildirim alırlarsa, başarısızlıklarının nedenlerini anlama olasılıkları da o kadar artar ve bu da yazma başarısının gelişmesiyle sonuçlanır (Kulhavy, 1977). Aynı zamanda, geri bildirimin öğrenci ve öğretmen arasındaki ilişkiye olumlu etkisi öğrencilerin daha güvenli ve interaktif bir ortamda yazma becerileri üzerine çalışmalarına olanak sağlar (Ferris, 2003).

Yazma etkinliğinin yabancı dil öğrenen öğrenciler için zorlayıcı bir aktivite olması ve öğrencilerin deneyimlediği zorlukların genel yazma performanslarında olumsuz etkilere sebep olması, öğrencilerin gelişimini büyük oranda engelleme potansiyeline sahiptir (Chen, 2002). Birçok öğrencinin deneyimlediği bu zorluklar etkililik ve anlaşılırlığını azaltabilir, dilsel sorunlara ve niteliksiz metin içeriğine sebep olabilir ve motivasyon ve kaygı düzeylerini önemli derecede etkiler (Chen, 2002; Fareed ve diğerleri, 2016; Shokrpour ve Fallahzadeh, 2007; Moses ve Mohamad, 2019). Motivasyon eksikliği ve yüksek kaygı gibi olumsuz duygular, olumlu duyguların faydaları kadar öğrenmenin kalitesini ve oranını da olumsuz yönde etkilemektedir (Arnold, 2011; Dörnyei, 2003; Dulay vd., 1982). Ortega (2014) başarıya giden yolda öğrencilere eşlik eden bir faktör olan motivasyonun, etkili öğrenmeye öncülük ettiğini ve gerekli çabayı sürdürmek için zorluklarla baş etmeye yardımcı olduğunu vurgulamaktadır. Motivasyonun olumlu katkılarının aksine, motivasyon eksikliği yazma aktivitesinden kaçınmaya (Dörnyei ve

Ushioda, 2009; Bartley, 1970), dilbilimsel hatalara (Ramage, 1990), zayıf kelime bilgisine ve etkisiz ve eksik öğrenme stratejilerine (Xu, 2011; Ellis, 2015) sebep olur. Yazma başarısını etkileyen bir diğer faktör olan kaygı da öğrenenlerin gelişimi açısından önemlidir. Yüksek kaygı düzeyi etkili öğrenmenin önünde bir engel haline gelir ve girdinin alıma dönüştürülmesine engel olur (Krashen, 1982), öğrenenleri nitelikli yazmanın gerekli özelliklerinden yoksun yazılı ürünler üretmeye yönlendirir (Dulay vd., 1982; Kurtoğlu ve Sabuncuoğlu, 2015; Scovel, 1978). Bu nedenle kaygılı öğrenenlerin anlama ve uygulamada zorluk yaşamaları, öğrenmelerine ve yeteneklerine olan inançlarının azalması, yazmaya yönelik olumsuz tutumların ortaya çıkması ve genel olarak öz saygılarının azalması (Cheng, 2004; Ekmekçi, 2018) ile fikir üretme, organize etme, daha az yoğun konuları daha basit bir ile anlatma sorunlarıyla da karşılaşmaları söz konusudur (Daly, 1977; Kusumaningputri ve diğerleri, 2018; Schumann, 1994). Son olarak yazma kaygısının tüm bu etkileri öğrencilerin akademik başarısını ve ders notlarını etkilemekte ve gelecekteki kariyer seçimlerini yoğun bir şekilde etkileyip değiştirdiği de göz ardı edilmemelidir (Daly vd., 1976; Daly ve Shamo, 1978; Horwitz, 2001). Sonuç olarak motivasyon eksikliği ve yüksek düzeydeki kaygı, öğrencilerin yazma becerilerinin gelişimini olumsuz yönde etkilemektedir. Belirtilen sorunlara ek olarak, öğrenme süreci üzerindeki sayısız faydasına ve olumlu etkisine rağmen geri bildirim ve süreci çeşitli sorunlara neden olabilir. Tutarsız ve geç geri bildirim (Brookhart, 2017), Öğrenciler her zaman zamanında ve düzenli geri bildirim alamayabilirler Tutarsız ve gecikmeli geri bildirim ve belirsiz geri bildirim gibi sorunlar yabancı dil öğrenen öğrencilerin daha az motivasyonlu ve daha çok kaygılı hissetmelerine (Nassaji, 2016) neden olmakla birlikte yazma performanslarının düşmesine sebebiyet verebilir (Clariana, 1999; Kulik ve Kulik, 1988; Doughty, 2001; O. Hassan ve Mahfoodh, 2017; Price vd., 2010). Sonuç olarak geri bildirim sürecinde ortaya çıkan bu sorunlar, öğrenenlerin yazma motivasyonunu, kaygılarını ve yazma başarılarını önemli ölçüde etkileyen olumsuz sonuçlar yaratabilmektedir.

Yukarıda bahsedilen tüm bu sorunlar, öğrencinin yazma performansını, motivasyonunu kaygısını önemli ölçüde etkilemektedir. Fakat bu olumsuz etkiler otomatik geri bildirim kullanımıyla ortadan kaldırılabilir. Otomatik geri bildirim, zaman ve mekan kısıtlamasından bağımsız olarak öğrencilere ihtiyaçlarına göre net, anında ve bireyselleştirilmiş geri bildirim sunar (Dikli, 2010; Dikli ve Russell, 2006; Jiang ve Yu, 2022). Bu bağımsızlık ve netlik, öğrencilerin kendi bireysel öğrenme süreçleri hakkında farkındalık kazanmalarına yardımcı olarak öğretmenin yardımı olmadan ve sınıf dışında

eksikliklerini anında vurgulayarak yabancı dil öğrencisinin bağımsızlığını artırabilir ve bireysel öğrenme stratejilerini geliştirebilir (Chandler, 2003; Dikli ve Russell, 2006; Wang ve diğerleri, 2013; Woodworth ve Barkaoui, 2020a). Sonuç olarak, otomatik geri bildirim yoluyla öğrenciler mevcut yeterlilikleri ve performansları hakkında farkındalık kazandırır, bu da onların motivasyonlarını ve yazma başarılarını artırmalarına yardımcı olur (Özen, 2017; Wang ve diğerleri, 2013; Zhang, 2020). Başka bir deyişle, otomatik geri bildirim, geleneksel geri bildirimin dezavantajlarını azaltabilir, kaygıyı azaltarak öğrenme sürecini kolaylaştırabilir ve öğrencilerin motivasyonunu artırabilir. Bu sebeple, otomatik geri bildirim ve öğretmen geri bildiriminin yabancı dil öğrenen öğrencilerin yazma başarısı, yazma motivasyonu ve kaygısı üzerindeki etkilerin incelenmesi önemlidir. Ancak, bu konu üzerinde sınırlı sayıda çalışma bulunmakla beraber, yeterli olmaktan çok uzaktadır.

Bu çalışma, otomatik geri bildirimin yabancı dil olarak İngilizce öğrenen öğrencilerin yazma başarısı, yazma motivasyonu ve kaygısı üzerindeki etkilerini araştırmayı amaçlamaktadır. İlk olarak, geleneksel öğretmen geri bildiriminin ve otomatik geribildirimin öğrencilerin yazma başarısı, yazma motivasyonu ve kaygısı üzerindeki etkilerini analiz etmeyi amaçlamaktadır. Ayrıca çalışma, öğretmen geribildirimi ve otomatik geribildirim kullanımında öğrencilerin yazma başarısı, yazma motivasyonu ve kaygı düzeylerinde bir farklılık olup olmadığını incelemeyi amaçlamaktadır. Yarı deneysel bir araştırma tasarımını benimseyen ve 2023-2024 akademik yılı Güz döneminde gerçekleştirilen bu araştırmada, İstanbul'da bir vakıf üniversitesi olan İstanbul Kültür Üniversitesi'nin İngilizce Öğretmenliği (ELT) bölümünde birinci sınıfta öğrenim gören 26 öğrenci katılmıştır. Katılımcıların 18'i (%69.30) kadın, sekizi (%30.70) erkektir ve yaş ortalamaları 20,53 olup, minimum yaş 18, maksimum yaş ise 31'dir. Araştırmaya katılan öğrencilerin tamamı hazırlık sınıfını tamamlamıştır. Çalışmadaki öğrencilerin İngilizce yeterlilikleri B1 düzeyindedir. Dört haftalık uygulama süreci ile ön test ve son test uygulaması dahil olmak üzere altı hafta süren bu çalışmada, katılımcıların demografik bilgileri, yazma motivasyonu, yazma kaygısı ve yazma başarısı (Bkz. Ek A) hakkında veri toplamak için toplamda dört ölçek kullanılmış ve son testten sonra her gruptan beş katılımcıyla bir odak grup görüşmesi yapılmıştır. Katılımcıların yazma motivasyon düzeylerini araştırmak amacıyla Payne (2012) tarafından hazırlanan Akademik Yazma Motivasyon Anketi (AWMQ) kullanılmış, yazma kaygısı düzeylerini tespit etmek amacıyla ise Cheng (2004) tarafından hazırlanan İkinci Dilde Yazma Kaygısı Envanteri (SLWAI) uygulanmıştır. Son olarak katılımcıların yazma başarısını incelemek için ön

test ve son test uygulaması için iki yazma görevi kullanılmıştır. Araştırmada gerçekleştirilen diğer analizlerin yanı sıra odak grup görüşmesi yapılmış ve görüşmeden elde edilen veriler detaylı bir şekilde incelenmiştir. Beşi kontrol grubundan, beşi deney grubundan olmak üzere toplam on katılımcıyla yüz yüze gerçekleştirilen ve 40 dakika süren odak grup görüşmesinde toplam altı soru sorulmuştur. Analiz süreci, katılımcıların görüşlerinin derinlemesine değerlendirilmesi ve kontrol ve deney grupları arasındaki farklılıkların olası nedenlerinin belirlenmesi amacıyla gerçekleştirilmiştir.

Çalışmanın sonunda elde edilen bulgulara göre, öğretmen geri bildiriminin, içerik başarısı, iletişimsel başarı, organizasyon ve dil kullanımı gibi yönleri de içeren, yabancı dil olarak İngilizce öğrenen öğrencilerin genel yazma başarısı üzerinde kolaylaştırıcı bir etkisinin olmadığı bulunmuştur. Otomatik geri bildirimin kullanılmasıyla, içerik başarısı, iletişimsel başarı, organizasyon ve dil kullanımı da dahil olmak üzere yabancı dil olarak yabancı dil bilen yazarların yazma başarısı artmıştır. Bir diğer sonuç ise, öğretmen geri bildirimi, öğrencilerin, özellikle de akademik açıdan daha başarılı olma arzusunu oluşturma konusunda, yazmaya yönelik motivasyonlarının artmasına sebep olmuştur. Öte yandan çalışmanın bulgularına göre, otomatik geri bildirim, öğrencilerin motivasyonunu olumsuz etkileyerek onları yabancı dilde yazmaya daha az istekli hale getirmiştir. Sonuç olarak, öğretmen geri bildirimi öğrencilerin motivasyonunu yükseltirken, otomatik geri bildirim öğrencilerin yazma motivasyon düzeylerini olumsuz yönde etkilemiştir. Üçüncüsü, öğretmen geri bildirimi öğrencilerin yazma kaygısını azalmasına sebep olurken yazmaya karşı daha sağlıklı bir psikolojik yaklaşım geliştirmelerini sağlamıştır. Yüksek kaygının olumsuz etkileri göz önüne alındığında öğretmen geribildirimi, daha az kaygılı bir ruh hali sağlayarak yazma sürecini kolaylaştırır. Öğretmen geri bildirimine paralel olarak, otomatik geri bildirim de öğrencilerin yazma kaygısında da büyük bir farklılık yaratmıştır. Yabancı dil olarak İngilizce öğrenen öğrencilerin yaşadığı yazma kaygısını önemli ölçüde azaltmıştır. Bu bulgular, yazma sürecinde geri bildirimin tasarlanması ve uygulanmasında dikkate alınması gereken karmaşık dinamikleri gözler önüne sermektedir.

Yukarıda sunulan sonuçlara göre, bazı öneriler sunulabilir. İlk olarak, İngilizce öğretmenleri, otomatik geri bildirim ve bunun öğrencilerin yazma başarısı ve öğrencilerin performansını etkileyen önemli bir psikolojik faktör olan yazma kaygısı üzerindeki olumlu etkileri konusunda pratik bir anlayışa sahip olmalıdır. Ayrıca otomatik geri bildirim araçlarının İngilizce öğretmenleri için zaman yönetimi ve iş yükü açısından faydaları da göz ardı

edilmemelidir. Bu nedenle öğretmenlerin, öğrencilerin yazma becerilerini doğruluk ve akıcılık açısından geliştirmek ve stressiz bir öğrenme ortamı sağlamak için otomatik geribildirim araçlarından faydalanmaları önerilmektedir. Ancak, öğrencilerin yazma motivasyonunu yükseltmede öğretmen geri bildiriminin önemi göz ardı edilemeyeceğinden, otomatik geri bildirim ile öğretmen geri bildiriminin kullanımı dengelenmelidir. Geri bildirim türlerinin bu kombinasyonu, öğrencilerin motivasyonunu ve kaygısını olumlu yönde etkileyebilir ve daha etkili ve ilgi çekici bir öğrenme ortamı yaratarak yazma başarılarını artırabilir. Aynı zamanda, öğretmenlerin otomatik geri bildirim araçlarını kullanabilmeleri de bu araçların etkili bir şekilde uygulanması açısından önemlidir. Teknik donanım ve istikrarlı bir internet bağlantısının da okul yönetimi tarafından ayarlanması gerekmektedir. Müfredat ve materyal geliştiricileri, yazma derslerini geliştirmek ve olası sorunları önceden önlemek için İngilizce öğretmenleriyle iş birliği içerisinde çalışmalıdır. Ayrıca öğretmen yetiştirme programlarında bu teknolojik araçların pedagojik kullanımına ilişkin derslere yer verilmeli ve öğretmen adaylarına gelecek profesyonel hayatlarında bu teknolojiyi etkin kullanabilmeleri adına gerekli becerilerin kazandırılmasına odaklanılmalıdır. Son olarak politika yapıcılar, öğretmen ve otomatik geri bildirim araçlarının entegrasyonunu teşvik eden politikalar geliştirmeli ve bu araçların eğitim kurumlarına uygun maliyetle sunulmasını desteklemelidir.

Anahtar Kelimeler: Yabancı dil olarak İngilizce öğretimi, Otomatik geri bildirim, Yazma başarısı, Yazma motivasyonu, Yazma Anksiyetesi

ABSTRACT

An Experimental Study on the Effects of Automated Feedback on Writing Achievement, Writing Motivation and Anxiety

Altınay, Gülnihan

Master's Thesis, Department of Foreign Language Teaching

Supervisor: Prof. Dr., Selami Aydın

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Writing achievement is crucial for EFL learners due to its impact on language skills, overall proficiency (Hyland, 2022), academic success (Harmer, 2004), creativity (Syrewicz, 2023), and critical thinking (Mehta & Al-Mahrooqi, 2015). Writing motivation, anxiety, and feedback also play significant roles in enhancing (Cleary, 1991; Yeung, 2016; Johari, 2008) or debilitating (Daly & Miller, 1975; Dulay et al., 1982) writing performance. Automated feedback, offering immediate and personalized responses (Dikli, 2010; Dikli & Russell, 2006; Jiang & Yu, 2022; Wang et al., 2013), can help reduce anxiety and improve accuracy and fluency (Ozen, 2017; Wang et al., 2013; Zhang, 2010). This study examines the effects of traditional teacher feedback versus automated feedback on EFL learners' writing achievement, motivation, and anxiety. Using a quasi-experimental design, 26 first-year ELT students participated. Data were collected through a demographic questionnaire, the Academic Writing Motivation Questionnaire (Payne, 2012), the Second Language Writing Anxiety Inventory (Cheng, 2004), writing tasks, and focus groups. Over four weeks, the control group used pen and paper, while the experimental group used Write & Improve. Data analysis revealed that teacher feedback positively impacted writing motivation and anxiety but did not affect writing achievement. Conversely, automated feedback improved writing achievement and reduced anxiety but decreased motivation. Therefore, it is recommended to balance automated feedback with teacher feedback to enhance writing achievement, reduce anxiety and maintain motivation in EFL learners.

Keywords: English as a foreign language, Automated feedback, Writing achievement, Writing motivation, Writing anxiety

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EFL : English as a Foreign Language

SLA : Second Language Acquisition

SDT : Self-determination Theory

FLA : Foreign Language Anxiety

FLCAS : Foreign Language Classroom Anxiety Scale

AAT : Achievement Anxiety Test

SCT : Sociocultural Theory

ZPD : Zone of Proximal Development

ESL : English as a Second Language

SLWAI : Second Language Writing Anxiety Scale

ELT : English Language Teaching

AWMQ : Academic Writing Motivation Questionnaire

CEFR : The Common European Framework of Reference for Languages

SPSS : Statistical Package for the Social Sciences

1. INTRODUCTION

1.1. Background of the Study

Writing is considered one of the most challenging and significant language skills in the foreign language learning and teaching process for several reasons. First, writing skills contribute to developing all other language skills such as reading, listening, speaking, vocabulary, and grammar. With this undeniably significant skill, learners can improve learned structures, increase their knowledge of vocabulary, and notice mistakes and deficiencies in the target language (Çakır, 2010). Correspondingly, it leads to the overall development of learners' language proficiency and facilitates the way from competence to performance (Hyland, 2022). Second, along with being a predictor of language success and proficiency, writing skills also significantly affect learners' academic success in general (Harmer, 2004). Learners worldwide need to succeed in various courses in the curriculum through examinations which are used as tools to assess and measure their knowledge. Regardless of the type of examination preferred, learners' success depends on their writing ability since the evaluation and measurement of performance is based on the learners' ability to present and convey knowledge. Furthermore, in terms of social interaction, it is of great importance for learners to be able to convey their feelings and thoughts appropriately and effectively to build a successful communication and cooperation environment. In this wise, they can convey information to other people, have discussions, and express their feelings

and thoughts through writing. Therefore, it can be stated that effective writing skills contribute to learners' academic achievement and interaction with other people. Another significance is that since writing activity involves mental and psychological processes that stimulate learners' thoughts and ideas, it improves their creativity and helps them discover different perspectives (Syrewicz, 2023). While writing, a topic or situation needs to be considered and evaluated from many standpoints. Simultaneously, in the writing process, learners are required to focus not only on the grammar rules and punctuation but also on the organization and presentation of the ideas they desire to share. From this perspective, unlike the spontaneity of speech, writing demands more effort and attention. In other words, the writing activity's holistic nature requires learners to consider many different aspects concurrently. Lastly, each writing activity encourages learners to think further and requires them to consider several different factors including the target audience, word choice, and the organization of the ideas as well as judging and illustrating the subject matter thoroughly. Accordingly, it can be stated that it helps learners develop critical thinking skills that enable them to access, comprehend and question facts and knowledge independently (Mehta & Al-Mahrooqi, 2015). To conclude, while writing achievement is extremely important, various factors may affect the development of writing skills.

Since writing is a challenging activity, motivation is quite important for EFL learners to keep pace with the difficulties of learning writing for several reasons. First, it is a support mechanism to initiate the writing process and a booster for potential progress (Cleary, 1991). It prevents procrastination and helps learners maintain

concentration by ignoring distractions which are extremely important for learner writers' full development and achievement. Second, motivation leads learners to write more and better. In other words, the motive encourages learners to willingly practice and create a successful written product. Unlike unmotivated or less motivated ones, motivated learners are more likely to practice their writing skills and present qualified pieces of writing in terms of both quality and quantity due to their desire to achieve as motivation stimulates learners to form a positive attitude toward writing (Oroujlou & Vahedi, 2011). Third, when learning a language, it is probable that some problems may arise such as fear of negative evaluation or feelings of incapableness. In times of those challenges, motivation assists learners in the process of achievement by inhibiting such negative feelings learners might feel during the writing procedure. Instead, as learners with high motivation voluntarily involve in writing activities despite the undesired outcomes and issues, the possibility of learning through those problems increases which is one of the key components of success. Accordingly, learners frequently have the opportunity to evaluate their writing performance, notice their mistakes and build awareness of their progress since they see their mistakes and deficiencies as learning opportunities and consider them as tools for improvement to become better writers (Cahyono & Rahayu, 2020). They become individuals committed to success. Furthermore, it allows them to form personal strategies to address the unsatisfactory points which they struggle with. Based on these particular contributions of writing motivation, it can also be assumed that writing motivation helps learners build autonomy and take responsibility for their learning (Yeung, 2016). In this respect, motivation empowers learners to realize and correct their mistakes and

helps them to create strategies to deal with negative results. Fifthly, while creating unique written products, learners have to search for words they do not know yet but need to use. This necessity directs them to learn new words and improve their current vocabulary knowledge (Johari, 2008). Furthermore, learners are not required to learn the meanings of unknown words solely; they also need to comprehend their use including the common combinations of each word to fit them in sentences or paragraphs and their formality or frequency. As a result, learners' awareness of the English language increases as their vocabulary knowledge expands. In conclusion, writing motivation significantly affects the ability to write from an increased willingness to learner autonomy and vocabulary knowledge. However, it is also important to consider writing anxiety as a powerful factor that impacts writing achievement to a serious extent.

Since writing is an activity that includes both cognitive and emotional aspects, anxiety is a critical factor that directly affects learners and their improvement of writing ability in various ways. First, writing anxiety has negative impacts on learners' psychological well-being such as causing stress and nervousness which lead learners to build negative thoughts and beliefs about writing activity (Aula Blasco, 2016). This unpleasant situation blunts students' desire and may cause visible physical symptoms such as sweating, trembling and dizziness. These effects generate a reluctance towards writing and cause learners to hesitate to be involved in writing activities while creating an insufficient and detrimental environment for learning. Second, due to these prohibitive effects, learners who have writing anxiety may experience a decrease in their interest or completely avoid writing and skip writing courses to escape from

facing those feelings (Horwitz et al., 1986). In addition to avoiding writing classes, these students tend to choose professions that require minimal use of writing skills in their future professional lives (Daly & Miller, 1975b). Therefore, it can be claimed that the effects of writing anxiety are not only instantaneous and short-term, but they also have impacts on career choices that alter learners' entire lives. Third, along with these consequences, writing anxiety causes a significant decrease in EFL learners' self-esteem (B. A. Hassan, 2001). They feel less confident and grow undesired views about themselves which intensely disrupts the improvement of learners' writing ability. As a result of learners' low self-esteem, their belief in what they can achieve and their expectation of success are affected adversely (Sabti et al., 2019). Instead of challenging the difficulties they face during writing classes, learners may simply refuse to try which becomes a major obstacle to learning and development. Last, research reveals that the written products of learners who are affected by writing anxiety display differences in quality and quantity from less anxious learners (Horwitz et al., 1986). Anxious learners write shorter, simpler structures and less intense articles, whereas non-anxious students write longer, more intense messages with more statements (Daly & Miller, 1975a). Furthermore, in terms of language mechanics, learners with writing anxiety tend to make more errors in grammar and syntax resulting in poor language and sentence structure such as issues in word order and tense agreement. To sum up, it can be stated that there is a negative relationship between anxiety and writing performance (Dulay et al., 1982) and as the level of writing anxiety increases, a decrease in learners' writing achievement occurs due to the effects mentioned above.

Among those factors, feedback can be given on the form and content of written products since student writers should be able to convey messages efficiently and meaningfully in terms of both aspects. On the side of the learners, receiving feedback has numerous positive effects on writing achievement. First, meaningful development can be seen in learners' grammar, spelling, punctuation, and vocabulary performance as they are required to edit and rewrite their drafts multiple times to create an accurate piece of writing (Zaman & Kalam, 2012). This constant rewriting activity allows learners to practice grammar and mechanics, transferring knowledge to long-term memory to be employed in later occasions and needs (Kamberi, 2013). Second, together with the improvement of accuracy, advances in content knowledge can also be acquired through feedback since it shows learners how to arrange ideas and information logically and fluently in written work by considering the target audience (Hyland, 2006). Through its guidance, learners can practice and internalize the process of organization and presentation. Accordingly, errors become highlighted for learners to notice the deficits since displaying learners' lack of knowledge is one of the benefits of feedback (Hendrickson, 1978). Third, the more feedback learners have about their learning progress, the more likely they will comprehend the reasons for their failure which results in the development of writing achievement (Kulhavy, 1977). When learners become aware of their deficiencies, they develop strategies to deal with them and respond to the problems. Therefore, it can be stated that feedback also improves learners' problem-solving and critical-thinking skills. Moreover, it provides a personalized evaluation that serves as a powerful tool to spot and analyze the needs of individual learners even in crowded classrooms (Hyland, 2006). This essential benefit

of feedback is helpful in two ways. Primarily, learners feel recognized and cared for individually by the teacher which leads to an increased level of willingness and eagerness to be successful in writing; in consequence, it positively impacts the relationship between learners and teacher resulting in a supportive environment and open communication that facilitates learning and increases learners' level of motivation, engagement, and interest in writing (Ferris, 2003). Secondarily, in a classroom full of diverse student writers, including the ones who are overachievers as well as the less accomplished ones, learners may have the privilege of individual assessment which brightens their way to achievement by indicating clear expectations, strengths, and weaknesses (Thao & Duy, 2017). Therefore, it can be stated that feedback functions as a report that shows learners' current performance specifying information on the deficiencies that should be improved, capabilities, and learners' potential achievement. As a result, learners' possibility to improve their writing skills and raise writing achievement becomes higher owing to the assistance of feedback. On the other hand, while feedback brings certain advantages regarding writing achievement and performance, affective factors such as motivation constitute a vital role in the writing process.

In conclusion, writing is challenging and significant in the EFL learning process due to several reasons such as its contributions to overall language development, effects on academic achievement and professional life, successful communication skills, and development of critical thinking skills. Considering its relation with a wide range of areas, writing has an enormous role in improving learners' academic, cognitive, and communicative abilities. Yet, learners' writing achievement can be

affected by various factors including feedback and affective states such as motivation and anxiety. Considering the impacts of affective factors on learners, it can be stated that motivation and anxiety significantly affect the writing process and development. In other words, motivation and anxiety have a remarkable potential to decrease or increase learners' level of writing achievement by affecting them in such distinct ways as their willingness toward writing activity, quality and quantity of their written products, psychological well-being, self-esteem, problem-solving skills, and learner autonomy (Dulay et al., 1982; Horwitz et al., 1986). Therefore, considering these impacts, it can be stated that the effects of motivation and anxiety can shape and alter the present academic life and future professional choices of learners. As a final point, through feedback, a significant component of the writing process, learners are provided with a guide that presents both strong and weak aspects of learners' current writing performance (Hyland, 2006; Thao & Duy, 2017). It serves as a communication bridge that transfers the required information about learners' needs and current proficiencies in writing between the teacher's knowledge and learners' experience.

1.2. Statement of the Problem

Writing is a linguistically and psychologically challenging activity, especially for EFL learners (Hyland, 2022) and these challenges EFL learners experience may cause unfavorable results and block improvement in writing skills (Y. Chen, 2002). First, in terms of linguistics, learners encounter numerous drawbacks while writing. Although, proper use of grammar is essential for successful written communication and intelligibility, problems in grammar and syntax are commonly seen in EFL learners' written products (Moses & Mohamad, 2019). In such cases where grammar is used

improperly and inaccurately, the readability and intelligibility of writing decrease, which causes communication to be ineffective and meaningless. Therefore, it can be stated that it creates a major obstacle to successful written communication. In addition to grammatical problems, EFL learners have difficulty expressing and conveying knowledge or ideas because of their limited vocabulary knowledge (Fareed et al., 2016). The lack of vocabulary creates a barrier leading to less intense and simpler written products in terms of structure and content, thus degrading the learner's intended message. A larger range of ideas can be expressed, owing to a richer vocabulary that includes complex words. Moreover, numerous studies have found that EFL learners have problems with spelling and punctuation rules (Y. Chen, 2002; Fareed et al., 2016; Shokrpour & Fallahzadeh, 2007). Misspelling and improper use of punctuation disrupt and reduce accuracy and fluency, negatively affecting the writing comprehensibility as these errors might alter the meaning and provide misleading information. Apart from these mechanical problems seen in learners' written works, they experience difficulty in generating and organizing ideas while writing. While concentrating on grammar and mechanics of language, learners, especially low-proficiency ones, cannot focus on making meaning and organizing thoughts, which leads to inconvenient writing pieces that lack cohesion, which is significant for the clarity of the written product (Ahmed, 2010). Overall, it should be mentioned that these aforementioned problems are highly influenced by learners' motivation and anxiety levels, having a great potential to create considerable handicaps in writing achievement. To review, while learners' writing achievement and the quality of written products are highly affected by these problems, affective factors such as motivation

and anxiety have a great potential to change learners' perceptions about writing and their potential success as well as creating handicaps for improvement.

Negative emotions, such as the lack of motivation and high anxiety, negatively affect the quality and rate of learning as much as the benefits of positive emotions (Arnold, 2011; Dörnyei, 2003; Dulay et al., 1982). Therefore, it is important to consider learners' emotional states during the learning process. Initially, due to the unique and complex progress of writing skills, motivation is considered a key factor in the improvement of this challenging skill for many EFL learners. Ortega (2014) stresses that motivation, a factor that accompanies learners in the way of achievement, pioneers effective learning and helps to handle difficulties to maintain the required effort. In contrast to positive contributions of motivation, lack of it substantially impedes learning writing in several ways (Listyani, 2022). First, learners who lack motivation do not put adequate effort and time into improving and becoming proficient in foreign language writing (Dörnyei & Ushioda, 2009). This reluctance has diverse consequences such as ignoring learning opportunities to improve their writing skills and frequently avoiding writing by procrastinating and dropping out of writing courses, which causes inconsistent writing habits (Bartley, 1970; Ramage, 1990). Therefore, practice, the main condition for achievement, remains inadequate and incomplete. Second, because of the repeated cycle of failure learners experience, they may lose confidence in themselves and their writing skills (Ortega, 2014). Due to these harmful outcomes resulting in ineffective and unpleasant learning experiences, learners present less proficient and qualified written products in terms of accuracy and fluency than their counterparts who are highly motivated to write (Lee et al., 2018; Y.

Zhang, 2012). It is seen that unmotivated learners produce shorter texts containing poor grammatical mistakes and poor vocabulary. In addition, the lack of motivation decreases learners' use of language learning strategies, which is a significant aid for effective learning (Xu, 2011) and self-regulation rates (Ellis, 2015). Specifically, as a result of such detrimental effects, learners fail to practice and work on their writing skills and eventually, evaluate their written products. In other words, unmotivated learners miss the stages of effective learning such as planning, monitoring, and evaluating their performance. Lastly, affective factors highly influence creativity; the lack of motivation reduces learners' ability to produce creative and original products, leading to non-innovative and inauthentic writing (Tran, 2007). Thus, it could be concluded that a lack of motivation depletes learners' overall writing performances by affecting the necessary characteristics and steps of successful and powerful writing. Anxiety, another factor that affects writing achievement, is also significant for learners' improvement. Most EFL students find foreign language writing stressful and express that they experience excessive anxiety, which paves the way for failure (Chastain, 1975). In support of this claim, the debilitating effect of anxiety has been investigated in detail for several years. Learners encounter numerous disadvantages in terms of the linguistic aspects of writing and their psychological well-being (Horwitz et al., 1986). First, high anxiety levels become a barrier to effective learning and hinder them from turning input into intake, leading learners to produce written products that lack the necessary features of qualified writing (Dulay et al., 1982; Kurtoğlu & Sabuncuoğlu, 2015; Scovel, 1978). As Krashen (1982) states, although they are provided with sufficient and effective input, anxiety acts as a filter that blocks learners'

ability to understand and affects the efficacy and comprehensibility of the received input. Therefore, anxious learners have difficulties understanding and applying and experience a decrease in their belief towards their learning and capability, resulting in negative attitudes toward writing and a decrease in their self-esteem in general (Cheng, 2004; Ekmekçi, 2018). Specifically, they are afraid of the writing process and the possibility of failure, which causes them to procrastinate or avoid any lesson or activity that involves writing because of their reduced willingness, low success expectations, and lack of motivation to write (Cheng, 2004; Daly & Miller, 1975b; Kleinmann, 1977). Second, the negative effects of anxiety on writing skills have aspects that significantly affect learners' writing quality. In texts written by anxious learners, more grammatical and spelling mistakes are seen when compared to learners who do not deal with anxiety due to feelings of panic and stress while writing (Ekmekçi, 2018; Horwitz et al., 1986). In addition, anxious learners have problems with overall message construction such as producing and organizing ideas, choosing topics that are less intense and complex, and using simpler vocabulary (Daly, 1977; Kusumaningputri et al., 2018; Schumann, 1994). These structural, contextual, and grammatical handicaps create issues in the fluency and accuracy of written work, decreasing the efficacy and quality of learners' intended messages (Daly & Miller, 1975a; B. A. Hassan, 2001). Thus, it can be suggested that high levels of anxiety decrease the overall quality and construction of texts, ultimately resulting in poor writing performance. Therefore, it can be concluded that learners' inadequate performance and unsuccessful written communication attempts cause them to obtain lower grades than their anxiety-free peers (Horwitz, 2001a; Horwitz et al., 1986; Negari & Rezaabadi, 2012; Sabti et al.,

2019). As a final point, all these effects of writing anxiety affect learners' academic success and course grades and intensely affect and change their future career choices (Daly et al., 1976; Daly & Shamo, 1978; Horwitz, 2001). Accordingly, learners with writing anxiety prefer professions that require less writing. In conclusion, lack of motivation and high levels of anxiety have negative effects on the development of learners' writing skills and significantly affect their level of achievement in various aspects.

Despite its numerous benefits and impacts on the learning process, the feedback, and its process may cause various problems. First, learners may not always receive timely and regular feedback (Brookhart, 2017). The inconsistent and delayed feedback causes problems in the learning process and learners' overall writing development due to irregular and scarce guidance (Clariana, 1999; Kulik & Kulik, 1988). As a result of this lateness or complete absence of support, learners may lose their motivation and willingness since they are not given any specific information about their weaknesses and strengths in writing which fetters the learners' progress (Doughty, 2001). Furthermore, because of a lack of guidance, learners may not have enough information about their progress, so they may not evaluate their performance in terms of strong and weak parts that inhibit the development of learner autonomy. Second, considering the unique characteristics, goals, and different language deficiencies, and proficiencies of EFL learners, providing feedback that is not individualized according to learners may cause harmful effects on their developmental status and create undesired changes in their motivation and anxiety levels (Nassaji, 2016). Unsuitable feedback that ignores or mismatches learners' needs and problems may increase their anxiety while reducing

their motivation toward writing (Lee, 2014). It also creates a problem if the feedback given conflicts with the previous feedback or with the feedback that is provided by different sources (Miranty & Widiati, 2021), leading to an ambiguity which may result in learners being more anxious, less motivated, and confused which hinders their improvement. Another issue that may be witnessed during the process of feedback is its vagueness and ambiguousness which may cause higher anxiety and demotivation by misguiding and confusing learners about their errors (O. Hassan & Mahfoodh, 2017; Price et al., 2010) and creating an uncertain picture of their overall progress. Finally, although it occurs between the teacher and learners, learners generally do not have the opportunity to interact with the teacher about the feedback they receive despite its two-way and dynamic nature (Nassaji, 2016), lowering the potential and expected efficacy of feedback by diminishing the opportunity of revision on written work. As a result, learners may lose motivation and enthusiasm toward writing. Because of these various problems in learners' cognitive and emotional states, learners may fail to engage in writing courses and activities, limiting learner engagement which is considered significant for FL writing achievement (Ellis, 2015; Han & Hyland, 2019). As a result, these problems that occur in the feedback process may create negative consequences that significantly affect learners' writing motivation and anxiety.

The effects of these problems on writing anxiety and motivation during the feedback process are of great importance. However, the use of automated feedback may diminish the issues and eliminate the potential undesired consequences of traditional teacher feedback. Regarding the issue of when and how feedback is given,

automated feedback offers learners clear, immediate, and individualized feedback according to their needs, regardless of time and place constraints (Dikli, 2010; Dikli & Russell, 2006; Jiang & Yu, 2022). With its implementation, students have the opportunity to evaluate their written products whenever and wherever they want to see their mistakes and correct them without being in a traditional classroom environment. In other words, learners can receive the help they need instantly, avoiding the need to wait for the next course and the availability of the teacher to receive feedback. The independence and clarity that automated feedback provides may enhance autonomy by helping learners to gain awareness of their individual learning process and highlighting their lacks instantly without the teacher's assistance and outside the classroom (Chandler, 2003; Dikli & Russell, 2006; Wang et al., 2013; Woodworth & Barkaoui, 2020a). According to the feedback they receive, learners can identify their specific mistakes and deficiencies, thus they can use their unique strategies to correct and learn from them, enhancing the responsibility for their individual learning progress. As a result, through automated feedback, learners can have valuable information about their current proficiency and performance, which helps them boost their motivation and writing achievement (Ozen, 2017; Wang et al., 2013; Zhang, 2020). Furthermore, due to the clarity, frequency (Griffiths & Nicolls, 2010) and accessibility of automated feedback (Bai & Hu, 2017), learners' opportunity to revise accelerates (Bai & Hu, 2017; El Ebyary & Windeatt, 2010; Stevenson & Phakiti, 2014), leading to a significant increase in their ability of self-correction by boosting feedback interaction (Ferris, 2003; Lee, 2007; Li et al., 2015). Therefore, learners may practice their writing ability more without any limitations that traditional feedback

may cause (El Ebyary & Windeatt, 2010). Based on these benefits such as constant and instant access to clear and individualized feedback, multiple self-revision and correction opportunities, and autonomy in the learning process, it may be stated that automated feedback may decrease learners' anxiety. With its immediate assistance that helps learners build awareness of their progress and learner engagement in terms of cognitive, emotional, and behavioral aspects, their motivation toward writing may increase (El Ebyary & Windeatt, 2010). In conclusion, automated feedback may potentially reduce traditional feedback' drawbacks, facilitating the learning process by decreasing anxiety and boosting learners' motivation.

1.3. Aims of the Study

Writing skills have an important role in learners' social, academic, and future professional lives. Specifically, effective and accurate writing skills are needed for qualified written communication and the academic and professional success that learners pursue. However, as being considered one of the most complex language skills, learners may experience numerous difficulties during learning and producing written language. Although its significance and necessity are evident, it preserves its challenging side for most EFL learners due to its simultaneous requirements such as cognitive and emotional involvement, appropriate use of language mechanics and organization and coherence of the written product. In addition, while the learners' writing achievement is considerably affected by these aspects of writing, learners' writing motivation and anxiety possess an enormous role in their overall writing achievement. Because of a lack of motivation and anxiety, learners may experience a decrease in their overall writing quality as well as negative affective consequences

such as reduced willingness and lack of learner autonomy and engagement. In addition to learners' affective states, while teaching and learning writing, feedback is a complement that is significantly useful to developing writing skills. By causing an increase in anxiety and a decrease in motivation, the feedback that is given in an irregular pattern and broad or vague may block learners' potential development. Unlike traditional teacher feedback, automated feedback may offer solutions to these problems with clarity and immediateness arising from its independence from the time and place. In conclusion, the current study intends to investigate the effects of automated feedback on EFL learners' writing achievement, writing motivation, and anxiety.

1.4. Significance of the Study

Considered by many to be challenging and demanding, the development of writing skills is viewed as a requirement due to its major beneficial effects on EFL learners' overall language learning success. Therefore, the development of writing skills has become the focus of many studies for years. Furthermore, it is known that learners' level of writing achievement is highly affected by writing motivation, anxiety, and the feedback process they experience. However, despite the growing number of studies aiming to measure and discuss the effects of teacher and automated feedback on learners' accuracy in writing, there is a gap regarding the use of automated feedback and its effects on learners' both writing achievement and affective states and the comparison of automated feedback with traditional teacher feedback in terms of its impacts on learners' writing achievement and motivation and anxiety levels, specifically in the EFL context where English is learned as a foreign language.

Therefore, this study can appear to be significantly enlightening and influential since it encompasses the investigation of the effects of automated feedback on learners' writing achievement, writing motivation, and anxiety and the comparison of the effects of automated feedback and traditional teacher feedback on learners' writing achievement and affective states.

1.5. Research Questions

As outlined before, learners' writing achievement is highly influenced by the learners' motivation, anxiety, and feedback process which are crucial in the development of learners' writing achievement. However, while the number of studies on affective factors and their impact on learners' writing achievement has increased due to the importance they hold, there is a gap in the literature regarding the use of automated feedback and its impacts on learners' writing achievement, motivation, and anxiety. Therefore, this study aims to provide an understanding of the effects of using automated feedback and discover whether automated feedback and traditional teacher feedback possess different impacts on the learners' writing achievement, motivation, and anxiety by answering the following research questions:

1. Does teacher feedback affect the level of writing achievement, anxiety, and motivation levels among foreign language learners?
2. Does automated feedback affect the level of writing achievement, anxiety, and motivation levels among foreign language learners?
3. Is there a difference in writing achievement, anxiety, and motivation levels in the use of teacher and automated feedback?

2. LITERATURE REVIEW

2.1. Theoretical Framework

2.1.1. Writing as a Foreign Language Skill

To provide a general definition of writing, Flower and Hayes (1981) explain writing as an ability by which individuals organize and convey information and thoughts by using written symbols. Specific to EFL writing, Hamp-Lyons and Heasley (2006) express that EFL writing is an ability to convey meaning by using appropriate grammatical features, vocabulary, and discourse by non-native English users. By including learners' mental stages during the writing process, Tang (2012) expresses that writing involves stages in which learners generate and organize ideas while ensuring accuracy and fluency in written communication. Similar to the previous definition, Reid (2001) considers writing as a "mental work" in which learners develop and organize ideas to create accurate and clear pieces of writing. Considering these definitions, it can be stated that writing involves multiple aspects which EFL learners must consider and comprehend to build writing achievement.

2.1.1.1. Approaches to Writing

The teaching and development of this indispensable skill were ignored and disregarded until the last half of the twentieth century, acting as a complementary skill that represents speech (Matsuda & Silva, 2001). It was used as a tool to measure

students' grammatical and vocabulary knowledge for assessment purposes (Reid, 2001). However, over time, the significance of writing skills has increased, and it has started to be recognized as a separate and required language skill in the field of foreign language teaching. Therefore, since the beginning of the 1950s, writing has been accepted as an individual language skill that learners should master. Furthermore, it has been acknowledged that to be competent users of written language; learners should have knowledge of more than grammar, they also need the knowledge of the social and cultural values of the target audience, discourse, and strategic competence (Canale & Swain, 1981). With this enlightenment, the need to search for contemporary ways has become increasingly popular over time and led to the development of several approaches to teaching writing.

2.1.1.1.1. Product-based approach

Due to the view on errors in the 1950s, which was complete rejection and avoidance, the product-based approach does not encourage learners' errors and mistakes and aims to prevent this possibility by having learners imitate a model text with immediate corrections provided by the teacher (Gabrielatos, 2000; Gordon, 2008). In other words, instead of providing independence to learners in the process of generating ideas and creating a unique text, the product-based approach strictly applies an imitation procedure to teach writing at the first stages. Therefore, it aims to obtain accuracy above other features of a written text. Throughout the teaching process, the aim is to teach learners target grammatical structure, vocabulary, and organizational skills. Ultimately, learners are expected to present a written text that is completely

accurate in terms of grammar, organization, and vocabulary as the final product (Brown, 1997; Klimova, 2014; Pincas, 1982).

The "Product Approach Model" proposed by Steele (2004) involves four stages that a product-based writing course depends on. According to this model, the first stage of the learning process begins with analyzing the text and the specific characteristics of its type and genre. The second stage of this model includes the controlled practice phase in which the learners work on the target language and characteristics of the model text in isolation. The task is done under the precise control of the teacher to avoid any type of error. The third stage is devoted to the organization of ideas; however, in the assessment phase, learners' organizational skills are considered and assessed, not their ideas. The fourth and last stage of this model is the phase in which the final product is presented. In the final product, learners are expected to implement all the grammatical and structural knowledge they learned during the learning stage. Furthermore, the assessment of the learners' writing ability merely depends on the final product without the consideration of the learning process and learners' ideas.

The product-based approach is criticized mainly because of its complete focus on accuracy and denial of meaning and learners' individuality (Gordon, 2008). During the process of production, learners are expected to rewrite the model text by generating adaptations which are considered a barrier to learners' creativity and development of critical thinking skills. Due to applying similar strict steps, there is no place given to learners' individuality. Furthermore, the teaching occurs regardless of the context, culture, and audience, which are important factors to be considered during the

production of written language (Hyland, 2015). Finally, overemphasizing the final product leads to questionable success and writing achievement (Harmer, 2004). The complete neglect of the learning process results in over-dependency on the final product which causes a lack of observation of learners' developmental and writing stages including brainstorming for ideas and organization as well as the general structure of the written product (Hyland, 2019).

2.1.1.1.2. Process-based approach

Despite focusing on the final product in the 1950s, the 1960s witnessed the importance of learners' mental processes while producing written language. The enormous emphasis that was given to accuracy shifted to the mental processes and the stages learners undergo in the late 1960s. During writing, learners experience several complex stages including brainstorming, organization of information and ideas, composing, and generating the complete structure of the written product they intend to create which requires a serious mental effort. Specifically, the theory behind the process-based approach completely contradicts the product-based approach (Al-Hammadi & Sidek, 2014).

The process-based approach puts great emphasis on the writing process which is quite complex and flexible (Zamel, 1983). In addition to its flexibility, Silva and Matsuda (2001) state that writing is also recursive, dynamic, and exploratory which means that learners may experience the same stages differently in terms of time and difficulty levels (Grabe & Kaplan, 1996). Furthermore, the focus is on the ideas and

meaning of the written product rather than its accuracy which encourages learners' creativity and critical thinking skills (Klimova, 2014; Matsuda & Silva, 2001).

Flower and Hayes (1981) present the "Cognitive Models of Writing" in the light of the process-based approach. According to this model, the writing process consists of three main stages; planning, translating, and reviewing stage. The planning stage, which is the first stage of writing, includes generating and organizing the ideas and topics that will be included in the text. Therefore, learners brainstorm ideas and organize them to create a coherent and cohesive piece of writing. In the second stage, learners are expected to write the ideas they have generated and organized in the earlier stage. The last stage includes the evaluation and revising, supporting the nature of the process-based approach. In this stage, learners review and evaluate their written works in terms of both structural and grammatical properties. Additionally, these stages may be repeated if needed, reflecting the exact presentation of the recursive nature of the writing process (Matsuda & Silva, 2001), allowing learners to create and edit more than one draft.

In addition to the Cognitive Models of Writing, Steele (2004) proposes another model called "The Process Approach Model", consisting of eight stages which are namely (1) brainstorming, (2) planning, (3) mind mapping, (4) first draft, (5) peer feedback, (6) editing, (7) final draft and (8) evaluation and teacher feedback. Therefore, it may be stated that the Process approach model presents a comprehensive frame of the writing process, highlighting the importance of multiple drafts and collaboration. In this model, the teachers' primary and most important purpose is to

encourage learners' creativity by directing learners to re-edit and re-draft several times. Furthermore, it can also be understood from the stages that feedback plays a crucial role in this model. By allowing peer and teacher feedback in multiple stages, learners are provided with the opportunity to self-correct and work on their deficiencies in writing. This valuable property of the process approach model promotes the individuality and uniqueness of learners' writing development. However, although it successfully manages to close the various gaps in the product-based approach and product-approach model, it fails to engage the socio-cultural factors that should be considered and paid attention to while creating a written product (Swales, 1990).

2.1.1.1.3. Genre-based approach

In the early 1980s, the impact of culture and purpose on writing has begun to gain significance in teaching EFL writing. This shift has occurred due to the recognition of the effects of cultural and social features on the types and genres of written texts. Therefore, it was considered that learners must have knowledge of varying features and structures of different types of texts, including reports, formal and informal letters, research essays, and narratives for them to develop writing achievement.

Hyland (2004) proposes a teaching cycle based on the genre approach. According to this cycle, learners undergo five stages in total. In the first stage, learners are expected to set the objectives of the text regarding the context. Then, they analyze a sample genre text. In the genre-based approach, analysis and the features of the sample text are explicitly provided to help learners recognize the specific characteristics and

gain genre awareness. The focus of the third and fourth stages is on the construction of the learners' production. Initially, learners practice through teacher-guided activities to fully comprehend the text's organizational patterns including preferred grammar structures and vocabulary. Then, they start to compose their independent written products, receiving full support and guidance from the teacher throughout the process. Ultimately, in the last stage of Hyland's teaching cycle, learners compare the characteristics of the genre they have worked on with the previously learned genres to explore differences by benefitting from collaboration, peer interaction, and scaffolding.

Although learners' mental processes play a vital role in a writing activity, writing is also considerably influenced by context (Gordon, 2008). As it can be understood from Hyland's teaching model, the genre-based approach puts great emphasis on the purposes and target audience of the genres. Through understanding such differences and categorizing genres, learners could adapt themselves to write any kind of written text, which in turn leads them to become competent writers in a foreign language, signifying the main idea of the genre-based approach. Furthermore, the genre-based approach's primary consideration is the social context including the target audience and purpose it is written for (Hyland, 2015); then, it focuses on learners' accuracy. By analyzing and categorizing the genres, learners are expected to better understand the social functions and linguistic features that are specific to genres (Luu, 2011; Myskow & Gordon, 2010). Moreover, the genre-based approach promotes learners' creativity by avoiding imitation and reproduction and allowing learners to create unique pieces of writing through multiple drafts (Al-Hammadi & Sidek, 2014). Learners receive

feedback from their peers and the teacher during the evaluation and revision of the drafts. Therefore, the genre-based approach encourages collaboration and scaffolding by promoting interaction in a writing classroom (Hyland, 2004). Yet, despite its encouraging view on multiple feedback and collaboration during the writing process, the overemphasis on the audience in the genre-based approach has been criticized since it ignores the learners' experiences in many of the writing stages (Swales, 2000).

2.1.1.1.4. Reader-dominated approach

Considered the opposite of the Process Approach, the Reader-dominated approach highly emphasizes the audience. Raimes (1991) criticizes the Process approach's overemphasis on learners' by claiming that the "Process approach creates a false impression which ignores the academic requirements that learners should have to be successful in their future education and academic lives." Considering these drawbacks such as neglecting the sociocultural context and overemphasizing the writer's individual processes, the Reader-dominated approach primarily focuses on the audience in teaching writing. Rather than focusing on the product or learners' internal processes, it emphasizes the expectations of the audience, with a significant focus on the meaning and rhetorical form of the written product intended to appeal to the academic community (Raimes, 1991). Also known as English for academic purposes, the theme and target audience are the central concerns in a written product, and courses are designed accordingly (Çelik & Aydın, 2021). Therefore, learners are expected to deliver information and thoughts properly and accurately by following the formal and academic manner in their writing. These two criteria are the key principles learners'

written product should embody to succeed. As a result, it can be stated that the learners' main purpose is to reach and maintain academic success (Silva, 1990).

In a course designed according to the principles of the Reader-dominated approach, academic demands are expected to be fulfilled by adopting academic discourse and theme-based lessons (Raimes, 1991). The structural and lexical properties are of great importance. Therefore, a separate place is given to preferred grammar and vocabulary through discussion. In this wise, learners' awareness of vocabulary and grammar is aimed to be increased (Hinkel, 2011). These discussions are particularly significant since accuracy and academic discourse are necessary for the Reader-dominated approach. Feedback both from peers and the teacher becomes a main building block in teaching and learning writing. In a writing course designed accordingly, learners are allowed and encouraged to work on multiple drafts and revise their written product as much as needed (Çelik & Aydın, 2021). Through feedback, learners have numerous opportunities to edit their work to finalize. Apart from its widely accepted advantages, it is also criticized for its limited and debatable benefits in scientific and technical fields (Silva, 1990).

2.1.1.2. Theories Related to Teaching Writing

2.1.1.2.1. The Input Hypothesis

The Input Hypothesis emphasizes the significance of comprehensible input that learners should receive during the language acquisition process and considers it a prerequisite (Krashen, 1982). Regarding the similarity of second language acquisition

to first language acquisition that every child successfully manages, the Input Hypothesis claims that through exposure to communicative and comprehensible input, learners can acquire, not learn, the target language by understanding the meaning and structure of the message. It is claimed that for an input to be understood by learners, it should be comprehensible. By outlining its characteristics, Krashen explains comprehensible input as "i+1" meaning that input should be slightly beyond the learners' current language proficiency, yet still understandable. By defining comprehensible input as "i+1", Krashen refers to "i" as learners' current knowledge while "+1" relates to the extra information that is delivered to learners with the help of the additional contextual or linguistic information (Krashen, 1985). According to the Input Hypothesis, learners try to understand the meaning to acquire language and then the structure of the message which occurs unintentionally and inherently (Dulay et al., 1982; Krashen, 1981, 1982).

Although the Input Hypothesis mainly aims to explain and develop the speaking skills of language learners, it can be implemented in the development of writing skills. In writing development, reading can also take the form of considerable input that improves learners' written and spoken performances (Krashen & Terrell, 1983). In other words, more comprehensible input, written or spoken, leads to development in fluency and accuracy in language proficiency (Chomsky, 1972; Krashen, 1989). Therefore, as learners are exposed to a sufficient amount of comprehensible, understandable, challenging input, they can improve their grammatical and lexical knowledge, ultimately developing their writing ability.

2.1.1.2.2. The Noticing Hypothesis

In the 1980s, theories of SLA mainly highlighted the unconscious and natural acquisition of languages and the processes learners experience (Gass & Mackey, 2013). Despite this enormous and dominant view, in the 1990s, Schmidt proposed the Noticing Hypothesis in which the conscious processes and noticing are greatly emphasized. According to Schmidt (1990), although learning a language unconsciously without intention is highly possible, learning without attention cannot occur. Accordingly, the Noticing Hypothesis emphasizes the importance of attention by claiming that learners need to notice and pay attention to turn input into intake and completely comprehend the input (Schmidt, 2012). To acquire certain linguistic features including vocabulary, phonology, grammar, and discourse, and be able to produce them when needed, learners need to pay considerable attention and notice them, resulting in learners' complete awareness and language development. According to Schmidt, noticing can occur through explicit instruction which is not sufficient alone, attention, and random exposure (Schmidt, 1990). Through these ways, learners can acquire and implement the target language and structures in their productions. Furthermore, Mackey (2006) highlights the significant role of feedback in taking learners' attention to specific language elements. Feedback can play an enormous role in learners' noticing process since it directly guides them to notice their gaps in knowledge and areas that need improvement, leading them to work on specific parts to develop language proficiency. Moreover, as stated in Krashen's Input Hypothesis, for an input to be processed and internalized, it should be noticed by learners (Schmidt, 2012).

2.1.1.2.3. The Interaction Hypothesis

The Interaction Hypothesis claims that the meaningful interaction between language learners and proficient English speakers guides the learner in the language learning process, which is called the negotiation of meaning. Long (1980) stresses the importance of negotiation of meaning in the language learning process since it provides multiple advantages for the improvement of language skills. Specifically, during the interaction, learners and proficient speakers employ various strategies that facilitate comprehension and lead to development (Long, 1980).

Negotiation of meaning has two significant benefits to language learning and development (Gass & Mackey, 2013; Mackey & Gass, 2015). First, the negotiation of meaning can be used as a tool that takes learners' attention to specific language features by presenting the gaps in learners' current knowledge. In other words, the proficient speaker's feedback and strategies such as reformulation and repetition guide learners to notice and work on the deficiencies they experience. In this respect, the Interaction Hypothesis and the Noticing Hypothesis by Schmidt are highly related. To explain this relationship specifically, it can be stated that the negotiation of meaning helps learners to notice by focusing on the problematic aspect of their language proficiency and leading learners to practice language according to the feedback they receive. Also, as the Noticing Hypothesis highlights that noticing is not sufficient for learning, learners can practice and produce the language elements they lack by interacting with a proficient speaker. Second, for comprehensible input, negotiation of meaning is needed (Long, 1980, 1983; Schmidt, 1990). In addition, Pica (1994) states

that negotiation is critically significant in reaching comprehension. Negotiation of meaning can increase comprehension due to its features such as explaining, adjusting, and simplifying language when needed by language learners (Long, 1980, 1983). In this regard, the Interaction Hypothesis is closely related to the Input Hypothesis proposed by Krashen since both theories highlight the importance of comprehensible input in the process of language acquisition which leads to the meaningful use of language (Pica, 1994).

2.1.1.2.4. The Output Hypothesis

Proposed by Merrill Swain, the Output Hypothesis stresses the significance of output claiming that producing language facilitates and improves the language acquisition process by providing learners with opportunities to practice and test their language skills (Swain, 1985). According to this hypothesis, learners can benefit from producing language by testing their present abilities, noticing the lack in their knowledge, and working on their deficiencies to improve. When a learner produces a problematic language, feedback becomes the guide for improvement. Accordingly, it is emphasized that producing output has three significant functions in the language acquisition process (Swain, 1995). The first function is the Noticing/Triggering Function which enables learners to notice their gaps and errors in knowledge and be aware of their linguistic competencies. The second function, the Hypothesis/Testing Function, allows language learners to test their hypotheses about certain linguistic structures and rules. Therefore, they can find whether their utterances are accurate and improve the areas where they are insufficient. The Metalinguistic/Reflective Function

helps learners to distinguish the areas that need improvement and guides them to adjust their current knowledge according to the feedback they receive. Through these functions, Swain (1995) claims that learners can comprehend and then produce what is provided in terms of linguistic knowledge. Yet, while putting considerable stress on learners' language production, the Output Hypothesis does not claim that mere output is adequate for language acquisition. Therefore, exposure to comprehensible input is critical to developing language skills, as Krashen suggests in the Input Hypothesis (Gass & Mackey, 2011; Krashen, 1985).

2.1.1.2.5. The Feedback Hypothesis

According to the Feedback Hypothesis, feedback can facilitate and improve the language acquisition process by developing accuracy and increasing learners' motivation (Ellis, 2009). There are several effects of feedback that reinforce the acquisition. Feedback helps learners focus on the language knowledge gaps (Ellis, 2009; Ferris, 1999). Accordingly, learners can recognize the errors and address specific issues to correct them. This opportunity also allows learners to improve self-correction skills, leading to an increased awareness of the target language and learning progress and opportunities to reproduce inaccurate productions (Ferris, 1999; Kulhavy, 1977; Wulff et al., 2020). By helping them follow their learning process, receiving regular and timely feedback can increase learners' motivation (Ellis, 2009, 2015; Good & Lavigne, 2017). In other words, with the help of appropriate feedback, learners do not feel lost in the complex and ever-changing process of language learning. The strength and efficacy of feedback depend on some factors including the

timing, clarity, and specificity of the feedback, learners' characteristics, and receptivity, as well as the environmental circumstances. Irregular or unclear feedback may generate severe disadvantages for learners by causing confusion and frustration (Grabe & Kaplan, 1996). Furthermore, it should be noted that the Feedback Hypothesis does not suggest that feedback is the only precise factor that determines learners' language acquisition. It should be accompanied by comprehensible input, negotiation of meaning, and favorable affective states that facilitate language acquisition (Ellis, 2009; Wulff et al., 2020).

2.1.2. Writing Achievement

Writing has become an essential and widely used mode of communication (Andrews & Smith, 2011). Both professional and social communication has taken the form of e-mails and text messages. As a result, advanced writing skills have become a requirement for learners' academic and professional success (Ali, 2022; Harmer, 2004). In addition to its use as an evaluation tool to assess learners' knowledge, proficient writing ability is essential for a better understanding of the language (Harmer, 2004). However, improving writing achievement, which includes extensive vocabulary knowledge, sufficient and accurate knowledge of grammar, and the organizational properties of writing, is considered challenging for many EFL learners (Y. Chen, 2002; Harmer, 2004, 2011). In addition to the grammatical and structural aspects, generating, combining, and presenting ideas are significant for a proficient written product (Matsuda & Silva, 2001). As a result of its cognitive, linguistic, and organizational demands, learners struggle to consider various factors simultaneously,

making the process of developing writing achievement more difficult to manage. In conclusion, although it presents multiple challenges that generate several drawbacks EFL learners may undergo, writing achievement possesses remarkable importance and is considered critical in the development of language proficiency and the language learning process (Harmer, 2011; Hyland, 2019; Luu, 2011; Ortega, 2014; Reid, 2001).

2.1.3. Writing Motivation

2.1.3.1. Motivation

According to Ryan and Deci (2000), motivation is the force that allows, guides, and directs individuals' behavior toward a goal. Locke (1996) defines motivation as a mental activity that shapes individuals' behavior and decisions according to a certain goal. Considering these definitions, it can be stated that motivation can alter how, how much, and how frequently individuals engage and put effort into certain activities. Yet, motivation can be seen differently in every individual, reflecting its complexity and variety among individuals. Furthermore, the level of motivation cannot be considered permanent and unchangeable; rather, it may fluctuate over time according to various activities and circumstances.

2.1.3.2. Motivation in Foreign Language Learning

While the language learning process is considered difficult, the complex nature of language learning motivation cannot be ignored (Gardner, 1985). Language learning motivation has such a complex structure because of the significant role cognitive and

affective factors play in motivation. According to Oxford (1992), motivation is derived from learners' desires and attitudes, considerably affecting their language learning process. When learners are motivated, they are mostly goal-oriented, tend to spend more time and effort in activities that are related to language learning and have positive attitudes toward the target language and its culture (Gardner, 1985). Dörnyei and Ryan (2015) state that motivation is "the primary impetus to initiate L2 learning and later the driving force to sustain the language, often tedious learning process" (p.3) and is remarkable even for learners who have respectable ability. Moreover, motivated learners employ more learning strategies (Oxford, 1992), improving and facilitating the language learning process. As a result of this enthusiasm for and awareness of the process, it is stated that self-regulation skills of motivated learners are developed (Ellis, 2015). However, it must be recognized motivation is a highly complex and unpredictable concept and may be affected by various factors such as learning environment, individuals' attitudes and beliefs towards language learning, past experiences, and debilitative or facilitative affective factors (Dörnyei & Ushioda, 2009; Krashen, 1982; S. Ryan, 2018; Ushioda, 2013).

According to Gardner (1985), motivation is categorized into two types: *integrative motivation* and *instrumental motivation*. *Integrative motivation* can be defined as an internal desire that leads to increased interest and curiosity toward the target language, its culture, and society. Gardner and Smythe (1975) state that motivated learners are more willing to participate in classroom activities and eager to spend extra time and effort outside the classroom. Contrary to *integrative motivation*, *instrumental motivation* is derived from the advantages of knowing a foreign language such as

finding highly paid professions and the value and respect received from others (Bulut, 2019). In other words, it is the kind of motivation that results from a benefit-oriented perspective. On the other hand, Deci and Ryan (2012) divide motivation into two: *extrinsic* and *intrinsic motivation*. *Intrinsic motivation*, on the one hand, is derived from individuals' internal feelings and beliefs without the expectation of any reward or advantage (Özgür & Griffiths, 2013). On the other hand, *extrinsic motivation* displays exactly opposite orientations. A person who has *extrinsic motivation* learns a foreign language due to its advantages such as getting a qualification, high income, or pleasing others including the teacher and parents (R. Ryan & Deci, 2000).

2.1.3.3. Theories and Models Related to Motivation

2.1.3.3.1. Self-determination Theory

Self-determination theory (SDT), developed by Deci and Ryan (1985), is an influential framework in the field of psychology, emphasizing the significance of motivation and factors affecting individuals' intrinsic motivation. In foreign language teaching, Self-determination theory enhances the understanding of learners' motivation and attainment during the language learning process. Briefly, this macro-theory claims that the nature of human beings is active and intrinsically motivated toward the activities that individuals self-determine. In addition, Self-determination theory acknowledges the effects of outside factors on the social environment (E. Deci & Ryan, 2012). In other words, SDT focuses on goal-oriented behavior; it puts great

importance on psychological needs, self-determination, and the social environment, distinguishing itself from other related theories (E. L. Deci & Ryan, 2009).

According to SDT, three specific needs, autonomy, competence, and relatedness, are essential to individuals' intrinsic motivation (E. Deci & Ryan, 2012). While autonomy refers to the freedom of individuals to choose and control their learning process, competence is the need for individuals to feel qualified. Finally, relatedness demonstrates the feeling of connection with and belonging to others in a supportive social environment. Specifically, if learners can meet these three needs, they become *intrinsically motivated*. Contrary to this, learners are extrinsically motivated if they cannot self-determine and are forced to behave according to some regulated or external factors (Ortega, 2014). SDT claims that without the existence of these, expected development and desirable behaviors cannot be reached. Accordingly, learners cannot experience an achievement resulting from their choices and actions, resulting in learners' *amotivation* (E. L. Deci et al., 1989). However, if learners are provided with a safe and effective learning environment, challenging yet attainable tasks, and the opportunity to make decisions about their learning process, their psychological needs can be satisfied, influencing the overall learning experience (E. L. Deci & Ryan, 2009).

2.1.3.3.2. Attribution Theory

The attribution theory of motivation aims to represent the reasons behind an individual's behavior (Weiner, 1972). It is assumed that individuals assign some attributions to certain events and activities that lead them to behave as they do and

provide explanations. In the context of foreign language learning, it can be stated that attributions are the explanations that learners make during the process of language learning, resulting in either willingness or unwillingness toward a certain type of activity. There are three main attributions. As Ellis (2015) demonstrates, learners may provide *internal* or *external* causes for certain behaviors. For instance, learners may explain their failure in terms of their own lack of knowledge and ability or blame external factors such as peers, learning environment, or teachers. Second, learners may interpret the outcomes as *stable* which leads them to lower their efforts, or as *unstable* which results in spending more effort to be successful. Lastly, learners may consider the factors that affect the outcomes as *controllable*, resulting in an increase in motivation, or *uncontrollable*, considering the factors that occur beyond their control and are unchangeable.

2.1.3.3.3. The Process Model of L2 Motivation

The process model of L2 motivation, proposed by Dörnyei (1998), represents motivation as a dynamic and complex phenomenon rather than displaying it statically (Ellis, 2015). In Dörnyei's words, it considers the "ups and downs" of motivation (Dörnyei, 1998). According to this model, a learner's level of motivation may change and fluctuate over time in different circumstances (Dörnyei, 1998). The process model of L2 motivation displays three stages regarding the complexity and dynamicity of motivation including (1) the pre-actional stage, (2) the actional stage, and (3) the post-actional stage. The pre-actional stage is when learners try to set goals and prepare an action plan to complete a certain task. Dörnyei (2000) refers to this stage as 'choice

motivation'. As its name suggests, the actional stage involves executive motivation, leading learners to take action and implement the plan. Learners implement the plan they generated in the previous stage and control their actions and achievements regarding the task by using self-regulatory strategies. In the post-actional stage, learners check and evaluate their performances and the outcomes to identify achievements, failures, and the reasons behind them.

Although the process model of L2 motivation represents the dynamic and changing nature of motivation, separating itself from previous models and theories, it was proposed in the light of previous L2 research (Ellis, 2015). Specifically, the pre-actional stage involves properties of Gardner's social-psychological perspective. While the actional stage puts emphasis on the self-determination theory, the last stage, the post-actional stage, draws attention to attribution theory. However, although it aims to emphasize the complexity of motivation, Ellis (2015) criticizes the process model of L2 motivation since it falsely draws a linear sequence of the stages.

2.1.3.3.4. The L2 Motivational Self System

Proposed by Dörnyei, the L2 Motivational Self-System claims that motivation is derived from the learners' expectations of future L2 selves (Dörnyei, 2009). In other words, learners' future self-image plays an enormous role in their language learning motivations. It involves three components that claim to affect motivation. First is the ideal L2 self, referring to the learners' ideal representations of themselves. Dörnyei (2009) suggests that it is an important and influential component that increases

motivation since it acknowledges both integrative and instrumental motives such as a well-paid and highly respected job. The second component is the ought-to self, resulting in learners managing self-control and attributions to guarantee success and prevent possible failures (Dörnyei, 2009). Lastly, the L2 learning experience refers to the learning environment including the teacher, peers, teaching curriculum, physical appearance of the classroom, and past experiences of success and failure which are some of the most predictable indicators of motivation (Dörnyei, 2009; Ortega, 2014). Being one of the futuristic and influential theories of motivation, L2 Motivational Self-System is a macro theory of motivation that builds on the previous micro theories (Dörnyei, 2009; Ortega, 2014), considering various impactful factors on language learning motivation.

2.1.4. Writing Anxiety

2.1.4.1. Anxiety

Anxiety, experienced by many individuals, causes various negative impacts among individuals. Psychologists provide multiple definitions of this complex state, including its inconvenient impacts on individuals' psychological, physiological, and behavioral states. According to Hilgard et al. (1971), anxiety is a state of apprehension and fear. Spielberger (1983) defines anxiety as a state of mind characterized by tension, apprehension, and nervousness. In light of these definitions, it can be stated that it has numerous effects on individuals, causing unfavorable alterations in their experiences.

Accordingly, the unpleasant outcomes of anxiety may inhibit individuals from accomplishing everyday tasks, disrupting their lives in general.

Known for his influential works on psychology, Spielberger (1983) introduces three types of anxiety caused by different sources. These are namely *trait anxiety*, *state anxiety*, and *situation-specific anxiety*. First, *trait anxiety* is a permanent state of one's personality, occurring regardless of the time, place, task, or event. This nonstop feeling of apprehension continues to exist across various situations. In other words, it becomes a personality trait that accompanies individuals throughout their lives without exceptions. Second, *state anxiety* is described as an emotional state that is experienced as a result of certain events and situations. Spielberger (1983) describes *state anxiety* as "the emotional reaction or pattern of response that occurs in an individual who perceives a particular situation as personally dangerous or threatening" (p.489). According to Young (1999), it is an uncomfortable feeling that causes stress and fear that may change. According to this definition, anxiety is regarded as a personal answer to undesired or stressful experiences of an individual, increasing and decreasing over time. Finally, *situation-specific anxiety* can be defined as a reaction to particular situations (Spielberger, 1983). It occurs due to a certain type of situation and does not change across different situations. As a unique form of anxiety (MacIntyre & Gardner, 1991), foreign language anxiety or mathematics anxiety can be given as examples. Specifically, an individual who feels anxious about mathematics only experiences anxiety during tasks or events related to mathematics, causing negative effects during the process.

2.1.4.2.Foreign Language Anxiety

Horwitz et al. (1986) propose foreign language anxiety as a type of situation-specific anxiety and develop an influential scale named "the Foreign Language Classroom Anxiety Scale (FLCAS)." Foreign language anxiety (FLA) is defined by Horwitz et al. (1986) as "a distinct complex of self-perceptions, beliefs, feelings, and behaviors related to classroom language learning arising from the uniqueness of the language learning process" (p.128), indicating the complexity of this phenomenon. While Horwitz focuses on anxiety arising in the classroom environment, MacIntyre (1999) broadens the perspective and states that it is an emotional reaction, including stress and nervousness in situations related to foreign language learning. In addition, Hassan (2001) stresses the avoidance behavior observed in anxious learners in his definition.

FLA is divided into three types: communication apprehension, test anxiety, and fear of negative evaluation (Horwitz, 2001b; Horwitz et al., 1986). This division is beneficial to realize the differences. Communication apprehension can be defined as the fear of communicating with other people or in public. It is the fear of being unable to comprehend the received messages and having problems delivering messages caused by high anxiety during oral communication. Horwitz (2001b) refers to this type of FLA as the feeling of shyness accompanied by fear. Communication apprehension is problematic and challenging for most EFL learners due to the high requirement for oral communication in foreign language classrooms (Horwitz et al., 1986). In addition, test anxiety results from the fear of failure and low grades (Horwitz et al., 1986).

Considering the importance and frequency of tests in the language learning process, learners may often be affected by it. Learners suffering from it generally aim to reach perfection, leading them to have unrealistic expectations of themselves. Fear of not achieving those unrealistic goals leads them to undergo considerable difficulties. Lastly, fear of negative evaluation can be described as the apprehension stemming from fear of negative judgments made by others in the environment, including teachers and peers (Horwitz et al., 1986). These learners expect negative comments as a result of their performance. Unlike test anxiety, they may feel nervous about daily interactions or tasks in a foreign language without the intention of evaluation. Each form of anxiety may simultaneously or distinctively occur. For example, a learner could experience test anxiety and communication apprehension simultaneously.

2.1.4.2.1. Debilitating and Facilitating Anxiety

Alpert and Haber (1960) introduced two distinct types of anxiety that can be experienced in the learning process: facilitating anxiety and debilitating anxiety, and developed a test, called the Achievement Anxiety Test (AAT) to determine learners' level and type of anxiety. Briefly, facilitating anxiety positively affects learners' success and motivates them to learn and perform, helping and empowering learners to maintain their enthusiasm toward the process. On the other hand, debilitating anxiety may even cause dropping outs and complete avoidance of the anxiety-arising subject, acting exactly the opposite of facilitating anxiety. According to Alpert and Haber (1960), a learner may experience both types of anxieties simultaneously or only one

of them. Furthermore, it is possible to have none of the types as well. To identify and determine the type of anxiety learners possess, the AAT can be employed.

2.1.4.3.Theories and Models Related to Foreign Language Anxiety

2.1.4.3.1. Tobias' Anxiety Model

In Tobias' Anxiety Model, the classical instruction procedure is considered, involving three components: input, processing, and output. According to this model, anxiety can inhibit the learning process in three possible stages, stating that the effects can be seen before, during, and after processing. Specifically, *pre-processing* refers to the interference which takes place in the input stage during instruction. In this stage, anxiety may inhibit learners from receiving input, decreasing the efficacy and quality of learning. Learners who are highly anxious cannot comprehend the input provided due to the learners' concern about their performance and self-confidence. In the *processing* stage, anxiety may negatively affect learners' cognitive abilities, directly interfering with the instruction. According to Tobias (1979), anxious learners may perceive a task with a complex organization that requires short-term memory as more difficult than their less anxious peers because of anxiety. Lastly, in the *post-processing* stage, anxiety such as freezing affects learners' production, severely affecting overall achievement. In conclusion, this model presents a general picture of anxiety and its possible effects on the learning process, including different stages.

2.1.4.3.2. Affective Filter Hypothesis

According to the Affective Filter Hypothesis, affective factors such as anxiety significantly debilitate or facilitate the language learning process and achievement (Krashen, 1982). It is stated that learners who do not have optimal attitudes, specifically those who are highly anxious, cannot comprehend the input received. Although they are provided with input, it cannot reach the language device, in other words, the part of the brain in which language acquisition occurs (Krashen, 1982; Krashen & Terrell, 1983). Therefore, anxiety blocks learning by interfering with the amount of comprehensible input needed to be received for language acquisition. Dulay et al. (1982) state that the filter decides the amount of input learners can take and acquire and the quality and rate of the language acquisition process. As a result, it can be deduced that the Affective Filter Hypothesis highly emphasizes the input, the primary condition for language acquisition, yet claims that the filter can severely affect the operation and processing of input (Dulay et al., 1982). On the other hand, learners who are provided with an optimal environment and do not suffer from anxiety are more advantageous and likely to acquire a language more easily. Therefore, it should be noted that input should pass the filter to be processed and benefitted by learners. Moreover, this filter can be influenced by social factors and circumstances, including the physical environment in which learning takes place, the teacher, peers, and learners' past learning experiences (Dulay et al., 1982).

2.1.5. Feedback

2.1.5.1.Teacher Feedback

In the 1950s, errors were considered unpleasant behavior that should not be tolerated and should be prevented immediately. Accordingly, feedback was used as an immediate correction rather than a treatment that guides learners. However, over the last 20 years, the role of errors in language learning and teaching has faced a noticeable change, becoming an essential component of improvement (Bitchener & Knoch, 2010; Klimova, 2015; Sadler, 1989; Sermsook et al., 2017). In modern language learning and teaching, errors are viewed as steps for improvement and should be treated carefully and properly (Sermsook et al., 2017; Taskiran & Goksel, 2022), highlighting the importance of providing feedback.

Various definitions are made to provide a comprehensive perspective on the concept of feedback. Kulhavy (1977) defines feedback as a tool that informs learners about whether their output is correct or wrong. Hattie and Timperley (2007) define feedback as the "consequence" of learners language production (p.81). In other words, feedback is the procedure that is provided according to the learners' performances, enabling them to realize their individual weak and strong aspects (Ferris, 2003; Ferris & Hedgcock, 2023). Lightbown and Spada (2006) state that feedback allows learners to know that their productions are incorrect and need further learning and improvement. It is the report that indicates errors and lacks for learners' future development, allowing them to monitor and control their progress to enhance poor

performances (Sadler, 1989). It guides learners in their possible future paths to follow and briefly gives information on their past and current performances, making it invaluable for both teachers and learners.

According to the type of error, activity, and learners' characteristics, different types of feedback can take different modes and tones, focusing on various aspects of lack of knowledge (Biber et al., 2011). *Oral* or *written* feedback can be given directly or indirectly by the teacher. In *direct feedback*, the teacher provides an explicit explanation, presenting the inaccurate aspect and the proper form of it. However, *indirect feedback* indicates that a learner's language production contains an error or errors, underlining an improper use without providing an explicit correction to the learner. Furthermore, the focus of feedback can be on form or content. *Form-focused feedback* deals with grammatical structures, punctuation, and spelling, focusing on the rules-governed parts of language knowledge (D. Ferris, 1999). In other words, it aims to correct grammatical and structural errors, taking the form of error correction. On the other hand, *content-focused feedback* holds a more holistic perspective of the learner's work, including the ideas and content presented and the organizational skills of the learner (Kepner, 1991) and providing comments on the quality. Furthermore, feedback can either be positive, taking the form of appraisal of a well-done task, or negative, which is called criticism with the aim of improvement (Hyland & Hyland, 2006). However, as stated by Hyland and Hyland (2006) overly-received feedback may negatively affect learners' performance and motivation toward learning.

Even though the importance of providing feedback is highly acknowledged (Bitchener, 2008; Brookhart, 2017; Hyland & Hyland, 2006; Klimova, 2015), providing personalized and immediate feedback to learners is not always a task to accomplish effortlessly. Providing feedback on learners' performances is time-consuming for teachers, especially in larger classrooms (El Ebyary & Windeatt, 2010; Hyland & Hyland, 2006; Woodworth & Barkaoui, 2020b). Considering the need to revise multiple drafts continuously produced by learners, the process of giving individualized and instant feedback can easily become problematic for most teachers. Additionally, Ferris (2003) and Lee (2007) describe feedback as a teacher-centered process since the main focus is on the teachers' comments on the performance rather than learners' responses to them. After receiving feedback, learners are expected to create another draft considering the comments and corrections highlighted in the response of the teacher. However, considering the large number of learners in classrooms, it is not a feasible and simple duty to fulfill. In sum, these drawbacks of traditional teacher feedback inhibit learners' potential performances and lead teachers to feel burned out from excessive workload.

2.1.5.2.Automated Feedback

Since the 1960s, automated feedback has become popular in educational settings including universities and high schools, and has been used for educational purposes, especially in the area of teaching foreign language writing (Benali, 2021; C. F. E. Chen & Cheng, 2008). Automated feedback systems are designed to support and improve the language learning process by providing immediate and individualized feedback

without the boundaries of time and place, becoming a powerful tool (Benali, 2021; Burstein et al., 2020; Dikli, 2010). Accordingly, the demand for these systems has been rising along with the global use of technology in the classroom (C. F. E. Chen & Cheng, 2008). According to Warschauer and Healey (1998), automated feedback systems are tools that intelligently provide meaningful, individualized, and instant feedback and guidance. They can evaluate and comment on learners' written productions, indicating their errors and providing suggestions for development (G. Cheng, 2017; Dikli & Russell, 2006). Moreover, they can guide learners in various aspects of language including grammar, sentence structure, vocabulary selection, mechanics such as spelling and punctuation, and overall organization of ideas presented in the text (Dikli, 2010; Dikli & Russell, 2006). Therefore, the integration of automated feedback systems into language education has increased and has been preferred by many educational institutions in the last few years (Benali, 2021).

Automated feedback systems can enhance and improve learners' language learning process in several ways. First, through automated feedback, learners can reach individualized feedback immediately after completing a written task (Dikli, 2010; Dikli & Russell, 2006). Being able to receive immediate is significant in the learning process since it allows learners to adjust their drafts shortly after the performance. Furthermore, learners can create multiple drafts and receive feedback on each draft multiple times (Dikli, 2010; V. Z. Zhang & Hyland, 2018). Due to the increased amount and frequency of feedback (Bull & McKenna, 2003; V. Z. Zhang & Hyland, 2018), learners can have numerous opportunities to draft and re-draft (Li et al., 2015; Stevenson & Phakiti, 2014; Warschauer & Ware, 2006; V. Z. Zhang & Hyland, 2018).

Accordingly, it can be stated that automated feedback can enhance and improve learners' learning experience by increasing learners' engagement and motivation (C. F. E. Chen & Cheng, 2008; G. Cheng, 2017; V. Z. Zhang & Hyland, 2018). In addition, it is stated that the opportunity to reach instant and individualized feedback promotes the autonomy of learners by indicating their lack of knowledge and guiding the way for improvement (C. F. E. Chen & Cheng, 2008; El Ebyary & Windeatt, 2010; V. Z. Zhang & Hyland, 2018). Considering the benefits above, it can be stated that learners' overall writing achievement and quality can be improved (Dikli & Russell, 2006; Li et al., 2015; Stevenson & Phakiti, 2014). Furthermore, it may play an enormous role for teachers to save time, keep up with the workload, and provide effective and timely feedback to learners (Hyland & Hyland, 2006; Ranalli, 2018). Also, it helps learners save time by allowing them to receive individualized feedback outside the classroom instead of waiting for the next course. As a result of these advantages automated feedback may provide, it has a great potential to enhance foreign language teaching and learning (Dikli & Russell, 2006).

2.1.5.3.Theories and Models Related to Feedback

2.1.5.3.1. Sociocultural Theory

According to Vygotsky (1978), social activity is a significant and highly influential factor in individuals' learning. Accordingly, sociocultural theory (SCT) claims that individuals learn how to function in daily life and improve through interactions with people around them, being highly affected by cultural relations and norms while

acknowledging the importance of biological factors. Furthermore, Vygotsky (1978) states that development takes place in two levels. First, it occurs on the social level which is "inter-psychological". Then, it takes place within the individual which is "intra-psychological" (p.57). Considering these statements, sociocultural theory highlights the importance and effects of social relations in the development of people (Lantolf & Pavlenko, 1995). This Vygotskian perspective has become the focus of educational research and L2 researchers worldwide since SCT views education as the main contributor to individuals' cognitive development and considers learning, interaction, and collaboration as inseparable components of potential development (Lantolf & Pavlenko, 1995; Ratner, 2002; Vygotsky, 1978). Focusing on lower-level mental activities (Ortega, 2014), SCT puts emphasis on the process rather than recognizing only the product, the final behavior (Hausfather, 1996). Vygotsky (1978) signifies that understanding the reason behind a behavior cannot be achieved through the analysis of the product, rather the process of it can provide a clear understanding of the origin.

There are two important notions of SCT that are interconnected and mutually beneficial: *the zone of proximal development* and *scaffolding*. First, *the zone of proximal development* (ZPD) is the distance between an individual's actual and potential development (Vygotsky, 1978). As stated before, learning occurs through interaction, yet it should be conducted within the ZPD and with a more knowledgeable person to learn and develop cognitively and psychologically (Vygotsky, 1978). The more interaction takes place, the more development emerges within the individual (Lantolf, 2006). The other significant notion is *scaffolding*. *Scaffolding* can be

described as the support guided by an expert to a less knowledgeable person when needed (Nassaji & Swain, 2000; Vygotsky, 1978). Differing from the traditional view of guidance (Mccarthy & Carter, 1994), *scaffolding* is the process by which the individual who is less knowledgeable and the expert or more knowledgeable individual collaborate to solve a problem or reach a goal (Hausfather, 1996; Nassaji & Swain, 2000; Vygotsky, 1978; Wood et al., 1976). This notion is also seen as critical for foreign language learning and teaching as learners and teachers as experts continuously interact with and assist each other in order to complete a task, learn a new subject, or develop language skills inside and outside the classroom (Nassaji & Swain, 2000; Uzun, 2020).

2.1.5.3.2. Social Constructivism

As the socio-cultural theory, social constructivism embodies similar principles and implications for educational psychology. Having adopted the Vygotskian perspective, social constructivism suggests that learning takes place within the socio-cultural environment that learners are in and their current ZPD (Adams, 2006; J. Chung, 1991; Watson, 2001). According to social constructivism, knowledge is constructed with the help of a more knowledgeable person in the community and can be activated through the active use of it so that learners build their own understanding (Watson, 2001). Thus, it can be stated that collaboration and interaction possess a vital role in learners' improvement and learning. Considering a classroom setting, the teacher or other more knowledgeable peers can take the role of an expert for novice learners to master certain subjects or skills, making learning a shared and social activity (Adams, 2006; Watson,

2001). According to Tam (2000), there are some key principles in a social constructivist classroom. In such a classroom, learners' learning is the major concern rather than their performance, creating a teaching and learning that is not based on the success coming from the test results. This learning-based teaching encourages learners to take responsibility for their learning and enhances the interaction in the classroom, suggesting that knowledge should be co-constructed in the community. Furthermore, the teacher's role as a guide is a significant principle of social constructivism. With this guidance, the enhancement of learners' autonomy and responsibility in the learning process is mainly aimed at. As a result, learners can be well-informed on their progress. One way to keep learners' knowledge up-to-date and raise their awareness is to provide feedback that guides and informs them, helping them construct the knowledge, actively engage in the process, and achieve the pre-determined goal of learning (Adams, 2006; Jonassen, 1991). Therefore, learners can reflect on their weaknesses and strengths, leading them to develop (Tam, 2000).

In sum, both socio-cultural theory and social constructivism aim to shed light on learners' improvement and learning through social interaction and collaboration, considering their principles and background ideas. However, the difference between the two theories is that while social constructivism focuses on the construction of knowledge within the social and cultural community with other members, socio-cultural theory emphasizes the transfer and influence of society. Yet, both theories claim that social and cultural settings are vital in determining people's development (Ertmer & Newby, 1993).

2.1.5.3.3. Self-Regulation Theory

Self-regulation theory suggests that individuals are actively engaged in their learning process and can alter or adapt their behavior accordingly (Zimmerman, 2000). They organize and supervise their efforts and manage their perception, motivation, and cognition to accomplish specific goals, considerably affecting their achievement and motivation towards it. Individuals' abilities, self-efficacy beliefs, and past experiences lead them to foresee potential outcomes of their future actions. According to these perceptions and desires, they plan a certain action plan that guides them to the best possible outcomes and motivates them towards achievement (Bandura, 1991). Along with its high dependence on personal beliefs and motives, self-regulation is also affected by individuals' affective states such as confidence and fear, while performing the action plan (Zimmerman, 2000). External and self-generated sources can interfere with the individuals' reasoning and functioning negatively or positively (Chung & Yuen, 2011; Fogel, 1993), and this interference is viewed as a triadic process including the influences of personal, behavioral, and environmental factors (Zimmerman, 2000). Self-regulation is viewed as cyclical since these factors can continually change and vary, creating differences in a person's behavior by reactively or proactively adapting it (Zimmerman, 2000; Zimmerman & Martínez-Pons, 2012).

The structure of self-regulatory processes is seen in three main phases: *forethought, performance control,* and *self-reflection* (Bandura, 1991; Zimmerman, 1986). As Zimmerman (1986, 2000) explains, during the first phase, *forethought* includes goal-setting, planning, and consideration of self-motivation beliefs. In this stage,

individuals aim to build a plan that suits their goals regarding the potential outcomes and their self-efficacy beliefs. While the second phase, *performance control*, includes the examination and evaluation of on-action behaviors and efforts possessed by the individuals, the *self-reflection* phase is the last process in which individuals evaluate their overall performance and the consequences they obtain. The result obtained from the last phase directly affects the individuals' future behavior and experiences, and they may return to the forethought stage, fulfilling the cyclical nature of self-regulatory processes.

In Zimmerman's words (2000), "being able to self-regulate is the strongest ability of individuals". Moreover, Self-regulation theory has gained importance in the field of education due to its significance and benefits in learners' academic achievement and self-efficacy beliefs (Zimmerman et al., 1992). Self-regulation helps learners become more effective and in control of their learning process by giving them the independence to follow and evaluate their progress. It is highly important for learners to change and improve their behavior and level of effort according to the foreseen consequences and past performances (Zimmerman et al., 1992; Zimmerman & Martínez-Pons, 2012), in other words, they become metacognitive about their learning. While finding some subjects or courses difficult to achieve is quite normal for learners, self-regulatory skills allow learners to self-motivate, discover strategies that will lead them to the best outcome, manage difficulties, supervise their efforts, and plan accordingly (Bandura, 1991; Zimmerman, 1986; Zimmerman et al., 1992). Considering these benefits, it can be stated that teachers' directions and guidance provided to learners can be an effective tool to enhance self-regulatory skills by

precisely informing learners of the required criteria and present deficiencies (Y. B. Chung & Yuen, 2011). Hawk and Shah (2008) state that most learners seek feedback since it helps them monitor their learning and take further action accordingly. Furthermore, feedback can be quite significant for the interaction between the learners and the environment around them, including peers, teachers, and the physical components (Y. B. Chung & Yuen, 2011). Thus, feedback, regardless of its source, influences and improves learners' self-regulatory skills, resulting in higher achievement.

2.2. Literature Review

2.2.1. Research on the Effects of Feedback on Writing Achievement

Research indicates that providing learners with feedback enhances their writing skills, resulting in higher levels of writing achievement. For instance, Fathman and Whalley (1990) conducted a study including 72 intermediate ESL learners in a college composition course to investigate the effects of grammar and content feedback on learners' writing achievement. Dividing learners into four groups according to the feedback conditions, learners were required to write stories according to the set of pictures provided in thirty minutes. The results of the study showed that the learners provided with feedback surpassed the learners who received no feedback in terms of grammar and content of their writings. Whether given separately or simultaneously, both types of feedback improved learners' writing performance, indicating the positive

effect of feedback on overall writing achievement. Another study conducted by Ferris and Roberts (2001) to measure the impact of feedback on the writing skills of seventy-two college-level students showed that the written products of the no-feedback group were less accurate and successful in terms of grammar and sentence structure. On the contrary, the groups who received feedback performed better than their counterparts. Chandler (2003) examined the writings of thirty-one learners in terms of grammatical and lexical errors. While the experimental group received feedback on both content and grammatical errors, the control group did not receive feedback and was only allowed to edit their writing without any specification of the errors. The results of the study showed that the experimental group outperformed the control group at the end of the 14-week study, indicating the positive impacts of feedback on learners' accuracy in writing. Also, it was found that solely practicing writing without receiving feedback on errors did not lead to improvement in learners' writing performance. Following her study with Roberts in 2001, Ferris (2006) conducted another study to analyze the effects of feedback. Working with ninety-two ESL learners and three teachers, tapes, notes, and transcriptions of the learner interviews were analyzed in addition to learners' written products. Learners were asked to write four assignments relevant to the topics of readings provided during the semester. For each assignment, learners received error corrections to edit their texts. At the end of the study, a direct correlation between error correction and improvement in learners' writing achievement was supported by the findings. The results indicated that a significant decrease was observed in learners' errors through the provision of feedback. Beuningen et al. (2012), in addition, investigated direct and indirect corrective feedback on learners' overall

writing accuracy. They divided a hundred thirty-four learners into four groups including two experimental and two control groups. While experimental groups received direct and indirect corrective feedback separately on their written products, one of the control groups self-corrected their writings, and the other group was only provided with more practice without receiving any type of feedback. According to the results, the experimental groups performed better than the control groups on the post- and delayed post-tests. Moreover, the results suggested that corrective feedback is a practical and helpful tool that improves learners' accuracy in teaching writing. To examine the efficacy of written corrective feedback, Elfiyanto et al. (2021) conducted research including 162 learners from two different high schools. In this three-week-long study, learners are divided into three groups: a teacher-feedback group, a peer-feedback group, and a self-correction group. Learners in each group composed five argumentative essays in 40 minutes and learners' pre-test and post-test essays were used as the tools to obtain results. To standardize the amount and quality of feedback, teachers and learners are provided with a feedback checklist that includes sections about accuracy and fluency of writing. At the end of the study, an increase in the accuracy and writing achievement of all three groups was observed.

While there are studies that examine the overall writing accuracy of learners, there are other studies that examined the learning of some specific structures in English. To give an example, Sheen (2007) studied the effect of written corrective feedback on the learning of English articles "a" and "the". Being one of the subjects that ESL and EFL learners have difficulty with, this quasi-experimental study included a hundred-one intermediate learners between the ages of 21 and 56. Dividing learners into three

groups and implementing pre-test, post-test, and delayed post-test, feedback on the articles was given in isolation. The results of the study revealed that written corrective feedback enhanced the learning of English articles, positively affecting learners' writing achievement. Also, Bitchener and Knoch (2010) conducted a ten-month study with fifty-two low-intermediate learners, focusing solely on the use of articles. Composing four groups, the control group received no feedback, while the three other groups received varying feedback combinations on the correct use of articles. Each learner was required to produce five written products. After the analysis of learners' writings and errors, it was found that the three groups provided with feedback surpassed the control group in the accurate use of articles. Furthermore, the result implicated that the use of corrective feedback can ease and enhance the learning of simple English structures and forms.

2.2.2. Research on the Effects of Feedback on Writing Motivation

Research shows that feedback enhances learners' writing motivation by encouraging them to take writing courses and engage in writing activities. For instance, Guilloteaux and Dörnyei (2008) investigated the impacts of motivational strategies on learners' motivation levels, including feedback. One thousand three hundred learners and twenty-seven teachers participated in their large-scale study and completed a self-report questionnaire. In addition to the questionnaire, the researchers conducted a classroom observation to obtain qualitative data. The results of the study showed that the use of feedback as a motivational strategy increased learners' motivation and active engagement in the courses. Hamidun et al. (2012) examined the effects of immediate

feedback on thirty-four international learners' motivation levels. In addition to the analysis of learners' written products, the data obtained from classroom observations and interviews with learners along with the implementation of pre-test and post-test. The results indicated that immediate and meaningful feedback led to an increase in learners' writing motivation and encouraged them to participate in writing activities. In a study including fifty-four Iranian EFL learners (Zarei et al., 2020), the influences of oral corrective feedback on learners' motivation levels were investigated through the use of motivation questionnaire and semi-structured interviews with learners. The results revealed that feedback enhances learners' motivation, and there is a positive correlation between learners' motivation and receiving feedback. Contrary to the positive results revealed by these studies, Carless's study (2006) provided quite different results. Carless implemented a large-scale motivation questionnaire for learners from eight different universities located in Hong Kong. The results showed that learners feel less motivated when they receive feedback due to their fear of negative judgment from their teachers. As a result, it can be stated that the relationship between motivation and feedback is unstable, and contradictory results may be obtained in different studies.

2.2.3. Research on the Effects of Feedback on Writing Anxiety

Research demonstrates that feedback can have contradictory effects on learners. While some learners feel more comfortable with receiving feedback, others can be anxious due to their fear of negative judgment. For instance, Loreto and McDonough (2013) examined the relationship between teacher feedback and learners' anxiety

levels of fifty-three ESL learners in a five-month long period. Learners were required to complete integrative writing tests and five anxiety questionnaires periodically. After each writing test, learners were provided with corrective feedback on their errors. The data obtained showed that learners felt more anxious when they received feedback. However, the study also indicated the importance of learners' feedback perceptions by showing that positive perceptions led to lower anxiety levels in learners. According to this study, it can be stated that while feedback may cause higher levels of anxiety, the feedback practice may result in more positive consequences. Rezaei and Jafari (2014) conducted a study using 120 EFL learners from two higher education institutions. To reveal the causes of writing anxiety, they implemented the Second Language Writing Anxiety Inventory (SLWAI) by Cheng (2004), the Causes of Writing Anxiety Scale developed by the authors, and conducted semi-structured interviews with learners. The results showed that learners felt anxious when they received feedback due to the fear of negative judgment that comes from the teacher, representing an authority figure for learners. Other studies by Fareed et al. (2021) and Rasool et al. (2023) presented similar results. According to these studies, learners were anxious to receive negative feedback from more knowledgeable people, their teachers. Unlike previous research, Genç and Yaylı (2019) examined two hundred fifty-seven undergraduate EFL learners to investigate the reasons for writing anxiety. The data were obtained by implementing SLWAI by Cheng (2004), a questionnaire with open-ended questions, and interviews. The results showed that learners experienced high or moderate levels of writing anxiety due to the lack of effective feedback from their teacher, leading them to question their performances.

2.2.4. Research on the Effects of Automated Feedback on Writing Achievement

The results of a fairly limited number of studies show that the implementation of automated feedback in writing evaluation and feedback processes can lead to positive outcomes in learners' writing achievement. El Ebrary's (2010) study examined five hundred forty-nine prospective English teachers' writing development. Criterion was used as an automated feedback tool. Participants' writings, interviews, and questionnaires were analyzed to obtain data. The results showed that the use of Criterion positively affected learners' writing achievement by improving accuracy. Kellogg et al. (2007) investigated the effectiveness of automated feedback by using Criterion to examine the impacts of it on fifty-nine EFL learners' writing achievement. Three groups including a control group and two experimental groups were formed according to the feedback conditions. While one of the experimental groups received continuous automated feedback, the other experimental group received automated feedback intermittently. On the other hand, the control group did not receive feedback completely. The results suggested that while the experimental groups outperformed the control group, the group that received continuous feedback from Criterion was more accurate than the intermittent feedback group. Also, Cheng (2017) conducted a study involving fifty-four EFL learners. Dividing learners into two groups, the experimental group received automated feedback on their reflective essays. According to the results, the control group underperformed the experimental group in terms of writing achievement and overall reflective essay points. Unlike previous studies, Altuntaş (2021) compared the efficacy of automated feedback and teacher feedback on learners' writing achievement. Including ninety-one EFL learners, three groups

were formed. While one of the two experimental groups received only automated feedback, the other experimental group received both automated and teacher feedback. The control group received only teacher feedback. During the procedure, learners were required to write six essays. At the end of the study, learners' first and last essay drafts were gathered for analysis. The results showed that automated feedback increased learners' overall writing achievement. However, the study suggests that the combination of automated and teacher feedback is the most effective method for learners' improvement. On the other hand, Taşkıran and Göksel (2022) conducted a nine-week study including learners from an open education institution. During the procedure, while participants received teacher feedback in the first three weeks, they received automated feedback in the last three weeks. At the end of the procedure, learners' writings and scores were analyzed. Different from the previously mentioned studies, the results showed that while receiving regular feedback resulted in improvement in writing, teacher feedback increased learners' writing achievement slightly more than automated feedback.

2.2.5. Research on the Effects of Automated Feedback on Writing Motivation

The research shows that automated feedback increases learners' writing motivation. Wilson and Czik (2016) conducted a large-scale study aiming to identify the effects of automated feedback on learners' writing motivation and quality. While four eighth-grade classes received both teacher and automated feedback on their writings, the other four eighth-grade classes received only teacher feedback. The results implicated that even though there was no significant difference between the

quality improvement rates of groups, the motivation levels of the learners who received both types of feedback increased.

2.2.6. Research on the Effects of Automated Feedback on Writing Anxiety

According to a limited number of studies, automated feedback can decrease learners' writing anxiety. For example, Waer (2023) examined the effects of automated feedback on learners' writing apprehension and grammatical quality by forming two groups: a control group and an experimental group. While the control group received only teacher feedback on their writings, learners in the experimental group received feedback from Cambridge "Write&Improve". In terms of learners' writing apprehension, the results showed that automated feedback can be a useful tool to reduce learners' writing anxiety. Another study by Cahyono et al. (2023) investigated the strategies teachers use to reduce learner anxiety. The data was obtained from interviews with teachers and questionnaires given to 274 learners. The results showed that teachers preferred automated feedback tools to alleviate learners' writing anxiety. In addition, learners expressed that the implementation of these tools helped them reduce their anxiety.

2.2.7. Summary

The review of the research points out the significance of feedback during the process of teaching writing and its effects on learners' writing achievement, motivation, and anxiety. The existing literature suggests that writing motivation and anxiety can be either debilitative or facilitative factors in developing learners' writing

achievement. Learners who lack motivation generally tend to avoid writing and fail, while motivated learners are eager to participate in writing-related activities and develop higher writing achievement. On the other hand, writing anxiety can possess detrimental impacts on learners' writing performance. The research indicates that learners with high levels of writing anxiety are less motivated toward writing activities and less successful while dealing with other problems resulting from writing anxiety such as academic failure, difficulty in reaching unrealistic expectations that they form, and low self-esteem. Yet, the review of the literature shows that feedback, an indispensable tool for teaching and learning, can have positive effects such as increasing learners' motivation to write and decreasing the anxiety learners struggle with. However, not every learner responds to teacher feedback as the same. Moreover, it is not always possible to reach each learner in the classroom for the teacher due to the crowded classrooms and restrictions of time and place. Therefore, implementing automated feedback in writing courses is seen as a reasonable and worthwhile solution. Through the use of it, learners can access necessary feedback without being in the classroom with the teacher. Although its popularity among learners and teachers has been increasing in recent years, there is little research on its possible effects on learners' writing achievement, writing motivation, and anxiety. Thus, a further examination of the effects of automated feedback on learners' writing achievement, writing motivation, and anxiety is significant.

3. METHODOLOGY

The following section includes the introduction of this study. Therefore, first, the research design is described. Second, the participants in the study are described. Later, the tools used to obtain data are presented. After the presentation of the tools, the procedures are explained. Eventually, the process of data analysis is presented.

3.1. Research Design

The study mainly aims to examine the effects of automated feedback on foreign language learners' writing achievement, writing motivation and anxiety. First, it intends to analyze the effects of traditional teacher feedback and automated feedback on language learners' writing achievement, writing motivation and anxiety. In addition, the study aims to examine whether there is a difference in learners' writing achievement, anxiety, and motivation levels in the use of teacher feedback and automated feedback. Therefore, it adopts a quasi-experimental research design. In this type of research design, already existing groups are used instead of randomly assigning participants (Creswell, 2014). Although the use of preexisting groups is considered a limitation since it lacks randomization, it is practical and natural (Shadish et al., 2002). As in experimental research design, the study includes an experimental group that receives treatment and a control group receiving no treatment, helping examine the effects of the treatment.

3.2. Participants

The study included 26 students studying at the English Language Teaching (ELT) department of Istanbul Kultur University, a foundation university in Istanbul, Turkiye. While 18 of the participants were females (69.30%), eight of them were males (30.70%). The mean age of the participants was 20.53 while the minimum age was 18 and the maximum age was 31. Since preparatory school is compulsory for all students, they must complete the preparatory school before transferring to the department by successfully passing the preparatory exam held at the beginning of each term. During the preparatory school, students attended 23 hours of intensive English courses each week including courses focused on four language skills: speaking, listening, reading, and writing. At the end of each term, students were allowed to take the proficiency exam to be transferred to their main departments in case of success. As a result, all of the students who participated in the study completed the preparatory school. Their English proficiency was B1 level and they were in the first grade of the ELT department. In Table 1 below, the demographic information of the participants can be seen.

Table 1

Demographic Information of the Participants

	Control			Experimental			Total		
	Min.	Max.	M.	Min.	Max.	M.	Min.	Max.	M.
Age	18	31	21.69	18	22	19.38	18	31	20.53
Gender	5 Male (38.46%) 8 Female (61.53%)			3 Male (23.07%) 10 Female (76.92%)			8 Male (30.70%) 18 Female (69.30%)		
Department	English Language Teaching								
Grade	1								
Proficiency level	B1								

Furthermore, a focus group study was needed to discover and examine the possible causes of the results obtained after the analysis. Five participants from each group were randomly selected and a 30-minute meeting was carried out separately. Six participants were female while four participants were male. The age of the participants ranged from 18 to 31 years old, with the average being 20.6.

3.3. Tools

In the study, four scales were used to collect data on participants' demographic information, writing motivation, writing anxiety and writing achievement (See Appendix A) and a focus group interview was carried out including five participants from each group. The demographic information questionnaire was needed to obtain data on learners' background information including questions on participants' age,

gender, grade, department, current proficiency levels, and hours of English courses taken. Academic Writing Motivation Questionnaire (AWMQ) by Payne (2012) was used to investigate the participants' level of writing motivation. In addition, to recognize the participants' level of writing anxiety, the Second Language Writing Anxiety Inventory (SLWAI) by Cheng (2004) was implemented. Finally, to examine the participants' writing achievement, two writing tasks were used for pretest and posttest implementation.

The AWMQ includes 37 items that participants were expected to answer according to the five-point Likert Scale as 1= Strongly Disagree, 2= Disagree, 3= Uncertain, 4= Agree and 5= Strongly Agree for each statement. The total of 37 statements included five different dimensions involving 13 items for enjoyment, eight items for self-efficacy, five items for instrumentality, four items for recognition and three items for effort, accounting for 73.69% of variance identified by exploratory factor analysis (Payne, 2012). Therefore, through AWMQ, it is possible to measure participants' both intrinsic and extrinsic motivation (Payne, 2012). With a reliability coefficient of .95 found by Cronbach's alpha, the AWMQ exhibited a prominent internal consistency. Considering the reliability and variety of the questionnaire, it is stated that the AWMQ is a valid tool to measure learners' academic writing motivation.

To measure the level of participants' writing anxiety, the SLWAI by Cheng (2004) was employed. SLWAI included 22 statements that participants were required to answer according to the five-point Likert Scale ranging from 1 to 5 including statements as follows: 1= Strongly Disagree, 2= Disagree, 3= Uncertain, 4= Agree and

5= Strongly Agree. The statements include three main dimensions including the participants' avoidance, cognitive and somatic behavior toward writing in a second language. The SLWAI possessed an alignment with the multiple dimensions of anxiety, accounting for 48% of variance identified by exploratory factor analysis (Y.-S. Cheng, 2004). Indicating a high level of reliability, the coefficient value is determined as .91 by Cronbach's alpha. Therefore, the SLWAI was considered a valid and reliable tool to measure learners' level of writing anxiety.

In addition, to evaluate participants' level of writing achievement, two writing tasks were used in the pre-test and post-test, taken from Cambridge ESOL. While determining the tasks, it was ensured that the participants' proficiency levels matched those of the selected writing tasks. In addition to the proficiency levels of the tasks, it was aimed to include different types of essays such as opinion essays, descriptive essays, and review essays. The reliability coefficient value of the writing achievement tasks was .78 while the percentage of variance of the writing achievement tasks was 52.63%. Furthermore, to ensure the reliability of the evaluation, the tasks were also scored by a co-rater.

Table 2

Reliability Coefficients

	Reliability Coefficients (Cronbach's Alpha)	% of the Variance
AWMQ	.95	73.69%
SLWAI	.91	48.00%
Writing Achievement	.78	52.63%

Finally, to understand the results further and the reasons behind the differences in learners' writing achievement, writing motivation and anxiety, a focus group was held with 10 participants, including five participants from the control group and five participants from the experimental group. To ensure that the opinions received were original and free, each group was interviewed separately and it lasted approximately 30 minutes for each group. Six questions were prepared on writing achievement, writing motivation and anxiety to investigate and examine the opinions of the participants. In this face-to-face focus group interview, the participants' answers were noted down by the researcher. All personal information of the participants was hidden and used anonymously in the study.

3.4. Procedure

After obtaining the necessary ethics committee permission documents from Istanbul Kultur University, Faculty of Education (See Appendix B), participants were given thorough information including the objective, procedure and significance of the

study to be conducted. It was particularly emphasized that the study was voluntary. Participants were informed and guaranteed that their information would be used anonymously for scientific purposes only and that their data would be kept completely confidential. To obtain the participants' permission, they were given a consent paper to be signed at the beginning of the data collection process.

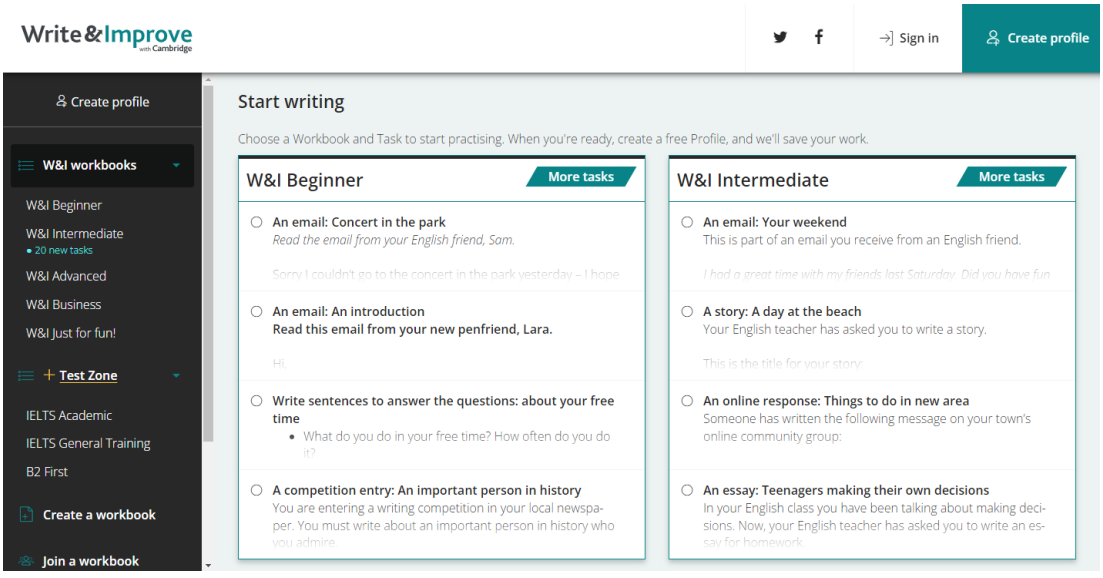
The study took place in the Fall semester of the 2023-24 academic year and lasted for six weeks including the 4-week long treatment process and pre-test and post-test employment. Participants were required to complete a writing task for each week during the practice process. A pre-existing classroom including 26 students was used and the participants were randomly divided in half and assigned to the control and experimental groups. Later, the pre-test was employed in both groups to obtain the pre-treatment data regarding their background information, writing achievement, writing motivation, and anxiety. In total, participants were asked to respond to the background questionnaire, the AWMQ and SLWAI as well as a writing test taken from Cambridge ESOL for the pretest. During the treatment process, participants were asked to complete a writing task for each week under the control of the teacher. While the control group used pen and paper to complete the writing tasks and evaluated according to the Writing Assessment Scale developed by Cambridge English Qualifications, the experimental group used Write&Improve, an online automated feedback tool designed and developed by Cambridge University that enables students to receive immediate, automated, and individualized feedback. At the end of the practice process which lasted for four weeks, all participants took the post-test, including the writing achievement task adopted from Cambridge ESOL, the AWMQ,

and SLWAI. After the post-tests, a focus group interview consisting of six questions was carried out with ten participants, involving five participants from each group. The interview was held face-to-face and lasted for approximately 60 minutes in total.

3.4.1. Write&Improve

"Write&Improve" is an online platform developed by Cambridge English and designed for EFL learners. This tool evaluates users' writing skills in a wide range from level A1 to level C2 according to the CEFR criteria and provides instant automated feedback. The platform offers users writing tasks of varying difficulty levels and sets a specific writing prompt, content recommendations, and minimum word count requirements for each task.

Figure 1 Write&Improve's Interface



The interface is enhanced so that users can effectively process the texts they write and the feedback they receive. Articles and feedback are presented visually in separate

sections. After uploading their articles to the system, users start the evaluation process via the "Check" button. The system performs a detailed analysis of spelling, grammar, word choice and stylistic features and visually indicates areas that need improvement in the text using the sentence-level shading technique.

This process allows users to revise their writing based on the feedback they receive and repeat this process as many times as they wish, thus providing an opportunity for continuous improvement and learning. Additionally, the platform offers a timer feature for individuals who want to improve their time management skills, making the feature particularly useful for individuals preparing for time-limited exams.

Figure 2 Write&Improve's Task Interface

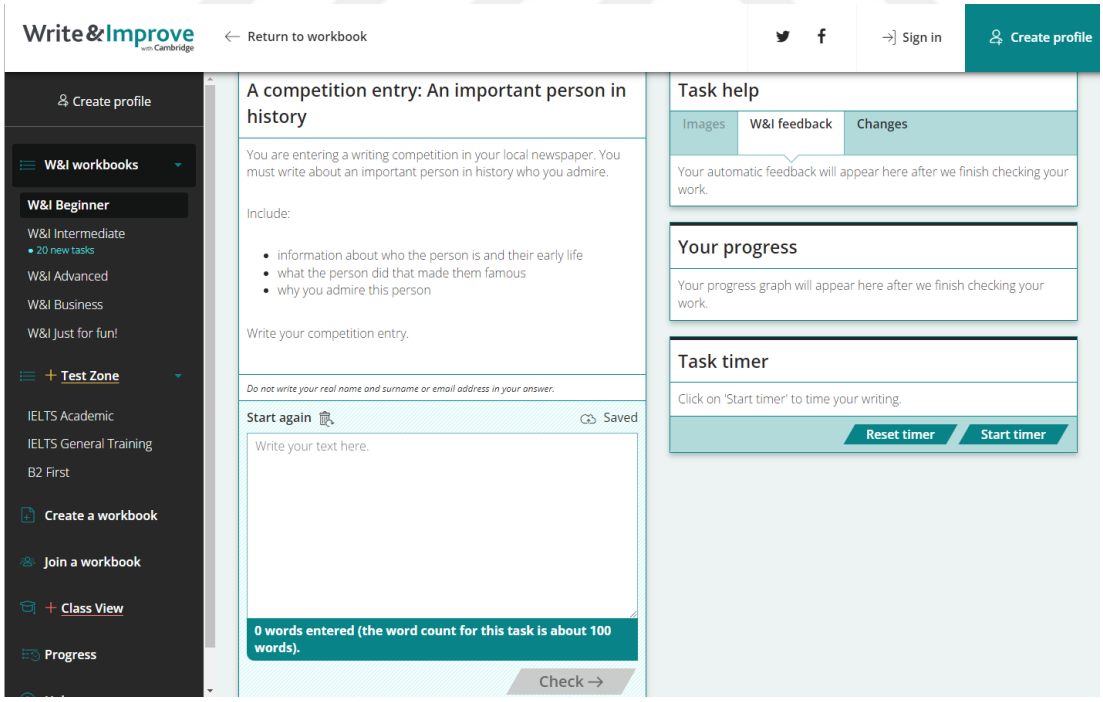
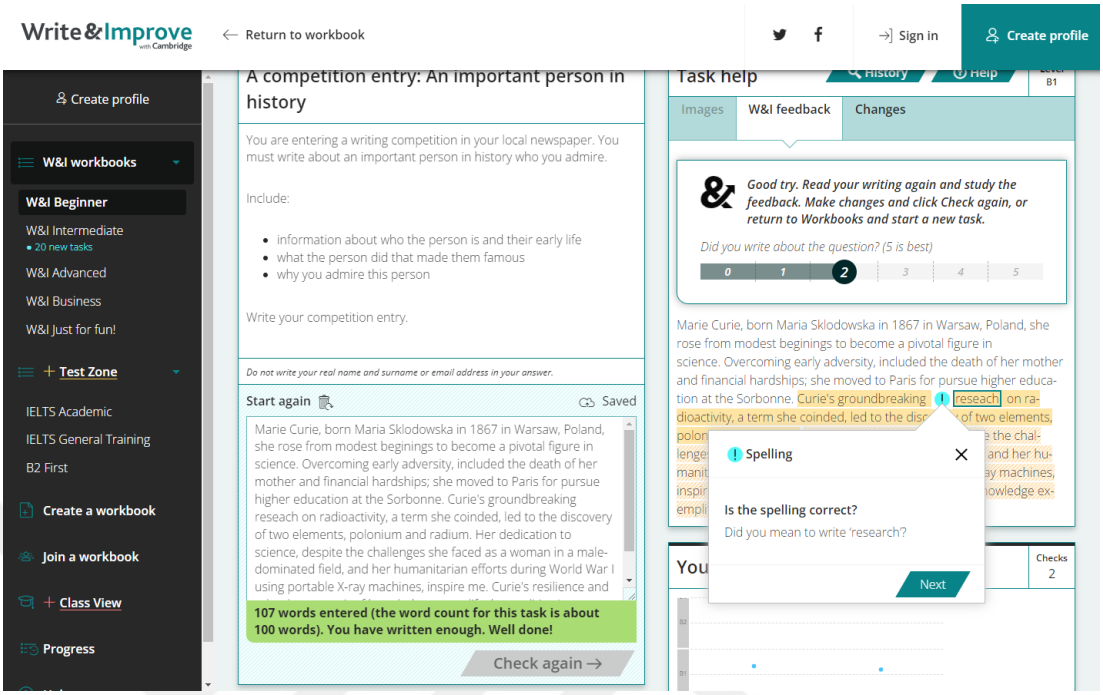


Figure 3 Write&Improve's Feedback Interface



Write & Improve is defined by Cambridge English as a constantly updated system, and this dynamic structure ensures that the platform always remains up-to-date and effective. The rapid and continuous feedback provided by the platform encourages students to work and learn independently, offering students a faster development and adaptation process, unlike traditional teacher feedback. Accordingly, Write & Improve supports writing improvement with an effective and student-centered approach.

3.4.2. Pretest administration

At the beginning of the study, the background information questionnaire consisting of six questions was distributed to the participants to obtain background information. Through this questionnaire, information on the following was aimed to be obtained:

participants' age, gender, grade, English proficiency levels, department, and weekly hours of English classes. After completing the background information questionnaire, participants answered the AWMQ to measure their writing motivation level and SLWAI to measure their writing anxiety which took around 20-25 minutes. The participants were allowed to use dictionaries or ask about the meanings of the unknown words as they were answering the questionnaires. Additionally, after the questionnaires were answered, participants were given 60 minutes to complete the writing achievement task. To obtain valid data on their current writing achievement levels, participants were not permitted to use dictionaries or consult each other about the meanings of unknown or forgotten words. Each of the tools used in the pretest was given as hard copies.

3.4.3. The practice process

During the 4-week long practice process, the participants were asked to complete pre-determined writing tasks taken from Write&Improve by Cambridge University between 200-250 words. All of the writing tasks were chosen from the Write&Improve Advanced category so that both the control and experimental groups could perform the same tasks. Before each task, participants were informed about the specific type of essay types including the distinct characteristics and example essays. They were asked to examine the provided examples in groups. The questions of participants were answered by the teacher before the actual writing task. In addition, the control group of the study used pen and paper to complete the tasks as they acted as the baseline in this study. The experimental group, however, used computers and completed the

writing tasks using Write&Improve. While the control group received traditional teacher feedback, the experimental group received immediate and automated feedback from Write&Improve.

Before the beginning of the practice process, all participants were informed about the practice process in detail. Furthermore, the participants in the experimental group received particular instruction on the use of Write&Improve to enhance their use and familiarize them with the feedback tool by practicing example tasks beforehand. During the process, instructions were given to the participants before each task and discussions and brainstorming activities were held. As shown in Table 3, the practice process continued for four weeks.

Table 3

The Practice Process

Weeks	Writing Task	Instruction	Type of Feedback	
			Control Group	Experimental Group
Week 1	Writing an opinion essay about the main problems of Turkish teenagers by describing causes and providing solutions	Characteristics of an opinion essay, descriptive essay, and review.	Teacher Feedback	Automated Feedback
Week 2	Writing a descriptive essay about a way of relaxing by implying its importance in today's world.	How to express an opinion		
Week 3	Writing a review describing the best and worst films you have seen and giving reasons for these choices.	How to support opinions and provide reasons Brainstorming Discussions		
Week 4	Writing an essay discussing two of the areas in the notes given, identifying which area has benefited more from the internet and giving reasons for the specific choice.	Teacher Feedback Automated Feedback		

Week 1

In the first week of the practice process, the participants were instructed on how to write an opinion essay, its steps, and general rules including the presentation of example essays. To enhance and check their comprehension, several paragraph matching and completion exercises were employed. In this stage, all participants were asked to write an opinion essay about the main problems of Turkish teenagers by describing causes and providing solutions in 200-250 words. For this task, they were given sixty minutes to complete. The participants in the control group received their writing task on paper while the experimental group used Write&Improve to write their essays. When the task was completed, control group participants returned their papers to the teacher. On the other hand, the experimental group already received their feedback from the tool during the writing process.

Week 2

In the second week, participants were asked to write a descriptive essay about a way of relaxing by implying its importance in today's world in 200-250 words. Since the concept of writing a descriptive essay is not perfectly familiar to current participants, particular attention to the instruction and practice process was paid. The instruction process included a variety of examples of descriptive essays, emphasizing the importance of similes and metaphors and how to express sensory details. In addition, participants were provided with some pictures and photographs to practice descriptive writing to help them reach full comprehension. The short descriptive

paragraphs written by participants were discussed with the whole class. Finally, the writing task was handed to the control group participants on paper while the experimental group used Write&Improve to complete the task. Participants were given sixty minutes to finish the task.

Week 3

In the third week of the practice process, participants were asked to write a movie review implying the best and worst films they have watched in 200-250 words. To inform participants about the specific type of writing, a presentation on how to write a review including the general rules, vocabulary choice, and how to address the audience with appropriate examples was presented to them. Later, they were provided with a few reviews and asked to improve these writings in groups, aiming to help participants brainstorm and work collaboratively for better comprehension. Before the writing process, all participants were allowed to search for films online since it was important for them to browse and remember the films they considered best and worst to avoid any negative effects on their writing skills. When the deciding period finished, the control group received the writing task on paper and the experimental group used Write&Improve to write their reviews. Participants were given sixty minutes to complete the tasks.

Week 4

In the last week of the practice process, participants were required to write an essay discussing which area has benefited the internet the most. A few example areas were

given on the task to provide ideas to participants. In addition, a discussion was held to contribute the number of areas by the participants so that they could have a variety of topics to mention. Through this discussion and brainstorming, it was aimed to ensure that they internalize the subject thoroughly. The ideas given by the participants were written on the board along with the already provided ones and they were allowed to use any of the ideas and areas noted on the board. Once the instruction process was completed, the control group received the last writing task on paper and the experimental group used Write&Improve. Participants had sixty minutes to complete the task.

3.4.4. The posttest administration

At the end of the practice process, the writing achievement task, the AWMQ, and SLWAI were employed to find whether there were any changes in the participants' level of writing achievement, writing motivation and anxiety following the practice process.

3.5. Data Analysis

To analyze the data, The Statistical Package for Social Sciences (IBM SPSS Statistics 21.0 software) was used. Initially, the maximum, minimum and mean of the participants' ages were analyzed. Then, the participants' gender percentages and numbers were computed. Later, through Cronbach's Alpha, the reliability of the scales and writing achievement tasks was computed as well as varimax rotation for both the pretest and posttest.

As presented in Table 4 below, the reliability coefficient value of the AWMQ for the pre-test was .94, and .95 for the post-test. The percentage of variance of the AWMQ for the pre-test was 85.41% and 84.41% for the post-test. For SLWAI, the reliability coefficient of the pre-test was .82, and .72 for the post-test. The percentage of the variance of the SLWAI was 77.31% for the pre-test and 81.21% for the post-test. In addition, the reliability coefficient value of the writing achievement tasks was calculated as .70 for the pre-test and .73 for the post-test. The percentage of variance of the writing achievement tasks was 52.63% for the pre-test and 55.60% for the post-test.

Table 4

Reliability Coefficients and Percentage of the Variance of the Pre and Post-tests

	Reliability Coefficients (Cronbach's Alpha)	**% of the Variance**
Pre-test AWMQ	.94	85.41%
Post-test AWMQ	.95	84.41%
Pre-test SLWAI	.82	77.31%
Post-test SLWAI	.72	81.21%
Pre-test Writing Achievement Task	.70	52.63%
Post-test Writing Achievement Task	.73	55.60%

For further analysis of the data, non-parametric methods were employed since the number of participants was small and could not be regarded as a normal distribution. Descriptive analysis, the Wilcoxon analysis, and Mann-Whitney U analysis were used to analyze the data. First, to find the mean scores of the pre-test and post-test results, descriptive analysis were carried out. Then, the Wilcoxon analysis was employed to examine whether there were any changes between the pre-test and post-test results of the control and experimental groups' writing achievement, motivation and anxiety levels caused by the practice process. In addition, the Mann-Whitney U analysis was carried out to compare whether there were any significant differences between the scores of the control and experimental groups' writing achievement, motivation, and anxiety after the implementation.

In addition to other analyses carried out in the study, a focus group interview was held and the data obtained from the interview were examined in detail. A total of six questions were asked during the focus group interview, which was held face-to-face with a total of ten participants (five from the control group and five from the experimental group) and lasted 30 minutes for each group. Each participant's answers were carefully noted and then analyzed by the researcher. The analysis process was carried out with the aim of an in-depth evaluation of the participants' opinions and determining the differences between the control and experimental groups. The personal information of the participants was kept confidential and the data was

processed completely anonymously. The findings obtained in this process will be discussed in the next sections of the study.

4. FINDINGS

In this section, the results obtained from the analysis are presented concerning the research questions. First, the effects of teacher feedback on participants' writing achievement, motivation, and anxiety levels are presented. Second, the effects of automated feedback on participants' writing achievement, motivation, and anxiety levels are provided. Lastly, the results of the control and experimental groups are compared to investigate whether there is any significant difference in their level of writing achievement, motivation, and anxiety.

4.1. Research Question 1: Does teacher feedback affect the level of writing achievement, anxiety, and motivation levels among foreign language learners?

4.1.1. The overall writing achievement scores of the control group

Table 5 presents the mean scores, standard deviation, and minimum and maximum scores of the control group's pre-test and post-test overall writing achievement scores. As shown in the table, while participants' overall writing achievement scores had a mean of 13.31 in the pre-test, it decreased to 12.54 in the post-test.

Table 5

The Mean Scores for Overall Writing Achievement Scores of the Control Group (Wilcoxon test)

	N	Mean	Std. Deviation	Minimum Score	Maximum Score
Pre-test	13	13.31	2.72	8	18
Post-test	13	12.54	1.94	9	16

Table 6 compares the pre-test and post-test scores for the overall writing achievement of the control group including the number of positive and negative ranks, mean ranks, sum of ranks, and significance level of the comparison. According to the results, five of the participants' writing achievement scores decreased with a mean rank of 6.40 while four of the participants' scores increased with a mean rank of 3.25. In addition, four participants' writing achievement scores showed no difference after the implementation. With a significance level of .26, it can be stated that there is no significant difference in participants' writing achievement scores between the pre-test and post-test.

Table 6

Comparison of the Pre and Post-test Scores for Overall Language Achievement of the Control Group (Wilcoxon test)

	Ranks	N	Mean Ranks	Sum of Ranks	Asymp. Sig. (2-tailed)
Pre-test - Post-test	Negative Ranks	5	6.40	32.00	.26
	Positive Ranks	4	3.25	13.00	
	Ties	4			
	Total	13			

4.1.1.1. The content achievement, communicative achievement, organization and language use scores of the control group

Table 7 below presents the mean, minimum, and maximum scores and standard deviation values of content achievement, communicative achievement, organization and language use of the control group. As seen in the table, the control group's content achievement mean score was 3.31 before the implementation and 2.92 after the implementation, indicating that the control group's content achievement decreased after the implementation process. In terms of communicative achievement scores, the participants in the control group had a mean of 3.15 in the pre-test scores and it was 3.15 in the post-test, indicating no difference in participants' mean scores of communicative achievement between the pre-test and post-test implementation. For organization, the participants in the control group had a mean of 3.77 in the pre-test and 3.62 in the post-test. Finally, the participants' language use scores had a mean of

3.08 in the pre-test and 2.85 in the post-test, showing a decrease in the participants' language use score after the implementation.

Table 7

The Mean Scores for the Content Achievement, Communicative Achievement, Organization and Language Use Scores of the Control Group (Wilcoxon test)

		N	Mean	Std. Deviation	Minimum	Maximum
Content Achievement	Pre-test	13	3.31	.75	2	5
	Post-test	13	2.92	.76	2	4
Communicative Achievement	Pre-test	13	3.15	.80	2	5
	Post-test	13	3.15	.69	2	4
Organization	Pre-test	13	3.77	1.17	2	5
	Post-test	13	3.62	.65	3	5
Language Use	Pre-test	13	3.08	.87	2	5
	Post-test	13	2.85	.69	2	4

Table 8 compares the pre-test and post-test scores for content achievement, communicative achievement, organization and language use scores of the control group including the number of positive and negative ranks, mean ranks, sum of ranks, and significance level of the comparison. As seen in the table, four of the participants' content achievement scores decreased with a mean rank of 3.25 while one participant's content achievement score increased with a mean rank of 2.00. In addition, it is seen that eight of the participants' content achievement scores did not show any difference. Since the significance value was .13, there is no significant difference in the

participants' content achievement scores between the pre-test and post-test. In addition, communicative achievement scores of three participants were lower in the post-test with a mean rank of 10.50 while three participants' communicative achievement scores increased with a mean rank of 10.50. In addition, seven of the control group participants' communicative achievement scores remained the same as in the pre-test. With a significance level of 1.0, it can be stated that no significant difference was encountered between the pre and post-test scores. In terms of organization, five participants' scores decreased with a mean rank of 6.50 while the organization scores of five participants increased with a mean rank of 4.50 after the implementation. Also, the scores of the three participants showed no difference in the post-test. Although little differences can be seen according to the results, there is no significant difference between the pre-test and post-test results. Lastly, six participants' language use scores decreased with a mean rank of 5.00 while the language use scores of three participants increased with a mean rank of 5.00 after the practice process. However, no significant difference was encountered between the pre and post-test scores due to the significance level of .32.

Table 8

The Comparison of Pre and Post-test Scores for Content Achievement, Communicative Achievement, Organization and Language Use of the Control Group (Wilcoxon test)

		N	Mean Ranks	Sum of Ranks	Asymp. Sig. (2-tailed)
Content Achievement	Negative Ranks	4	3.25	13.00	.13
	Positive Ranks	1	2.00	2.00	
	Ties	8			
	Total	13			
Communicative Achievement	Negative Ranks	3	3.50	10.50	1.0
	Positive Ranks	3	3.50	10.50	
	Ties	7			
	Total	13			
Organization	Negative Ranks	5	6.50	32.50	.59
	Positive Ranks	5	4.50	22.50	
	Ties	3			
	Total	13			
Language Use	Negative Ranks	6	5.00	30.00	.32
	Positive Ranks	3	5.00	15.00	
	Ties	4			
	Total	13			

4.1.2. The writing motivation level of the control group

Table 9 shows the motivation level of the participants in the control group indicating the mean score, standard deviation as well as minimum and maximum means. As the table presents, while the mean score of the participants' writing motivation was 3.80 in the pre-test, it increased to 3.91 in the post-test.

Table 9

The Mean Scores for Motivation of the Control Group (Wilcoxon test)

	N	Mean	Std. Deviation	Minimum	Maximum
Pre-test	13	3.80	.46	2.97	4.43
Post-test	13	3.91	.62	2.81	4.86

Table 10 below compares the participants' motivation levels of the control group in the pre and post-test including the number of positive and negative ranks, mean ranks, the sum of ranks, and the significance level of the comparison. According to the table, while seven participants' writing motivation levels decreased with a mean rank of 5.43 after the implementation, six participants' motivation levels increased with a mean rank of 8.83. With a significance level of .60, it can be stated that there is no significant change in the participants' level of motivation.

Table 10

Comparison of Pre and Post-test Scores for Motivation of the Control Group (Wilcoxon test)

	Ranks	N	Mean Ranks	Sum of Ranks	Asymp. Sig. (2-tailed)
Pre-test - Post-test	Negative Ranks	7	5.43	38.00	.60
	Positive Ranks	6	8.83	53.00	
	Ties	0			
	Total	13			

4.1.3. The writing anxiety level of the control group

Table 11 shows the writing anxiety levels of the participants in the control group indicating the mean score, and standard deviation as well as minimum and maximum means. As can be seen in the table, while the mean score of the participants writing anxiety was 2.75 in the pre-test, it was calculated as 2.58 after the implementation, displaying a decrease in participants' anxiety toward writing.

Table 11

The Mean Scores for Writing Anxiety of the Control Group (Wilcoxon test)

	N	Mean	Std. Deviation	Minimum	Maximum
Pre-test	13	2.75	.53	1.91	3.86
Post-test	13	2.58	.36	2.14	3.18

Table 12 presents the comparison of the participants' writing anxiety levels of the control group in the pre and post-test consisting of the number of positive and negative ranks, mean ranks, the sum of ranks, and the significance level of the comparison. According to the table, nine participants' anxiety levels decreased after the implementation with a mean rank of 6.28. While three participants' writing anxiety increased, one participant's anxiety level remained the same as before the implementation. However, since the significance level was calculated as .17, the changes in participants' writing anxiety levels cannot be considered significant.

Table 12

Comparison of Pre and Post-test Scores for Anxiety of the Control Group (Wilcoxon test)

	Ranks	N	Mean Ranks	Sum of Ranks	Asymp. Sig. (2-tailed)
Pre-test - Post-test	Negative Ranks	9	6.28	56.50	.17
	Positive Ranks	3	7.17	21.50	
	Ties	1			
	Total	13			

4.2. Research Question 2: Does automated feedback affect the level of writing achievement, anxiety, and motivation levels among foreign language learners?

4.2.1. The overall writing achievement scores of the experimental group

Table 13 presents the overall writing achievement scores of the participants in the experimental group including the mean score, standard deviation as well as minimum and maximum means. According to the table, while participants' overall writing achievement scores had a mean of 13.54 in the pre-test, it was calculated as 14.15 in the post-test, indicating an increase after the implementation.

Table 13

The Mean Scores for Overall Writing Achievement of the Experimental Group (Wilcoxon test)

	N	Mean	Std. Deviation	Minimum	Maximum
Pre-test	13	13.54	2.14	11	18
Post-test	13	14.15	2.79	10	18

Table 14 compares the pre-test and post-test scores for the overall writing achievement of the experimental group presenting the number of positive and negative ranks, mean ranks, sum of ranks, and significance level of the comparison. According to the results, five of the participants' writing achievement scores decreased with a mean rank of 4.40 while six of the participants' scores increased with a mean rank of 7.33. Also, the two participants' overall writing achievement scores did not change

after the implementation. Although there is a slight increase in participants' overall writing achievement scores, there is no significant difference between the pre-test and post-test with a significance level of .32.

Table 14

Comparison of Pre and Post-test Scores for Overall Language Achievement of the Experimental Group (Wilcoxon test)

	Ranks	N	Mean Ranks	Sum of Ranks	Asymp. Sig. (2-tailed)
Pre-test - Post-test	Negative Ranks	5	4.40	22.00	.32
	Positive Ranks	6	7.33	44.00	
	Ties	2			
	Total	13			

4.2.1.1. The content achievement, communicative achievement, organization and language use scores of the experimental group

Table 15 shows the content achievement, communicative achievement, organization and language use scores of the experimental group including the mean score, standard deviation as well as minimum and maximum means. According to the table, while the mean score of the participants' content achievement was calculated as 3.62 in the pre-test, it was 3.46 in the post-test, displaying a decrease after the implementation. For communicative achievement, while the mean score of the participants was 3.15 in the pre-test, it was calculated as 3.23 in the post-test. In terms

of organization, while the mean score of the participants was 3.92 in the pre-test, it increased to 4.08 after the implementation. Finally, participants' mean score of language use was calculated as 3.92 in the pre-test, it increased to 4.08 after the implementation.

Table 15

The Mean Scores for the Content Achievement, Communicative Achievement, Organization and Language Use Scores of the Experimental Group (Wilcoxon test)

		N	Mean	Std. Deviation	Minimum	Maximum
Content Achievement	Pre-test	13	3.62	.87	2	5
	Post-test	13	3.46	.97	2	5
Communicative Achievement	Pre-test	13	3.15	.69	2	5
	Post-test	13	3.23	.92	2	5
Organization	Pre-test	13	3.92	.64	3	5
	Post-test	13	4.08	.86	3	5
Language Use	Pre-test	13	3.00	.71	2	4
	Post-test	13	3.38	.96	2	5

Table 16 below presents the comparison of the pre-test and post-test scores for the participants' content achievement, communicative achievement, organization and language use scores presenting the number of positive and negative ranks, mean ranks, sum of ranks, and significance level of the comparison. As can be seen in the table, while five participants' content achievement scores decreased after the implementation, four participants' content achievement scores increased with a mean

rank of 5.00. Moreover, four participants' scores did not show any difference in the post-test. The significance level was calculated as .75. In terms of communicative achievement, five of the participants' communicative achievement scores decreased with a mean rank of 4.00 while four of the participants' scores increased with a mean rank of 6.25. Also, four participants' communicative achievement scores remained the same after the implementation. Although there is an increase in participants' communicative achievement scores, there is no significant difference between the pre-test and post-test with a significance level of .75. In the matter of organization, two participants' organization scores decreased with a mean rank of 3.50 while four participants' scores increased with a mean rank of 3.25. Also, the organization scores of the seven participants remained the same in the post-test. Although there is an increase in participants' organization scores, there is no significant difference between the pre-test and post-test with a significance level of .41. Finally, two participants' language use scores decreased with a mean rank of 5.00 while seven participants' scores increased with a mean rank of 5.00. Furthermore, the language use scores of the four participants did not show any change in the post-test. Although there is an increase in participants' language use scores, there is no significant difference between the pre-test and post-test scores with a significance level of .10.

Table 16

The Comparison of Pre and Post-test Scores for Content Achievement, Communicative Achievement, Organization and Language Use of the Experimental Group (Wilcoxon test)

		N	Mean Ranks	Sum of Ranks	Asymp. Sig. (2-tailed)
Content Achievement	Negative Ranks	5	5.00	25.00	.75
	Positive Ranks	4	5.00	20.00	
	Ties	4			
	Total	13			
Communicative Achievement	Negative Ranks	5	4.00	20.00	.75
	Positive Ranks	4	6.25	25.00	
	Ties	4			
	Total	13			
Organization	Negative Ranks	2	3.50	7.00	.41
	Positive Ranks	4	3.50	14.00	
	Ties	7			
	Total	13			
Language Use	Negative Ranks	2	5.00	10.00	.10
	Positive Ranks	7	5.00	35.00	
	Ties	4			
	Total	13			

4.2.2. The writing motivation level of the experimental group

Table 17 shows the motivation level of the participants in the experimental group indicating the mean score, standard deviation and minimum and maximum means. As the table presented, while the mean score of the experimental group's writing motivation was 3.72 in the pre-test, it was calculated as 3.70 after the implementation.

Table 17

The Mean Scores for Writing Motivation of the Experimental Group (Wilcoxon test)

	N	Mean	Std. Deviation	Minimum	Maximum
Pre-test	13	3.72	.62	2.51	4.68
Post-test	13	3.70	.58	2.70	4.54

Table 18 compares the participants' motivation levels of the experimental group in the pre and post-test including the number of positive and negative ranks, mean ranks, the sum of ranks, and the significance level of the comparison. According to the table, while six participants' writing motivation levels decreased with a mean rank of 8.25 after the implementation, seven participants' motivation levels increased with a mean rank of 5.93. With a significance level of .78, it can be stated that there is no significant change in the participants' level of motivation.

Table 18

Comparison of Pre and Post-test Scores for Writing Motivation of the Experimental Group (Wilcoxon test)

	Ranks	N	Mean Ranks	Sum of Ranks	Asymp. Sig. (2-tailed)
Pre-test - Post-test	Negative Ranks	6	8.25	49.50	.78
	Positive Ranks	7	5.93	41.50	
	Ties	0			
	Total	13			

4.2.3. The writing anxiety level of the experimental group

Table 19 presents the writing anxiety levels of the participants in the experimental group including the mean score, and standard deviation as well as minimum and maximum means. As can be seen in the table, while the mean score of the experimental group's writing anxiety was 2.82 in the pre-test, it was 2.59 after the implementation.

Table 19

The Mean Scores For Writing Anxiety of the Experimental Group (Wilcoxon test)

	N	Mean	Std. Deviation	Minimum	Maximum
Pre-test	13	2.82	.60	2.09	4.27
Post-test	13	2.59	.48	2.00	3.45

Table 20 compares the participants' writing anxiety levels of the experimental group in the pre and post-test indicating the number of positive and negative ranks, mean ranks, the sum of ranks, and the significance level of the comparison. According to the table, 10 participants' writing anxiety levels decreased with a mean rank of 7.90 after the implementation. Three participants' anxiety levels increased with a mean rank of 4.00. With a significance level of .02, it can be stated that there is a significant difference between the pre-test and post-test results of the participants' writing anxiety levels.

Table 20

Comparison of Pre and Post-test Scores for Writing Anxiety of the Experimental Group (Wilcoxon test)

	Ranks	N	Mean Ranks	Sum of Ranks	Asymp. Sig. (2-tailed)
Pre-test - Post-test	Negative Ranks	10	7.90	79.00	.02
	Positive Ranks	3	4.00	12.00	
	Ties	0			
	Total	13			

4.3. Research Question 3: Is there a difference in writing achievement, writing motivation, and anxiety levels in the use of teacher and automated feedback?

4.3.1. The Comparison of Pre-test Results

4.3.1.1. The comparison of pre-test overall writing achievement scores of the control and experimental groups

To identify whether there is any difference in participants' writing achievement, writing motivation and anxiety between the control group and experimental group, the Mann-Whitney U test was employed. Table 21 below presents the pre-test overall writing achievement scores of the control and experimental group including the mean rank, sum of ranks and significance level. As can be seen in the table, the participants in the control group had a mean rank of 13.38 while the experimental group was 13.62. As the significance level was calculated as .94, it can be stated that there is no significant difference between the groups in the pre-test.

Table 21

The Comparison Pre-test Overall Writing Achievement Scores of the Control and Experimental Groups (Mann-Whitney U test)

	Group	Mean Rank	Sum of Ranks	Asymp. Sig. (2-tailed)
Pre-test	Control Group	13.38	174.00	.94
	Experimental Group	13.62	177.00	

4.3.1.1.1. The comparison of pre-test content achievement, communicative achievement, organization and language use scores of the control and experimental groups

Table 22 provides the pre-test scores for content achievement, communicative achievement, organization and language use scores of the control and experimental groups indicating the mean rank, sum of ranks and significance level. According to the table, in terms of content achievement, while the control group had a mean rank of 12.08, the experimental group's mean rank was 14.92. However, there is no significant difference between the groups as the significance level was calculated as .30. For communicative achievement, both the control and experimental groups' mean rank was 13.50 with a significance level of 1.00, indicating that there is no significant difference between the control and experimental groups. In addition, the mean rank of the control group's organization scores was calculated as 13.15 while the experimental group received a mean rank of 13.85 in the pre-test. The significance level was .81; therefore, there is no significant difference between the groups. Lastly, the control group's language use scores had a mean rank of 13.62 while the experimental group had a mean rank of 13.38 with a significance level of .93.

Table 22

The Comparison of Pre-test Scores for Content Achievement, Communicative Achievement, Organization and Language Use of the Control and Experimental Groups (Mann-Whitney U test)

	Category	Group	Mean Rank	Sum of Ranks	Asymp. Sig. (2-tailed)
Pre-test	Content Achievement	Control Group	12.08	157.00	0.30
		Experimental Group	14.92	194.00	
	Communicative Achievement	Control Group	13.50	175.50	1.00
		Experimental Group	13.50	175.50	
	Organization	Control Group	13.15	171.00	.81
		Experimental Group	13.85	180.00	
	Language Use	Control Group	13.62	177.00	.93
		Experimental Group	13.38	174.00	

4.3.1.2. The comparison of pre-test writing motivation levels of the control and experimental groups

Table 23 provides the mean rank, sum of ranks and significance level values of pre-test writing motivation levels of the control and experimental groups. According to the table, while the experimental group had a mean rank of 14.27, the experimental group's writing motivation level was calculated as 12.73 in the pre-test. Although the experimental group's writing motivation level was slightly lower than the control

group, the difference cannot be considered significant due to the significance level of .61.

Table 23

The Comparison Pre-test Writing Motivation Levels of the Control and Experimental Groups (Mann-Whitney U test)

	Group	Mean Rank	Sum of Ranks	Asymp. Sig. (2-tailed)
Pre-test	Control Group	14.27	165.50	.61
	Experimental Group	12.73	185.50	

Table 24 below shows the only item in the AWMQ that presented a significant difference between the control and experimental groups. In the item regarding the use of correct grammar, while the control group had a mean rank of 16.35, the experimental group had a mean rank of 10.65. With a significance level of .04, there is a meaningful difference between the control and experimental groups.

Table 24

Mann Whitney U Test Results for the Pre-test Writing Motivation of the Control and Experimental Groups

	Group	N	Mean Rank	Sum of Ranks	Asymp. Sig. (2-tailed)
3. I use correct grammar in my writing.	Control Group	13	16.35	212.50	.04
	Experimental Group	13	10.65	138.50	
	Total	26			

4.3.1.3. The comparison of pre-test writing anxiety levels of the control and experimental groups

Table 25 presents the writing anxiety levels of the control and experimental groups in the pre-test, including the mean rank, sum of ranks and significance level values. According to the table, while the control group's writing anxiety mean rank was 13.04, it was 13.96 for the experimental group. With a significance level of .76, it can be stated that there is no significant difference between the control and experimental groups.

Table 25

The Comparison Pre-test Writing Anxiety Levels of the Control and Experimental Groups (Mann-Whitney U test)

	Group	Mean Rank	Sum of Ranks	Asymp. Sig. (2-tailed)
Pre-test	Control Group	13.04	169.50	.76
	Experimental Group	13.96	181.50	

Table 26 provides the only item in the SLWAI that presented a significant difference between the control and experimental groups. As can be seen in the table, the item was related to participants' anxiety about their writing performance. The control group' mean rank was 10.58 while the experimental group's mean rank was

calculated as 16.42. In other words, the experimental group's anxiety towards their writing performance was higher than the control group. Due to a significance level of .05, there is a considerable difference between the control and experimental groups.

Table 26

Mann Whitney U Test Results for the Pre-test Writing Anxiety of the Control and Experimental Groups

	Group	N	Mean Rank	Sum of Ranks	Asymp. Sig. (2-tailed)
21. I am not afraid at all that my English compositions would be rated as very poor.	Control Group	13	10.58	137.50	.05
	Experimental Group	13	16.42	213.50	
	Total	26			

4.3.2. The Comparison of Post-test Results

4.3.2.1. The comparison of post-test overall writing achievement scores of the control and experimental groups

Table 27 below presents the comparison of overall writing achievement of the control and experimental groups including the mean rank, sum of ranks and significance level values. According to the table, the control group's mean rank was 11.19 while the experimental group's was calculated as 15.81. However, the difference cannot be considered significant due to the significance level of .12.

Table 27

Post-test Overall Writing Achievement Scores of the Control and Experimental Groups (Mann-Whitney U test)

	Group	Mean Rank	Sum of Ranks	Asymp. Sig. (2-tailed)
Post-test	Control Group	11.19	145.50	.12
	Experimental Group	15.81	205.50	

4.3.2.1.1. The comparison of post-test content achievement, communicative achievement, organization and language use scores of the control and experimental groups

Table 28 provides the post-test scores for content achievement, communicative achievement, organization and language use scores of the control and experimental groups indicating the mean rank, sum of ranks and significance level. According to the table, in terms of content achievement, while the control group had a mean rank of 11.27, the experimental group's mean rank was 15.73. Although there is an increase in the experimental group's scores, there is no significant difference between the groups as the significance level was calculated as .12. For communicative achievement, the control group's mean rank was 13.27 while it was 13.73 for the experimental group with a significance level of .87, indicating that there is no significant difference between the control and experimental groups. In addition, the mean rank of the control group's organization scores was calculated as 11.50 while the experimental group's was 15.50 in the post-test. The significance level was .15,

indicating no significant difference between the groups. Lastly, the control group's language use scores had a mean rank of 11.27 while the experimental group had a mean rank of 15.73 with a significance level of .13. Although there is an increase in the experimental group's language use in the post-test, the difference cannot be considered meaningful due to the significance level.

Table 28

The Comparison of Post-test Scores for Content Achievement, Communicative Achievement, Organization and Language Use of the Control and Experimental Groups (Mann-Whitney U test)

	Category	Group	Mean Rank	Sum of Ranks	Asymp. Sig. (2-tailed)
Post-test	Content Achievement	Control Group	11.27	146.50	.12
		Experimental Group	15.73	204.50	
	Communicative Achievement	Control Group	13.27	172.50	.87
		Experimental Group	13.73	178.50	
	Organization	Control Group	11.50	149.50	.15
		Experimental Group	15.50	201.50	
	Language Use	Control Group	11.27	146.50	.13
		Experimental Group	15.73	204.50	

4.3.2.2. The comparison of post-test writing motivation levels of the control and experimental groups

Table 29 presents the comparison of writing motivation levels between the control and experimental groups including the mean rank, sum of ranks and significance level. According to the table, the control group's writing motivation level had a mean rank of 14.77. The experimental group's writing motivation level mean rank was calculated as 12.23. Therefore, it can be stated that the motivation level of the control group was slightly higher than the experimental group in the post-test. However, as the significance level was calculated as .39, the difference cannot be considered considerable.

Table 29

The Comparison Post-test Writing Motivation Levels of the Control and Experimental Groups (Mann-Whitney U test)

	Group	Mean Rank	Sum of Ranks	Asymp. Sig. (2-tailed)
Post-test	Control Group	14.77	192.00	.39
	Experimental Group	12.23	159.00	

Table 30 provides the only item in the AWMQ that presented a significant difference between the control and experimental groups in the post-test. The item was related to academic success. While the control group's mean rank was 16.12, the experimental group had a mean rank of 10.88. Therefore, with a significance level of

.05, it can be stated that there is a considerable difference between the control and experimental groups.

Table 30

Mann Whitney U Test Results for the Post-test Writing Motivation of the Control and Experimental Groups

	Group	N	Mean Rank	Sum of Ranks	Asymp. Sig. (2-tailed)
21. It is important to me that I make an A on a writing assignment.	Control Group	13	16.12	209.50	.05
	Experimental Group	13	10.88	141.50	
	Total	26			

4.3.2.3. The comparison of post-test writing anxiety levels of the control and experimental groups

Table 31 shows the comparison of writing anxiety levels between the control and experimental groups, including the mean rank, sum of ranks and significance level. According to the table below, the control group's mean rank was 13.92 while the experimental group's mean rank was 13.08. Since the significance level was calculated as .78, there is no significant difference between the control and experimental groups.

Table 31

The Comparison Post-test Writing Anxiety Levels of the Control and Experimental Groups (Mann-Whitney U test)

	Group	Mean Rank	Sum of Ranks	Asymp. Sig. (2-tailed)
Post-test	Control Group	13.92	181.00	.78
	Experimental Group	13.08	170.00	

5. CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

In this section, the conclusions of the study and discussion regarding the effects of automated feedback on learners' writing achievement, writing motivation and anxiety are presented. First, the conclusions are provided. Then, the findings of the current study are discussed concerning the findings of the previous related studies. Later, recommendations are presented for educators, learners and policymakers. Finally, recommendations for further research are presented.

5.1. Conclusions

In the study that aims to investigate the effects of automated feedback on EFL learners' writing achievement, writing motivation and anxiety, several conclusions can be made considering the findings obtained. The study revealed that automated feedback increases the writing achievement of writers learning English as a foreign language, making them more competent, accurate and fluent in terms of content, communication, organization and language use. In contrast, traditional teacher feedback is more effective in increasing writers' motivation and has a positive effect on their writing anxiety. However, automatic feedback negatively affected writers' motivation, making them less motivated to write. As a result, it is seen that both teacher and automatic feedback affect students' writing processes in different ways and it is important to use the advantages of both methods in a balanced way.

The first conclusion is that teacher feedback has no facilitative effects on EFL writers' overall writing achievement including aspects such as content achievement, communicative achievement, organization, and language use. In other words, EFL writers become less accurate and fluent after getting traditional teacher feedback. However, automated feedback enhances EFL writers' writing performance. Through the use of automated feedback, EFL writers' writing achievement increases including content achievement, communicative achievement, organization, and language use. Therefore, they become more proficient, accurate, and fluent writers. As a result, when the use of teacher feedback and automated feedback is compared in terms of their effects on EFL writers' writing achievement, the use of automated feedback is more effective than traditional teacher feedback, helping them to become more proficient writers in terms of both accuracy and fluency.

Second, teacher feedback leads EFL writers to be more motivated toward writing, especially in establishing a desire to be more academically successful. When EFL writers receive feedback from the teacher, they make a connection between the writing task performed and academic success. Therefore, they want to become more successful at writing, eventually leading to increased motivation. On the other hand, according to the findings of the study, automated feedback negatively affects EFL writers' motivation, making them less willing to write in a foreign language. As a result, while teacher feedback increases EFL writers' motivation, automated feedback negatively affects the writing motivation levels of EFL writers.

Third, receiving teacher feedback decreases EFL writers' writing anxiety, enhancing them to build a healthier psychological approach towards writing. Considering the adverse effects of high anxiety, teacher feedback facilitates the writing process by providing a less anxious state of mind. In addition to teacher feedback, automated feedback also creates a great change in EFL writers' writing anxiety. It considerably decreases the writing anxiety that EFL writers experience and can be quite useful, especially with highly anxious EFL writers. Thus, the use of automated feedback facilitates EFL writers' writing process and enhances learning. As a result, both teacher feedback and automated feedback help EFL writers reduce writing anxiety, eventually creating a safer and more comfortable writing process.

As a result, feedback in foreign language writing has major effects on EFL writers' writing achievement, writing anxiety, and motivation. The study's findings reveal that the feedback received from teachers negatively impacts students' writing skills. In addition, this type of feedback positively affects EFL writers' anxiety levels and increases their motivation. On the other hand, the use of automatic feedback has a positive effect on the development of writing achievement, creating a largely positive change in EFL writers' anxiety levels, but harms their motivation. These findings demonstrate the complex dynamics that need to be considered in the design and implementation of feedback in the writing process. In particular, balancing the effects of both teacher and automatic feedback on students' learning processes can contribute to the creation of a more effective learning environment.

The results of a focus group study indicate that the abovementioned conclusions may relate to several factors. In terms of writing achievement, participants who received teacher feedback state that the teacher needs to notice their success or failure, so they write more cautiously. However, they experience problems with the organization, stating that since their time is limited, making corrections in the text on a sentence or paragraph basis is time-consuming and difficult, making it complicated to rearrange the already written text. On the other hand, according to the participants, teacher feedback strengthens their motivation by increasing competition. Also, teacher feedback allows them to notice their mistakes and lack, clearing the way for improvement. Moreover, the participants state that they want to be seen as successful writers by the teacher, and this desire led to an increase in their writing motivation. Regarding their writing anxiety, they believe that frequent writing practice reduces their writing anxiety, helping them get used to writing in a foreign language.

The participants who received automated feedback from Write&Improve state that receiving instant and continuous feedback positively affects their writing skills, allowing them to fix their errors immediately after writing. Particularly, it is emphasized that this type of feedback facilitates writing edits and enables concrete observation of writing success. They also believe that being able to observe their overall writing progress plays an important role in their development, directing them to set more clear goals. Although the feeling of independence that Write&Improve provides during the practice process is comforting, their motivation decreases since the success is not noticed by the teacher in the classroom. However, as stated by the participants, without the fear of being judged, their writing anxiety is considerably

reduced, leading participants to write freely and more comfortably. Finally, although the use of automated feedback provides many advantages during writing, participants who received automated feedback state that there are times when automated feedback is insufficient and they need teacher feedback.

In conclusion, the current study comparatively examines the effects of both teacher feedback and automated feedback on the writing achievement, writing motivation, and anxiety of writers learning English as a foreign language. Both types of feedback offer different advantages and have some limitations. Teacher feedback increases writing motivation and students' desire for academic success, while automated feedback is more effective in improving the accuracy and fluency of writing skills. However, it is concluded that automated feedback negatively affects learners' writing motivation. As a result, an effective writing instruction program should be customized to the learners' needs and learning goals. A balanced integration of both types of feedback can help students improve their writing skills and positively manage their motivation and anxiety levels. Therefore, this study provides valuable insights for teachers and educational technology developers in the design and implementation of writing instruction approaches.

5.2. Pedagogical Implications

Several pedagogical implications can be made in light of the present study and previous literature. First, teacher feedback does not contribute to learners' writing achievement. This result does not match the majority of previous literature that states the opposite. According to the literature, teacher feedback contributes to learners'

writing performance, improving both the accuracy and fluency of the written work by indicating strengths and weaknesses and guiding the way to the improvement of overall writing achievement (Bitchener & Knoch, 2010; Chandler, 2003; Fathman & Whalley, 1990; Ferris, 2006; Ferris & Roberts, 2001; Sheen, 2007; Van Beuningen et al., 2012). This may result from several reasons including the type and timing of feedback and learners' individual preferences. The type of feedback is an important factor that learners notice. The research indicates that most students prefer explicit feedback over exploratory feedback, believing that explicit feedback received from the teacher is a more understandable and faster way to correct their errors (Binglan & Jia, 2010; Bulut, 2019; Ferris, 1999). Another reason may be the limitations of time and place. In other words, learners receive feedback at a time and place determined by the teacher, making them dependent on the teacher and inhibiting them from receiving instant feedback (Ranalli, 2018; Ranalli et al., 2017; Waer, 2023). Furthermore, learners do not have the chance to edit their written work according to the corrections and suggestions given by the teacher after they receive teacher feedback (Ferris, 2003; Lee, 2007). That is to say, they do not have a chance to correct the mistakes immediately after they make. These limitations that learners encounter may reduce the impact of teacher feedback on learners' writing development. In terms of the effect of traditional teacher feedback on learners' writing motivation, it was found that teacher feedback increases the learners' writing motivation, positively affecting the writing process as previous literature suggests (Cui et al., 2021; Guilloteaux & Dörnyei, 2008; Hamidun et al., 2012; Zarei et al., 2020). By providing guidance on the learning process and indicating the areas that need to be developed, learners can feel more in

charge of their learning and notice their own needs. In terms of writing anxiety, it was seen from the study that teacher feedback decreases learners' writing anxiety, positively affecting their writing process. However, there are contradictory results in the literature on this issue. In some studies, learners' writing anxiety increased after they received teacher feedback (Fareed et al., 2021; Loreto & McDonough, 2013; Rasool et al., 2023; Rezaei & Jafari, 2014) while some studies showed that receiving teacher feedback decreased learners' anxiety (Astrid et al., 2019; Yaylı & Genç, 2019). These differences in the literature may result from several factors affecting learners' performance when receiving teacher feedback. First of all, learners' fear of being negatively evaluated/judged by teachers and peers enormously affects their perceptions of teacher feedback (Fareed et al., 2021). Furthermore, Cheng (2004) identified several causes that lead learners' to feel more anxious when receiving feedback including instructional practices of teachers, self-perceptions, and personal beliefs on the process of learning writing. Additionally, the importance of positive tone and reinforcement during the feedback process was underlined as a factor that determines the relationship between the learners' level of anxiety and teacher feedback (MacIntyre, 1999). Therefore, the effect of teacher feedback on learners' writing anxiety needs to be examined in more detail, taking into account the nature of the feedback given and the individual differences of the learners. In particular, managing the feedback process in a positive and supportive way can play a critical role in reducing learners' writing anxiety and increasing their motivation to learn.

In terms of automated feedback and its impact on writing achievement, there is fairly limited research in the literature. Therefore, this study is quite contributive to the

literature. According to the present study, the use of automated feedback increases EFL learners' writing performance in terms of accuracy and fluency, by providing immediate and individualized feedback during the writing process (G. Cheng, 2017; El Ebyary & Windeatt, 2010; Kellogg et al., 2010; Kellogg & Raulerson, 2007). Automated feedback helps learners improve their writing skills in several ways. First, it provides learners with immediate and continuous feedback as suggested by previous literature (Benali, 2021; Burstein et al., 2020; Dikli, 2010; Dikli & Russell, 2006). Second, by giving them chances for multiple revisions, learners can fix their errors right after their errors, making the learning process faster and easier (Benali, 2021; Burstein et al., 2020; Dikli, 2010; Dikli & Russell, 2006). Third, since learners do not interact with an authority figure, they can write freely without the fear of judgment (Benali, 2021; Calvo & Ellis, 2010; V. Z. Zhang, 2020). Realizing the significant effects of psychological factors on learners' writing performance, automated feedback allows learners to write in a safe environment. As a result, automated feedback systems can play an important role in improving learners' writing skills and provide learners with a confident writing environment by meeting their individual learning needs. Such technological supports can offer an effective way to increase learners' writing performance and optimize their learning processes in foreign language writing. However, it was seen that automated feedback has negative impacts on learners' writing motivation. Although there is relatively limited research on the relationship between automated feedback and its effects on learners' writing motivation, the studies show conflicting results. In a study conducted by Wilson and Czik (2016), it was found that learners' writing motivation increased through the use of automated feedback.

Yet, another study by Bulut (2019) indicated a negative impact on learners' writing motivation. Therefore, further and in-depth research is needed to understand the effects of automated feedback on learners' writing motivation. In addition, determining how the effects of such feedback vary on a student basis and the underlying reasons for this variability may enable more effective use of automated feedback. In terms of automated feedback and learners' level of writing anxiety, the literature is relatively limited. In this study, it was found that automated feedback reduces learners' writing anxiety which is in line with the existing literature (Cahyono et al., 2023; Waer, 2023). Learners may have the chance to evaluate their assignments without a teacher's or classmates' criticisms which can reduce anxiety, especially for learners who are anxious or shy about writing. Furthermore, automated feedback systems provide learners with feedback as soon as they complete their writing. This quick turnaround may allow learners to immediately review and correct their writing, helping make the writing process less stressful and more manageable. As a result, automated feedback plays an important role in reducing writing anxiety by allowing learners to review the writing process more quickly and efficiently, making their learning experience positive overall.

5.3. Practical Recommendations

Several pedagogical implications can be made according to the findings of the present study. First, EFL teachers should have a practical understanding of automated feedback and its positive impacts on learners' writing achievement and writing anxiety, an important psychological factor affecting learners' performance. Considering the significant development in learners' writing achievement and the

decrease in their writing anxiety, the use of automated feedback, especially with anxious learners, can facilitate the writing process. In addition, the benefits of automated feedback tools for EFL teachers in terms of time management and workload should not be ignored. Therefore, teachers should utilize automated feedback tools to improve students' writing skills in terms of accuracy and fluency and provide a stress-free learning environment. However, since teacher feedback is important in enhancing the learners' writing motivation, the use of automated feedback and teacher feedback should be balanced. This combination of feedback types can positively impact students' motivation and anxiety and increase their writing achievement by creating a more effective and engaging learning environment. Accordingly, in-service teachers' ability to use automated feedback tools is also significant for the effective implementation of these tools. Therefore, before employing automated feedback tools, school administrations should provide accessible training on automated feedback tools and encourage in-service EFL teachers to integrate these tools into their courses. In addition, technical equipment and a stable internet connection should also be arranged by school administrations. In terms of curriculum developers, their collaboration with EFL teachers plays a crucial role in the process. That is to say, curriculum and material developers should cooperate with EFL teachers to enhance writing courses and prevent potential problems beforehand. Furthermore, the courses should be expanded in teacher training programs on the pedagogical use of these technological tools and focus on providing the necessary skills for effective use in the future profession for prospective teachers. Finally, policymakers should develop policies that encourage the

integration of teacher and automated feedback tools and support the cost-effective provision of these tools to educational institutions.

5.4. Limitations

The present study has several limitations. First of all, this study is limited to a total of 26 first-year university students studying in the ELT program at a foundation university, including 13 students in the control group and 13 students in the experimental group. Therefore, the results obtained from this study cannot be generalized in terms of participants, time, place, and process. Second, the implementation period is limited to four weeks. A longer implementation period may provide different findings. Therefore, examination of any significant differences that may exist at baseline between control and experimental groups is limited. Third, this study adopts a quasi-experimental study design due to the use of pre-existing groups instead of random assignment of participants. In addition, only Write&Improve was used as an automated feedback tool in the present study. Therefore, the results cannot be generalized to other automated feedback tools.

5.5. Recommendations for Further Research

According to the results of this study, several recommendations for further research can be made. First, more research should be conducted on the effects of automated feedback on EFL learners' writing achievement, writing motivation and anxiety. To increase the generalizability and reliability, the sample diversity of the study should be increased by including more students from different universities and with different cultural backgrounds. More detailed studies can be conducted on the ease of use and

effectiveness of tools such as Write&Improve. Furthermore, to further examine the quality and impact of feedback, a content analysis should be conducted to compare the impacts of both teacher and automated feedback on learners' writing. The effect of automated feedback on overall writing skills should be examined separately and in detail in different aspects of writing achievement such as content, language use, communicative achievement, and organization. Thus, it can be examined in which areas of writing automated feedback can be used more effectively and efficiently. In addition, conducting a similar study with students with different language proficiency levels could show whether the effectiveness of automated feedback varies according to proficiency level. This can provide an important understanding for customizing teaching methods and tools. Furthermore, with the use of automated feedback, the correlation between writing success, writing anxiety and motivation can be examined.

REFERENCES

Adams, P. (2006). Exploring social constructivism: Theories and practicalities. *Education 3-13*, *34*(3), 243–257. https://doi.org/10.1080/03004270600898893

Ahmed, A. H. (2010). Students' problems with cohesion and coherence in EFL essay writing in Egypt: Different perspectives. *Literacy Information and Computer Education Journal*, *1*(4), 211–221. https://doi.org/10.20533/licej.2040.2589.2010.0030

Al-Hammadi, F., & Sidek, H. M. (2014). An analytical framework for analysing secondary EFL writing curriculum: Approaches for writing and preparation for higher education. *International Education Studies*, *8*(1), 59–70. https://doi.org/10.5539/ies.v8n1p59

Ali, H. H. H. (2022). The importance of the four English language skills: Reading, writing, speaking, and listening in teaching Iraqi learners. *Humanitarian and Natural Sciences Journal*, *3*(2), 154–165. https://doi.org/10.53796/hnsj3210

Alpert, R., & Haber, R. N. (1960). Anxiety in academic achievement situations. *The Journal of Abnormal and Social Psychology*, *61*(2), 207–215. https://doi.org/10.1037/h0045464

Altuntaş, T. (2021). *The use of automated writing evaluation in EFL writing classes: Effects on achievement, motivation and self-efficacy* [Master's Thesis, Gazi University]. https://avesis.gazi.edu.tr/dosya?id=089b2a5d-dd0a-4b0b-916e-2d4e66bf8f1a.

Andrews, R., & Smith, A. (2011). *Developing writers: Teaching and learning in the digital era* (1st ed.). Open University Press.

Arnold, J. (2011). Attention to affect in language learning. *International Journal of English Studies*, *22*(1), 11–22. https://files.eric.ed.gov/fulltext/ED532410.pdf

Astrid, A., Marzulina, L., Erlina, D., Harto, K., Habibi, A., & Mukminin, A. (2019). Teaching writing to efl student teachers: Teachers' intervention and no teachers' intervention through peer feedback writing techniques. *Universal Journal of Educational Research*, *7*(9), 1901–1908.

Aula Blasco, J. (2016). The relationship between writing anxiety, writing self-efficacy, and Spanish EFL students' use of metacognitive writing strategies: A case study. *Journal of English Studies*, *14*, 7. https://doi.org/10.18172/jes.3069

Bai, L., & Hu, G. (2017). In the face of fallible AWE feedback: how do students respond? *Educational Psychology*, *37*(1), 67–81. https://doi.org/10.1080/01443410.2016.1223275

Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, *50*(2), 248–287. https://doi.org/10.1016/0749-5978(91)90022-L

Bartley, D. E. (1970). The importance of the attitude factor in language dropout: A preliminary investigation of group and sex differences. *Foreign Language Annals*, *3*(3), 383–393. https://doi.org/10.1111/J.1944-9720.1970.TB01292.X

Benali, A. (2021). The impact of using automated writing feedback in ESL/EFL classroom contexts. *English Language Teaching*, *14*(12), 189. https://doi.org/10.5539/elt.v14n12p189

Biber, D., Nekrasova, T., & Horn, B. (2011). The effectiveness of feedback for L1 English and L2 writing development: A meta-analysis. *ETS Research Report Series*, *2011*(1), i–99. https://doi.org/10.1002/j.2333-8504.2011.tb02241.x

Binglan, Z., & Jia, C. (2010). The impact of teacher feedback on the long-term improvement in the accuracy of EFL student writing. *Chinese Journal of Applied Linguistics*, *33*(2), 18–34.

Bitchener, J. (2008). Evidence in support of written corrective feedback. *Journal of Second Language Writing*, *17*(2), 102–118. https://doi.org/10.1016/J.JSLW.2007.11.004

Bitchener, J., & Knoch, U. (2010). The contribution of written corrective feedback to language development: A ten month investigation. *Applied Linguistics*, *31*(2), 193–214. https://doi.org/10.1093/applin/amp016

Brookhart, S. M. (2017). *How to give feedback to your students* (2nd ed.). ASCD. https://books.google.com/books?id=CYzgEAAAQBAJ

Brown, H. D. (1997). English language teaching in the "post-method" era: Toward better diagnosis, treatment, and assessment. *PASAA*, *27*(1), 1–11. https://doi.org/10.58837/CHULA.PASAA.27.1.1

Bull, J., & McKenna, C. (2003). *A blueprint for computer-assisted assessment*. Routledge. https://doi.org/10.4324/9780203464687

Bulut, S. E. (2019). *The effects of automated writing evaluation on EFL students' writing achievement and motivation towards writing* [Master's Thesis, Istanbul University]. http://acikerisim.iuc.edu.tr/xmlui/handle/20.500.12831/4875

Burstein, J., McCaffrey, D., Elliot, N., & Beigman Klebanov, B. (2020). Exploring writing achievement and genre in postsecondary writing. *International Conference on Learning Analytics & Knowledge Conference*, 53–55.

Cahyono, B. Y., Astuti, U. P., & Suryati, N. (2023). Online writing class: EFL university students' perception of teachers' strategies in alleviating their writing anxiety. *Computer Assisted Language Learning*, *42*(1), 1–24.

Cahyono, B. Y., & Rahayu, T. (2020). EFL students' motivation in writing, writing proficiency and gender. *TEFLIN Journal*, *31*(2), 162. https://doi.org/10.15639/teflinjournal.v31i2/162-180

Çakır, İ. (2010). Yazma becerisinin kazanılması yabancı dil öğretiminde neden zordur? ［Why is it difficult to acquire writing skills in foreign language teaching?]. *Erciyes University Journal of Social Sciences Institute*, *1*(28), 1–12. https://dergipark.org.tr/en/pub/erusosbilder/issue/23762/253280

Calvo, R. A., & Ellis, R. A. (2010). Students' Conceptions of Tutor and Automated Feedback in Professional Writing. *Journal of Engineering Education*, *99*(4), 427–438. https://doi.org/10.1002/j.2168-9830.2010.tb01072.x

Canale, M., & Swain, M. (1981). *A theoretical framework for communicative competence.* https://eric.ed.gov/?id=ED223105

Carless, D. (2006). Differing perceptions in the feedback process. *Studies in Higher Education*, *31*(2), 219–233. https://doi.org/10.1080/03075070600572132

Çelik, Ş. S., & Aydın, S. (2021). Wiki effect on EFL writing motivation: An experimental study. *Language and Technology*, *3*(1), 32–47.

Chandler, J. (2003). The efficacy of various kinds of error feedback for improvement in the accuracy and fluency of L2 student writing. *Journal of Second Language Writing*, *12*(3), 267–296. https://doi.org/10.1016/S1060-3743(03)00038-9

Chastain, K. (1975). Affective and ability factors in second language acquisition. *Language Learning*, *25*(1), 153–161. https://doi.org/10.1111/j.1467-1770.1975.tb00115.x

Chen, C. F. E., & Cheng, W. Y. E. (2008). Beyond the design of automated writing evaluation: Pedagogical practices and perceived learning effectiveness in EFL writing classes. *Language Learning & Technology*, *12*(2), 94–112. http://llt.msu.edu/vol12num2/chencheng/

Chen, Y. (2002). The problems of university EFL writing in Taiwan. *The Korea TESOL Journal*, *5*(1), 59–79. https://mail.koreatesol.org/sites/default/files/pdf_publications/KTJ5-2002web.pdf#page=67

Cheng, G. (2017). The impact of online automated feedback on students' reflective journal writing in an EFL course. *The Internet and Higher Education*, *34*, 18–27. https://doi.org/10.1016/j.iheduc.2017.04.002

Cheng, Y. S. (2004). A measure of second language writing anxiety: Scale development and preliminary validation. *Journal of Second Language Writing*, *13*(4), 313–335. https://doi.org/10.1016/J.JSLW.2004.07.001

Cheng, Y.-S. (2004). A measure of second language writing anxiety: Scale development and preliminary validation. *Journal of Second Language Writing*, *13*(4), 313–335. https://doi.org/10.1016/j.jslw.2004.07.001

Chomsky, C. (1972). Stages in language development and reading exposure. *Harvard Educational Review*, *42*(1), 1–33. https://doi.org/10.17763/HAER.42.1.H78L676H28331480

Chung, J. (1991). Collaborative learning strategies: The design of instructional environments for the emerging new school. *Educational Technology*, *31*(12), 15–22.

Chung, Y. B., & Yuen, M. (2011). The role of feedback in enhancing students' self-regulation in inviting schools. *Journal of Invitational Theory and Practice*, *17*, 22–27.

Clariana, R. B. (1999, February). Differential memory effects for immediate and delayed feedback: A delta rule explanation of feedback timing effects. *Association for Educational Communications and Technology Annual Convention*.

Cleary, L. M. (1991). Affect and cognition in the writing processes of eleventh graders. *Written Communication*, *8*(4), 473–508. https://doi.org/10.1177/0741088391008004003

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications.

Cui, Y., Schunn, C. D., Gai, X., Jiang, Y., & Wang, Z. (2021). Effects of trained peer vs. teacher feedback on EFL students' writing performance, self-efficacy, and internalization of motivation. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.788474

Daly, J. A. (1977). The effects of writing apprehension on message encoding. *Journalism & Mass Communication Quarterly*, *54*(3), 566–572. https://doi.org/10.1177/107769907705400317/ASSET/107769907705400317.FP.PNG_V03

Daly, J. A., & Miller, M. D. (1975a). Apprehension of writing as a predictor of message intensity. *The Journal of Psychology*, *89*(2), 175–177. https://doi.org/10.1080/00223980.1975.9915748

Daly, J. A., & Miller, M. D. (1975b). Further studies on writing apprehension: SAT scores, success expectations, willingness to take advanced courses and sex differences. *Research in the Teaching of English*, *9*(3), 250–256.

Daly, J. A., & Shamo, W. (1978). Academic decisions as a function of writing apprehension. *Research in the Teaching of English*, *12*(2), 119–126.

Daly, J. A., Shamo, W., & G. (1976). Writing apprehension and occupational choice. *Journal of Occupational Psychology*, *49*(1), 55–56. https://doi.org/10.1111/j.2044-8325.1976.tb00329.x

Deci, E. L., Connell, J. P., & Ryan, R. M. (1989). Self-determination in a work organization. *Journal of Applied Psychology*, *74*(4), 580–590. https://doi.org/10.1037/0021-9010.74.4.580

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior* (E. Aronson, Ed.; 1st ed.). Plenum Press.

Deci, E. L., & Ryan, R. M. (2009). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, *11*(4), 227–268. https://doi.org/10.1207/S15327965PLI1104_01

Deci, E., & Ryan, R. (2012). Self-determination theory. In P. A. M. Van Lange, A. W. Kruglanski, & T. E. Higgins (Eds.), *Handbook of Theories of Social Psychology* (1st ed., Vol. 1, pp. 416–437). SAGE Publications.

Dikli, S. (2010). The nature of automated essay scoring feedback. *CALICO Journal*, *28*(1), 99–134. https://doi.org/10.2307/calicojournal.28.1.99

Dikli, S., & Russell, M. (2006). An overview of automated scoring of essays. *The Journal of Technology, Learning and Assessment*, *5*(1). https://ejournals.bc.edu/index.php/jtla/article/view/1640

Dörnyei, Z. (1998). Motivation in second and foreign language learning. *Language Teaching*, *31*(3), 117–135. https://doi.org/10.1017/S026144480001315X

Dörnyei, Z. (2000). Motivation in action: Towards a process-oriented conceptualisation of student motivation. *British Journal of Educational Psychology*, *70*, 519–538.

Dörnyei, Z. (2003). Attitudes, orientations, and motivations in language learning: Advances in theory, research, and applications. *Language Learning*, 3–32.

Dörnyei, Z. (2009). The L2 motivational self system. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (1st ed., pp. 9–42). Multilingual Matters.

Dörnyei, Z., & Ryan, S. (2015). *The psychology of the language learner revisited*. Routledge.

Dörnyei, Z., & Ushioda, Ema. (2009). *Motivation, language identity and the L2 self*. Multilingual Matters.

Doughty, C. (2001). Cognition and second language instruction. In P. Robinson (Ed.), *Cognition and second language instruction* (pp. 206–257). Cambridge University Press.

Dulay, H., Burt, M., & Krashen, S. (1982). *Language two*. Oxford University Press.

Ekmekçi, E. (2018). Exploring Turkish EFL students' writing anxiety. *The Reading Matrix: An International Online Journal*, *18*(1), 158–175.

El Ebyary, K., & Windeatt, S. (2010). The impact of computer-based feedback on students' written work. *The International Journal of Educational Spectrum*, *10*(2), 121–142. www.um.es/ijes

Elfiyanto, S., & Fukazawa, S. (2021). Three written corrective feedback sources in improving Indonesian and Japanese students' writing achievement. *International Journal of Instruction*, *14*(3), 433–450. https://doi.org/10.29333/iji.2021.14325a

Ellis, R. (2009). Corrective feedback and teacher development. *L2 Journal*, *1*(1), 3–18. https://doi.org/10.5070/L2.V1I1.9054

Ellis, R. (2015). *Understanding second language acquisition* (R. Ellis, Ed.; 2nd ed.). Oxford University Press.

Fareed, M., Ashraf, A., & Bilal, M. (2016). ESL learners' writing skills: Problems, factors and suggestions. *Journal of Education and Social Sciences*, *4*(2), 81–92.

Fareed, M., Khan, I., & Akhtar, H. (2021). The causes of English writing anxiety among Pakistani ESL students: Perceptions of teachers and students. *Pakistan Journal of Humanities and Social Sciences*, *9*(1), 21–27. https://doi.org/10.52131/pjhss.2021.0901.0109

Fathman, A. K., & Whalley, E. (1990). Teacher response to student writing: Focus on form versus content. In B. Kroll (Ed.), *Second language writing: Research insights for the classroom* (pp. 178–190). Cambridge University Press.

Ferris, D. (1999). The case for grammar correction in L2 writing classes: A response to Truscott (1996). *Journal of Second Language Writing*, *8*(1), 1–11. https://doi.org/10.1016/S1060-3743(99)80110-6

Ferris, D. (2003). *Response to student writing*. Routledge. https://doi.org/10.4324/9781410607201

Ferris, D. (2006). Does error feedback help student writers? New evidence on the short- and long-term effects of written error correction. In K. Hyland & F. Hyland (Eds.), *Feedback in second language writing* (pp. 81–104). Cambridge University Press. https://doi.org/10.1017/CBO9781139524742.007

Ferris, D., & Hedgcock, J. S. (2023). Teaching L2 composition : Purpose, process, and practice. In *Teaching L2 Composition*. Routledge. https://doi.org/10.4324/9781003004943

Ferris, D., & Roberts, B. (2001). Error feedback in L2 writing classes How explicit does it need to be? *Journal of Second Language Writing*, *10*(3), 161–184. https://doi.org/10.1016/S1060-3743(01)00039-X

Flower, L., & Hayes, J. R. (1981). A cognitive process theory of writing. *College Composition and Communication*, *32*(4), 365. https://doi.org/10.2307/356600

Fogel, A. (1993). *Developing through relationships: Origins of communication, self, and culture*. University of Chicago Press.

Gabrielatos, C. (2000, February). EFL writing: Product and process. *ELT News*, 133–135.

Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitudes and motivation* (H. Giles, Ed.; 1st ed., Issue 4). Edward Arnold. https://doi.org/10.1037/h0083787

Gardner, R. C., & Smythe, P. C. (1975). Motivation and second language acquisition. *The Canadian Modern Language Review*, *31*(3), 218–233. https://doi.org/10.3138/cmlr.31.3.218

Gass, S. M., & Mackey, A. (2011). *Data elicitation for second and foreign language research* (1st ed.). Routledge.

Gass, S. M., & Mackey, A. (2013). *The Routledge handbook of second language acquisition*. Routledge.

Good, T. L., & Lavigne, A. L. (2017). *Looking in classrooms* (11th ed.). Routledge. https://www.routledge.com/Looking-in-Classrooms/Good-Lavigne/p/book/9781138646537

Gordon, L. (2008). Writing and good language learners. In *Lessons from good language learners* (pp. 244–254). Cambridge University Press. https://doi.org/10.1017/CBO9780511497667.022

Grabe, W., & Kaplan, R. B. (1996). *Theory and practice of writing: An applied linguistic perspective* (1st ed.). Routledge. https://www.routledge.com/Theory-and-Practice-of-Writing-An-Applied-Linguistic-Perspective/Grabe-Kaplan/p/book/9780582553835

Griffiths, L., & Nicolls, B. (2010). e-Support4U: An evaluation of academic writing skills support in practice. *Nurse Education in Practice*, *10*(6), 341–348. https://doi.org/10.1016/J.NEPR.2010.02.005

Guilloteaux, M. J., & Dörnyei, Z. (2008). Motivating language learners: A classroom-oriented investigation of the effects of motivational strategies on student motivation. *TESOL Quarterly*, *42*(1), 55–77. https://doi.org/10.1002/j.1545-7249.2008.tb00207.x

Hamidun, N., Hashim, S. H. M., & Othman, N. F. (2012). Enhancing students' motivation by providing feedback on writing: The case of international students from Thailand. *International Journal of Social Science and Humanity*, *2*(6), 591–594. https://doi.org/10.7763/IJSSH.2012.V2.179

Hamp-Lyons, L., & Heasley, B. (2006). *Study writing: A course in written English for academic purposes*. Cambridge University Press.

Han, Y., & Hyland, F. (2019). Academic emotions in written corrective feedback situations. *Journal of English for Academic Purposes*, *38*, 1–13. https://doi.org/10.1016/j.jeap.2018.12.003

Harmer, J. (2004). *How to teach writing*. Pearson/Longman.

Harmer, J. (2011). *The practice of English language teaching* (4th ed.). Pearson Longman.

Hassan, B. A. (2001). *The relationship of writing apprehension and self-esteem to the writing quality and quantity of EFL university students*.

Hassan, O., & Mahfoodh, A. (2017). "I feel disappointed": EFL university students' emotional responses towards teacher written feedback. *Assessing Writing*, *31*, 53–72. https://doi.org/10.1016/j.asw.2016.07.001

Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, *77*(1), 81–112. https://doi.org/10.3102/003465430298487

Hausfather, S. J. (1996). Vygotsky and schooling: Creating a social context for learning. *Action in Teacher Education*, *18*(2), 1–10. https://doi.org/10.1080/01626620.1996.10462828

Hawk, T. F., & Shah, A. J. (2008). A revised feedback model for task and self-regulated learning. *The Coastal Business Journal*, *7*(1), 66–81.

Hendrickson, J. M. (1978). Error correction in foreign language teaching: Recent theory, research, and practice. *The Modern Language Journal*, *62*(8), 387. https://doi.org/10.2307/326176

Hilgard, E. E., Atkinson, R. C., & Atkinson, R. L. (1971). *Introduction to psychology*. Harcourt Brace and Company.

Hinkel, E. (2011). What research on second language writing tells us and what it doesn't. In *Handbook of research in second language teaching and learning* (1st ed.). Routledge.

Horwitz, E. (2001a). Language anxiety and achievement. *Annual Review of Applied Linguistics*, *21*, 112–126. https://doi.org/10.1017/S0267190501000071

Horwitz, E. (2001b). Language anxiety and achievement. *Annual Review of Applied Linguistics*, *21*, 112–126. https://doi.org/10.1017/S0267190501000071

Horwitz, E., Horwitz, M., & Cope, J. (1986). Foreign language classroom anxiety. *The Modern Language Journal*, *70*(2), 125–132. https://doi.org/10.2307/327317

Hyland, K. (2004). *Genre and second language writing* (D. Belcher & J. Liu, Eds.). The University of Michigan Press.

Hyland, K. (2006). *English for academic purposes: An advanced resource book* (1st ed.). Routledge.

Hyland, K. (2015). *Teaching and researching writing* (3rd ed.). Routledge. https://www.routledge.com/Teaching-and-Researching-Writing/Hyland/p/book/9781032056197

Hyland, K. (2019). *Second language writing* (C. K. Richards, Ed.; 2nd ed.). Cambridge University Press.

Hyland, K. (2022). *The Routledge handbook of second language acquisition and writing* (R. M. Manchón & C. Polio, Eds.; 2nd ed.). Routledge.

Hyland, K., & Hyland, F. (2006). *Feedback in Second Language Writing*. Cambridge University Press. https://doi.org/10.1017/CBO9781139524742

Jiang, L., & Yu, S. (2022). Appropriating automated feedback in L2 writing: Experiences of Chinese EFL student writers. *Computer Assisted Language Learning*, *35*(7), 1329–1353. https://doi.org/10.1080/09588221.2020.1799824

Johari, S. K. (2008). Building vocabulary and improving writing while developing a tourist brochure. *English Teaching Forum*, *46*(2), 38–42.

Jonassen, D. H. (1991). Objectivism versus constructivism: Do we need a new philosophical paradigm? *Educational Technology Research and Development*, *39*(3), 5–14. https://doi.org/10.1007/BF02296434

Kamberi, L. (2013). The significance of teacher feedback in EFL writing for tertiary level foreign language learners. *Procedia - Social and Behavioral Sciences*, *70*, 1686–1690. https://doi.org/10.1016/J.SBSPRO.2013.01.241

Kellogg, R. T., & Raulerson, B. A. (2007). Improving the writing skills of college students. *Psychonomic Bulletin & Review*, *14*(2), 237–242. https://doi.org/10.3758/BF03194058

Kellogg, R. T., Whiteford, A. P., & Quinlan, T. (2010). Does automated feedback help students learn to write? *Journal of Educational Computing Research*, *42*(2), 173–196. https://doi.org/10.2190/EC.42.2.c

Kepner, C. G. (1991). An Experiment in the Relationship of Types of Written Feedback to the Development of Second-Language Writing Skills. *The Modern Language Journal*, *75*(3), 305. https://doi.org/10.2307/328724

Kleinmann, H. H. (1977). Avoidance behavior in adult second language acquisition 1. *Language Learning*, *27*(1), 93–107. https://doi.org/10.1111/j.1467-1770.1977.tb00294.x

Klimova, B. F. (2014). Approaches to the teaching of writing skills. *Procedia - Social and Behavioral Sciences*, *112*, 147–151. https://doi.org/10.1016/j.sbspro.2014.01.1149

Klimova, B. F. (2015). The role of feedback in EFL classes. *Procedia - Social and Behavioral Sciences*, *199*, 172–177. https://doi.org/10.1016/J.SBSPRO.2015.07.502

Krashen, S. (1981). *Second language acquisition and second language learning* (1st ed.). Pergamon Press.

Krashen, S. (1982). *Principles and practice in second language acquisition* (1st ed.). Pergamon Press.

Krashen, S. (1985). *The input hypothesis: Issues and implications* (1st ed.). Longman.

Krashen, S. (1989). We acquire vocabulary and spelling by reading: Additional evidence for the input hypothesis. *The Modern Language Journal*, *73*(4), 440. https://doi.org/10.2307/326879

Krashen, S., & Terrell, T. (1983). *The natural approach*. Alemany Press.

Kulhavy, R. W. (1977). Feedback in written instruction. *Review of Educational Research*, *47*(2), 211–232. https://doi.org/10.3102/00346543047002211

Kulik, J. A., & Kulik, C.-L. C. (1988). Timing of feedback and verbal learning. *Review of Educational Research*, *58*(1), 79–97. https://doi.org/10.3102/00346543058001079

Kurtoğlu, D., & Sabuncuoğlu, O. (2015). The effects of foreign language anxiety on pupils at secondary school. *Eğitim Fakültesi Dergisi*, *7*(2), 313–368. https://doi.org/10.17932/IAU.EFD.2015.013/efd_v07i2004

Kusumaningputri, R., Ningsih, T. A., & Wisasongko, W. (2018). Second language writing anxiety of Indonesian EFL students. *Lingua Cultura*, *12*(4), 357. https://doi.org/10.21512/lc.v12i4.4268

Lantolf, J. P. (2006). Sociocultural theory and L2: State of the art. *Studies in Second Language Acquisition*, *28*, 67–109.

Lantolf, J. P., & Pavlenko, A. (1995). Sociocultural theory and second language acquisition. *Annual Review of Applied Linguistics*, *15*, 108–124. https://doi.org/10.1017/S0267190500002646

Lee, I. (2007). Feedback in Hong Kong secondary writing classrooms: Assessment for learning or assessment of learning? *Assessing Writing*, *12*(3), 180–198. https://doi.org/10.1016/j.asw.2008.02.003

Lee, I. (2014). Revisiting teacher feedback in EFL writing from sociocultural perspectives. *TESOL Quarterly*, *48*(1), 201–213. https://doi.org/10.1002/tesq.153

Lee, I., Yu, S., & Liu, Y. (2018). Hong Kong secondary students' motivation in EFL writing: A survey study. *TESOL Quarterly*, *52*(1), 176–187.

Li, J., Link, S., & Hegelheimer, V. (2015). Rethinking the role of automated writing evaluation (AWE) feedback in ESL writing instruction. *Journal of Second Language Writing*, *27*, 1–18. https://doi.org/10.1016/j.jslw.2014.10.004

Lightbown, P. M., & Spada, N. (2006). *How languages are learned* (3rd ed.). Oxford University Press.

Listyani, L. (2022). Exploring Indonesian EFL writing students' differences in motivation: A language learning journey to success. *Journal of Language Teaching and Research*, *13*(2), 406–416. https://doi.org/10.17507/jltr.1302.23

Locke, E. A. (1996). Motivation through conscious goal setting. *Applied and Preventive Psychology*, *5*(2), 117–124. https://doi.org/10.1016/S0962-1849(96)80005-9

Long, M. H. (1980). *Input, interaction and second language acquisition* [Doctoral Dissertation]. University of California.

Long, M. H. (1983). Native speaker/non-native speaker conversation and the negotiation of comprehensible input 1. *Applied Linguistics*, *4*(2), 126–141. https://doi.org/10.1093/APPLIN/4.2.126

Loreto, S. Di, & McDonough, K. (2013). The relationship between instructor feedback and ESL student anxiety. *TESL Canada Journal*, *31*(1), 20–41. https://doi.org/10.18806/TESL.V31I1.1165

Luu, T. T. (2011). Teaching writing through genre-based approach. *Brazilian English Language Teaching Journal*, *2*(1). https://revistaseletronicas.pucrs.br/index.php/belt/article/view/9361

MacIntyre, P. D. (1999). Language anxiety: A review of the research for language teachers. In D. J. Young (Ed.), *Affect in foreign language and second language: A practical guide to creating a low-anxiety classroom atmosphere* (pp. 34–70). McGraw-Hill.

MacIntyre, P. D., & Gardner, R. C. (1991). Investigating language class anxiety using the focused essay technique. *The Modern Language Journal*, *75*(3), 296. https://doi.org/10.2307/328723

MacKey, A. (2006). Feedback, noticing and instructed second language learning. *Applied Linguistics*, *27*(3), 405–430. https://doi.org/10.1093/APPLIN/AMI051

Mackey, A., & Gass, S. M. (2015). *Second language research*. Routledge. https://doi.org/10.4324/9781315750606

Matsuda, P. K., & Silva, T. (Eds.). (2001). *On second language writing* (1st ed.). Lawrence Erlbaum Associates.

Mccarthy, M., & Carter, R. (1994). *Language as discourse: Perspectives for language teaching* (1st ed.). Routledge. https://doi.org/10.4324/9781315845050

Mehta, S. R., & Al-Mahrooqi, R. (2015). Can thinking be taught? Linking critical thinking and writing in an EFL context. *RELC Journal*, *46*(1), 23–36. https://doi.org/10.1177/0033688214555356

Miranty, D., & Widiati, U. (2021). Automated writing evaluation (AWE) in higher education: Indonesian EFL students' perceptions about Grammarly use across student cohorts. *Pegem Egitim ve Ogretim Dergisi*, *11*(4), 126–137. https://doi.org/10.47750/pegegog.11.04.12

Moses, R. N., & Mohamad, M. (2019). Challenges faced by students and teachers on writing skills in ESL contexts: A literature review. *Creative Education*, *10*(13), 3385–3391. https://doi.org/10.4236/ce.2019.1013260

Myskow, G., & Gordon, K. (2010). A focus on purpose: Using a genre approach in an EFL writing class. *ELT Journal*, *64*(3), 283–292. https://doi.org/10.1093/ELT/CCP057

Nassaji, H. (2016). Anniversary article interactional feedback in second language teaching and learning: A synthesis and analysis of current research. *Language Teaching Research*, *20*(4), 535–562. https://doi.org/10.1177/1362168816644940

Nassaji, H., & Swain, M. (2000). A Vygotskian perspective on corrective feedback in L2: The effect of random versus negotiated help on the learning of English articles. *Language Awareness*, *9*(1), 34–51. https://doi.org/10.1080/09658410008667135

Negari, G. M., & Rezaabadi, O. T. (2012). Too nervous to write? The relationship between anxiety and EFL writing. *Theory and Practice in Language Studies*, *2*(12), 2578–2586. https://doi.org/10.4304/tpls.2.12.2578-2586

Orhan Özen, S. (2017). The effect of motivation on student achievement. In *The factors effecting student achievement* (pp. 35–56). Springer International Publishing. https://doi.org/10.1007/978-3-319-56083-0_3

Oroujlou, N., & Vahedi, M. (2011). Motivation, attitude, and language learning. *Procedia - Social and Behavioral Sciences*, *29*, 994–1000. https://doi.org/10.1016/j.sbspro.2011.11.333

Ortega, L. (2014). *Understanding second language acquisition* (1st ed.). Routledge. https://doi.org/10.4324/9780203777282

Oxford, R. (1992). Who are our students? A synthesis of foreign and second language research on individual differences with implications for instructional practice. *TESL Canada Journal*, *9*(2), 30–49. https://doi.org/10.18806/TESL.V9I2.602

Özgür, B., & Griffiths, C. (2013). Second language motivation. *Procedia - Social and Behavioral Sciences*, *70*, 1109–1114. https://doi.org/10.1016/J.SBSPRO.2013.01.165

Payne, A. R. (2012). *Development of the academic writing motivation questionnaire* [Master's Thesis]. University of Georgia.

Pica, T. (1994). Research on negotiation: What does it reveal about second language learning conditions, processes, and outcomes? *Language Learning*, *44*(3), 493–527. https://doi.org/10.1111/J.1467-1770.1994.TB01115.X

Pincas, A. (1982). *Teaching English writing* (1st ed.). Macmillan Press.

Price, M., Handley, K., Millar, J., & O'Donovan, B. (2010). Feedback: All that effort, but what is the effect? *Assessment and Evaluation in Higher Education*, *35*(3), 277–289. https://doi.org/10.1080/02602930903541007

Raimes, A. (1991). Out of the woods: Emerging traditions in the teaching of writing. *TESOL Quarterly*, *25*(3), 407. https://doi.org/10.2307/3586978

Ramage, K. (1990). Motivational factors and persistence in foreign language study. *Language Learning*, *40*(2), 189–219. https://doi.org/10.1111/J.1467-1770.1990.TB01333.X

Ranalli, J. (2018). Automated written corrective feedback: How well can students make use of it? *Computer Assisted Language Learning*, *31*(7), 653–674. https://doi.org/10.1080/09588221.2018.1428994

Ranalli, J., Link, S., & Chukharev-Hudilainen, E. (2017). Automated writing evaluation for formative assessment of second language writing: investigating the accuracy and usefulness of feedback as part of argument-based validation. *Educational Psychology*, *37*(1), 8–25. https://doi.org/10.1080/01443410.2015.1136407

Rasool, U., Qian, J., & Aslam, M. Z. (2023). An investigation of foreign language writing anxiety and its reasons among pre-service EFL teachers in Pakistan. *Frontiers in Psychology*, *13*, 947867. https://doi.org/10.3389/FPSYG.2022.947867/BIBTEX

Ratner, C. (2002). *Cultural psychology: Theory and method*. Kluwer Academic/Plenum Publishers. https://doi.org/10.1007/978-1-4615-0677-5

Reid, J. (2001). Writing. In R. Carter & D. Nunan (Eds.), *The cambridge guide to teaching English to speakers of other languages* (pp. 28–33). Cambridge University Press. https://doi.org/10.1017/CBO9780511667206

Rezaei, M., & Jafari, M. (2014). Investigating the levels, types, and causes of writing anxiety among Iranian EFL students: A mixed method design. *Procedia - Social and Behavioral Sciences*, *98*, 1545–1554. https://doi.org/10.1016/j.sbspro.2014.03.577

Ryan, R., & Deci, E. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, *25*(1), 54–67. https://doi.org/10.1006/ceps.1999.1020

Ryan, S. (2018). Motivation. In A. Burns & J. Richards (Eds.), *The cambridge guide to learning English as a second language* (1st ed., pp. 55–62). Cambridge University Press.

Sabti, A. A., Md Rashid, S., Nimehchisalem, V., & Darmi, R. (2019). The impact of writing anxiety, writing achievement motivation, and writing self-efficacy on writing performance: A correlational study of Iraqi tertiary EFL learners. *SAGE Open*, *9*(4), 1–13. https://doi.org/10.1177/2158244019894289

Sadler, R. D. (1989). Formative assessment and the design of instructional systems. *Instructional Science*, *18*, 119–144.

Schmidt, R. (1990). The role of consciousness in second language learning 1. *Applied Linguistics*, *11*(2), 129–158. https://doi.org/10.1093/APPLIN/11.2.129

Schmidt, R. (2012). Attention, awareness, and individual differences in language learning. In W. M. Chan, K. Nyet Chin, S. K. Bhatt, & I. Walker (Eds.), *Perspectives on individual characteristics and foreign language education* (pp. 6–27). De Gruyter Mouton. https://doi.org/10.1515/9781614510932

Schumann, J. H. (1994). Where is cognition?: Emotion and cognition in second language acquisition. *Studies in Second Language Acquisition*, *16*(2), 231–242. https://doi.org/10.1017/S0272263100012894

Scovel, T. (1978). The effect of affect on foreign language learning: A review of the anxiety research. *Language Learning*, *28*(1), 129–142. https://doi.org/10.1111/j.1467-1770.1978.tb00309.x

Sermsook, K., Liamnimitr, J., & Pochakorn, R. (2017). The impact of teacher corrective feedback on EFL student writers' grammatical improvement. *English Language Teaching*, *10*(10), 43–49. https://doi.org/10.5539/elt.v10n10p43

Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference* (3rd ed., Vol. 1195). Houghton Mifflin.

Sheen, Y. (2007). The effect of focused written corrective feedback and language aptitude on ESL learners' acquisition of articles. *TESOL Quarterly*, *41*(2), 255–283. https://doi.org/10.1002/j.1545-7249.2007.tb00059.x

Shokrpour, N., & Fallahzadeh, M. H. (2007). A survey of the students and interns' EFL writing problems in Shiraz University of Medical Sciences. *Asian EFL Journal*, *9*(1), 147–163. http://www.asian-efl-journal.com

Silva, T. (1990). Second language composition instruction: Developments, issues, and directions. In B. Kroll (Ed.), *Second language writing: Research insights for the classroom* (pp. 11–23). Cambridge University Press. https://doi.org/10.1017/CBO9781139524551

Spielberger, C. D. (1983). *State-trait anxiety inventory for adults* (1st ed.). Consulting Psychologists Press.

Steele, V. (2004). *Product and process writing: A comparison*. http://www.teachingenglish.org.uk/think/articles/product-process- writing- a-Comparison

Stevenson, M., & Phakiti, A. (2014). The effects of computer-generated feedback on the quality of writing. *Assessing Writing*, *19*, 51–65. https://doi.org/10.1016/J.ASW.2013.11.007

Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In *Input in second language acquisition* (pp. 165–179). Heinle & Heinle.

Swain, M. (1995). Three functions of output in second language learning. In M. Celce Murcia & G. S. B. Cook (Eds.), *Principles and practice in applied linguistics: Studies in honor of H. G. Widdowson* (pp. 125–144). Oxford University Press. https://cir.nii.ac.jp/crid/1573105975679432192

Swales, J. M. (1990). *Genre analysis: English in academic and research settings* (M. H. Long & J. C. Richards, Eds.; 1st ed.). Cambridge University Press.

Swales, J. M. (2000). Languages for specific purposes. *Annual Review of Applied Linguistics*, *20*, 59–76. https://doi.org/10.1017/S0267190500200044

Syrewicz, C. C. (2023). The motivations that improve the creative writing process: what they might be and why we should study them. *New Writing*, *20*(2), 178–200. https://doi.org/10.1080/14790726.2022.2051563

Tam, M. (2000). Constructivism, instructional design, and technology: Implications for transforming distance learning. *Journal of Educational Technology & Society*, *3*(2), 50–60.

Tang, R. (2012). *Academic writing in a second or foreign language* (1st ed.). Bloomsbury Publishing.

Taskiran, A., & Goksel, N. (2022). Automated feedback and teacher feedback: Writing achievement in learning English as a foreign language at a distance. *Turkish Online Journal of Distance Education*, *23*(2), 120–139. https://doi.org/10.17718/TOJDE.1096260

Thao, N. T. T., & Duy, L. H. (2017). Teachers' corrective feedback on English students' writing. *European Journal of English Language Teaching*, *2*(2), 178–203. https://doi.org/10.5281/ZENODO.437760

Tobias, S. (1979). Anxiety research in educational psychology. *Journal of Educational Psychology*, *71*(5), 573–582. https://doi.org/10.1037/0022-0663.71.5.573

Tran, L. T. (2007). Learners' motivation and identity in the Vietnamese EFL writing classroom. *English Teaching: Practice and Critique*, *6*(1), 151–163. http://education.waikato.ac.nz/research/files/etpc/2007v6n1art8.pdfpp.151-163

Ushioda, E. (2013). Motivation and ELT: Global issues and local concerns. In E. Ushioda (Ed.), *International perspectives on motivation* (pp. 1–17). Palgrave Macmillan. https://doi.org/10.1057/9781137000873_1

Uzun, Ş. (2020). An experimental study on scaffolding for writing achievement and its effect on writing motivation [Master's Thesis, Hacettepe University]. In G. Balint, B. Antala, C. Carty, J.-M. A. Mabieme, I. B. Amar, & A. Kaplanova (Eds.), *Uniwersytet śląski* (Vol. 7, Issue 1). https://doi.org/10.2/JQUERY.MIN.JS

Van Beuningen, C. G., De Jong, N. H., & Kuiken, F. (2012). Evidence on the effectiveness of comprehensive error correction in second language writing. *Language Learning*, *62*(1), 1–41. https://doi.org/10.1111/j.1467-9922.2011.00674.x

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (M. Cole, V. John-Steiner, S. Scribner, & E. Souberman, Eds.; 1st ed.). Harvard University Press.

Waer, H. (2023). The effect of integrating automated writing evaluation on EFL writing apprehension and grammatical knowledge. *Innovation in Language Learning and Teaching*, *17*(1), 47–71. https://doi.org/10.1080/17501229.2021.1914062

Wang, Y. J., Shang, H. F., & Briody, P. (2013). Exploring the impact of using automated writing evaluation in English as a foreign language university students' writing. *Computer Assisted Language Learning*, *26*(3), 234–257. https://doi.org/10.1080/09588221.2012.655300

Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. *Language Teaching*, *31*(2), 57–71. https://doi.org/10.1017/S0261444800012970

Warschauer, M., & Ware, P. (2006). Automated writing evaluation: Defining the classroom research agenda. *Language Teaching Research*, *10*(2), 157–180. https://doi.org/10.1191/1362168806lr190oa

Watson, J. (2001). Social constructivism in the classroom. *Support for Learning*, *16*(3), 140–147. https://doi.org/10.1111/1467-9604.00206

Weiner, B. (1972). Attribution theory, achievement motivation, and the educational process. *Review of Educational Research*, *42*(2), 203–215. https://doi.org/10.3102/00346543042002203/ASSET/00346543042002203.FP.PNG_V03

Wilson, J., & Czik, A. (2016). Automated essay evaluation software in English language arts classrooms: Effects on teacher feedback, student motivation, and writing quality. *Computers & Education*, *100*, 94–109. https://doi.org/10.1016/j.compedu.2016.05.004

Wood, D., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychology and Psychiatry*, *17*(2), 89–100. https://doi.org/10.1111/j.1469-7610.1976.tb00381.x

Woodworth, J., & Barkaoui, K. (2020a). Perspectives on using automated writing evaluation systems to provide written corrective feedback in the ESL classroom. *TESL Canada Journal*, *37*(2), 234–247. https://doi.org/10.18806/TESL.V37I2.1340

Woodworth, J., & Barkaoui, K. (2020b). Perspectives on using automated writing evaluation systems to provide written corrective feedback in the ESL classroom. *TESL Canada Journal*, *37*(2), 234–247. https://doi.org/10.18806/tesl.v37i2.1340

Wulff, S., Keating, G. D., & VanPatten, B. (Eds.). (2020). *Theories in second language acquisition: An introduction* (3rd ed.). Routledge. https://www.routledge.com/Theories-in-Second-Language-Acquisition-An-Introduction/VanPatten-Keating-Wulff/p/book/9781138587380

Xu, X. (2011). The relationship between language learning motivation and the choice of language learning strategies among Chinese graduates. *International Journal of English Linguistics*, *1*(2), 203–212. https://doi.org/10.5539/ijel.v1n2p203

Yaylı, D., & Genç, E. (2019). The second language writing anxiety: The perceived sources and consequences. *Pamukkale University Journal of Education*, *45*(45), 235–251. https://doi.org/10.9779/PUJE.2018.231

Yeung, M. (2016). Exploring the construct of learner autonomy in writing: The roles of motivation and the teacher. *English Language Teaching*, *9*(8), 122–139. https://doi.org/10.5539/elt.v9n8p122

Young, D. J. (1999). *Affect in foreign language and second language learning: A practical guide to creating a low-anxiety classroom atmosphere* (D. J. Young, Ed.; 1st ed.). McGraw-Hill.

Zaman, M., & Kalam, A. (2012). Feedback in EFL writing at tertiary level: Teachers' and learners' perceptions. *ASA University Review*, *6*(1).

Zamel, V. (1983). The composing processes of advanced ESL students: Six case studies. *TESOL Quarterly*, *17*(2), 165–188. https://doi.org/10.2307/3586647

Zarei, M., Ahour, T., & Seifoori, Z. (2020). Impacts of implicit, explicit, and emergent feedback strategies on EFL learners' motivation, attitude and perception. *Cogent Education*, *7*(1). https://doi.org/10.1080/2331186X.2020.1727130

Zhang, V. Z. (2020). Engaging with automated writing evaluation (AWE) feedback on L2 writing: Student perceptions and revisions. *Assessing Writing*, *43*. https://doi.org/10.1016/j.asw.2019.100439

Zhang, V. Z., & Hyland, K. (2018). Student engagement with teacher and automated feedback on L2 writing. *Assessing Writing*, *36*, 90–102. https://doi.org/10.1016/j.asw.2018.02.004

Zhang, Y. (2012). A study of English writing and domain-specific motivation and self-efficacy of Chinese EFL learners. *Journal of Pan-Pacific Association of Applied Linguistics*, *16*(2), 101–121.

Zimmerman, B. J. (1986). Becoming a self-regulated learner: Which are the key subprocesses? *Contemporary Educational Psychology*, *11*(4), 307–313. https://doi.org/10.1016/0361-476X(86)90027-5

Zimmerman, B. J. (2000). Motivational sources and outcomes of self-regulated learning and performance. In B. J. Zimmerman & D. H. Schunk (Eds.), *Handbook of self-regulation* (pp. 13–39). Elsevier. https://doi.org/10.1016/B978-012109890-2/50031-7

Zimmerman, B. J., Bandura, A., & Martinez-Pons, M. (1992). Self-motivation for academic attainment: The role of self-efficacy beliefs and personal goal setting. *American Educational Research Journal*, *29*(3), 663–676. https://doi.org/10.3102/00028312029003663

Zimmerman, B. J., & Martínez-Pons, M. (2012). Perceptions of efficacy and strategy use in the self-regulation of learning. In D. H. Schunk & J. L. Meece (Eds.), *Student perceptions in the classroom* (1st ed., pp. 185–208). Routledge.

Appendix A

Demographic Information Questionnaire

This questionnaire is prepared to obtain background information on the participants in this study. Please answer each question.

* The data used in this study will be used anonymously to protect the privacy of the participants and will only be accessed by the researchers. The personal information of the participants will be kept strictly confidential.

1. Age:

2. Gender:

3. Grade:

4. Proficiency level (A1/A2 vb.):

5. Department:

6. Weekly hours of English classes:

ACADEMIC WRITING MOTIVATION QUESTIONNAIRE (AWMQ)

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This scale was created to look into how motivated someone is to write in a foreign language. Please rate your motivation for each of the following items, with 0 being the least motivational and 4 being the most. Please do not leave any of the statements empty. Thank you!

Statements	Strongly Disagree 0	isagree 1	certain 2	gree 3	Strongly Agree 4
01. I enjoy writing.	0	1	2	3	4
02. I like to write down my thoughts.	0	1	2	3	4
03. I use correct grammar in my writing.	0	1	2	3	4
04. I complete a writing assignment even when it is difficult.	0	1	2	3	4
05. Being a good writer will help me do well academically.	0	1	2	3	4
06. I write as well as other students.	0	1	2	3	4
07. I write more than the minimum on writing assignments.	0	1	2	3	4
08. I put a lot of effort into my writing.	0	1	2	3	4
09. I like to participate in written online discussions.	0	1	2	3	4
10. I like to get feedback from an instructor on my writing.	0	1	2	3	4
11. I am able to clearly express my ideas in writing.	0	1	2	3	4
12. I easily focus on what I am writing.	0	1	2	3	4
13. I like my writing to be graded.	0	1	2	3	4
14. I am more likely to succeed if I can write well.	0	1	2	3	4

15. It is easy for me to write good essays.	0	1	2	3	4
16. I enjoy creative writing assignments.	0	1	2	3	4
17. I like classes that require a lot of writing.	0	1	2	3	4
18. I plan how I am going to write something before I write it.	0	1	2	3	4
19. Becoming a better writer is important to me.	0	1	2	3	4
20. Being a better writer will help me in my career.	0	1	2	3	4
21. It is important to me that I make an A on a writing assignment.	0	1	2	3	4
22. I enjoy writing assignments that challenge me.	0	1	2	3	4
23. I revise my writing before submitting an assignment.	0	1	2	3	4
24. Punctuation is easy for me.	0	1	2	3	4
25. I enjoy writing literary analysis papers.	0	1	2	3	4
26. I like to write even if my writing will not be graded.	0	1	2	3	4
27. I like others to read what I have written.	0	1	2	3	4
28. I enjoy writing research papers.	0	1	2	3	4
29. I would like to have more opportunities to write in classes.	0	1	2	3	4
30. Being a good writer is important in getting a good job.	0	1	2	3	4
31. I practice writing in order to improve my skills.	0	1	2	3	4
32. I want the highest grade in the class on a writing assignment.	0	1	2	3	4
33. I would rather write an essay than answer multiple-choice questions.	0	1	2	3	4
34. I want others to recognize me as a good writer.	0	1	2	3	4

35. Spelling is easy for me.	0	1	2	3	4
36. Choosing the right word is easy for me.	0	1	2	3	4
37. I am motivated to write in my classes.	0	1	2	3	4

References

Payne, A. R. (2012). Development of the Academic Writing Motivation Questionnaire. Master's thesis, University of Georgia, Athens, Georgia, USA.

Second Language Writing Anxiety Inventory (SLWAI)

© 2004 Cheng, Y. S.

This scale was created to look into how anxious someone is to write in a foreign language. Please rate your anxiety for each of the following items, with 0 being the least motivational and 4 being the most. Please do not leave any of the statements empty. Thank you!

Statements	Strongly Disagree 1	sagree 2	certain 3	gree 4	Strongly Agree 5
01. While writing in English, I am not nervous at all.	1	2	3	4	5
02. I feel my heart pounding when I write English compositions under time constraint.	1	2	3	4	5
03. While writing English compositions, I feel worried and uneasy if I know they will be evaluated.	1	2	3	4	5
04. I often choose to write down my thoughts in English.	1	2	3	4	5
05. I usually do my best to avoid writing English compositions.	1	2	3	4	5
06. My mind often goes blank when I start to work on an English composition.	1	2	3	4	5
07. I don't worry that my English compositions are a lot worse than others.	1	2	3	4	5
08. I tremble or perspire when I write English compositions under time pressure.	1	2	3	4	5
09. If my English composition is to be evaluated, I would worry about getting a very poor grade.	1	2	3	4	5
10. I do my best to avoid situations in which I have to write in English.	1	2	3	4	5

11. My thoughts become jumbled when I write English compositions under time constraint.	1	2	3	4	5
12. Unless I have no choice, I would not use English to write compositions.	1	2	3	4	5
13. I often feel fear when I write English compositions under time.	1	2	3	4	5
14. I am afraid that the other students would laugh at my English composition if they read it.	1	2	3	4	5
15. I freeze up when unexpectedly asked to write English compositions.	1	2	3	4	5
16. I would do my best to excuse myself if asked to write English compositions.	1	2	3	4	5
17. I don't worry at all about what other people would think of my English compositions.	1	2	3	4	5
18. I usually seek every possible chance to write English compositions outside of class.	1	2	3	4	5
19. I usually feel my whole body rigid and tense when write English compositions.	1	2	3	4	5
20. I am afraid of my English composition being chosen as a sample for discussion in class.	1	2	3	4	5
21. I am not afraid at all that my English compositions would be rated as very poor.	1	2	3	4	5
22. Whenever possible, I would use English to write compositions.	1	2	3	4	5

References

Cheng, Y. S. (2004). A measure of second language writing anxiety: Scale development and preliminary validation. Journal of second language writing, 13(4), 313-335

Pre-test Writing Achievement Task

Time for this task: 60 minutes

WRITING TASK

You have read the extract below as part of a newspaper article on the loss of national and cultural identity. Readers were asked to send in their opinions. You decide to write a letter responding to the points raised and expressing your own views. Your letter should include 300-350 words.

'We are losing our national and cultural identity. Because of recent advances in technology and the easy availability and speed of air travel, different countries are communicating more often and are therefore becoming more and more alike. The same shopping malls and fast food outlets can be found almost everywhere. So can the same types of office blocks, motorways, TV programmes and even lifestyles. How can we maintain the traditions that make each nation unique?'

*This essay you write will be used for the pre-test results of the current study. Your writings will only be used for this research and will not be shared with anyone except the researchers who participated in this study. To preserve your personal information, all your information will be kept confidential and used anonymously.

* This writing task was taken from the sample tests of Cambridge ESOL.

Post-test Writing Achievement Task

Time for this task: 60 minutes

WRITING TASK

This is an extract from a letter which you receive from the World Opinion Organisation. Your report should include 250-300 words.

We are carrying out an international survey on families around the world and the importance of family relationships. Please write us a report for our survey outlining the typical family situation in your own country and suggesting how you think the situation might change in the future.

Write your report accordingly.

*This essay you write will be used for the post-test results of the current study. Your writings will only be used for this research and will not be shared with anyone except the researchers who participated in this study. To preserve your personal information, all your information will be kept confidential and used anonymously.

* This writing task was taken from the sample tests of Cambridge ESOL.

Appendix B

The Ethics Committee Approval

Appendix C

Mann Whitney U Test Results for the Pre-test Writing Motivation of the Control and Experimental Groups

	Group	N	Mean Rank	Sum of Ranks	Asymp. Sig. (2-tailed)
1. I enjoy writing.	Control Group	13	14.04	182.50	.70
	Experimental Group	13	12.96	168.50	
	Total	26			
2. I like to write down my thoughts.	Control Group	13	14.27	185.50	.60
	Experimental Group	13	12.73	165.50	
	Total	26			
3. I use correct grammar in my writing.	Control Group	13	16.35	212.50	.04
	Experimental Group	13	10.65	138.50	
	Total	26			
4. I complete a writing assignment even when it is difficult.	Control Group	13	14.77	192.00	.37
	Experimental Group	13	12.23	159.00	
	Total	26			
5. Being a good writer will help me do well academically.	Control Group	13	12.62	164.00	.51
	Experimental Group	13	14.38	187.00	
	Total	26			
6. I write as well as other students.	Control Group	13	13.31	173.00	.89
	Experimental Group	13	13.96	178.00	
	Total	26			
7. I write more than the minimum on writing assignments.	Control Group	13	12.15	158.00	.33
	Experimental Group	13	14.85	193.00	
	Total	26			
	Control Group	13	15.54	202.00	.11
	Experimental Group	13	11.46	149.00	

8. I put a lot of effort into my writing.	Total	26			
9. I like to participate in written online discussions.	Control Group	13	13.35	173.50	.32
	Experimental Group	13	13.65	177.50	
	Total	26			
10. I like to get feedback from an instructor on my writing.	Control Group	13	15.00	195.00	.24
	Experimental Group	13	12.00	156.00	
	Total	26			
11. I am able to clearly express my ideas in writing.	Control Group	13	13.62	177.00	.93
	Experimental Group	13	13.38	174.00	
	Total	26			
12. I easily focus on what I am writing.	Control Group	13	13.88	180.50	.79
	Experimental Group	13	13.12	170.50	
	Total	26			
13. I like my writing to be graded.	Control Group	13	15.65	203.50	.13
	Experimental Group	13	11.35	147.50	
	Total	26			
14. I am more likely to succeed if I can write well.	Control Group	13	13.73	178.50	.86
	Experimental Group	13	13.27	172.50	
	Total	26			
15. It is easy for me to write good essays.	Control Group	13	13.46	175.00	.98
	Experimental Group	13	13.54	176.00	
	Total	26			
16. I enjoy creative writing assignments.	Control Group	13	12.54	163.00	.50
	Experimental Group	13	14.46	188.00	
	Total	26			
17. I like classes that require a lot of writing.	Control Group	13	14.77	192.00	.38
	Experimental Group	13	12.23	159.00	
	Total	26			

18. I plan how I am going to write something before I write it.	Control Group	13	14.12	183.50	.66
	Experimental Group	13	12.88	167.50	
	Total	26			
19. Becoming a better writer is important to me.	Control Group	13	12.58	163.50	.49
	Experimental Group	13	14.42	187.50	
	Total	26			
20. Being a better writer will help me in my career.	Control Group	13	13.00	169.00	.70
	Experimental Group	13	14.00	182.00	
	Total	26			
21. It is important to me that I make an A on a writing assignment.	Control Group	13	14.19	184.50	.59
	Experimental Group	13	12.81	166.50	
	Total	26			
22. I enjoy writing assignments that challenge me.	Control Group	13	16.04	208.50	.08
	Experimental Group	13	10.96	142.50	
	Total	26			
23. I revise my writing before submitting an assignment.	Control Group	13	13.08	170.00	.75
	Experimental Group	13	13.92	181.00	
	Total	26			
24. Punctuation is easy for me.	Control Group	13	13.81	179.50	.83
	Experimental Group	13	13.19	171.50	
	Total	26			
25. I enjoy writing literary analysis papers.	Control Group	13	12.92	168.00	.69
	Experimental Group	13	14.08	183.00	
	Total	26			
26. I like to write even if my writing will not be graded.	Control Group	13	11.42	148.50	.15
	Experimental Group	13	15.58	202.50	
	Total	26			
27. I like others to read what I have written.	Control Group	13	12.92	168.00	.67
	Experimental Group	13	14.08	183.00	
	Total	26			

28. I enjoy writing research papers.	Control Group	13	13.73	178.50	.87
	Experimental Group	13	13.27	172.50	
	Total	26			
29. I would like to have more opportunities to write in classes.	Control Group	13	12.50	162.50	.47
	Experimental Group	13	14.50	188.50	
	Total	26			
30. Being a good writer is important in getting a good job.	Control Group	13	11.46	149.00	.14
	Experimental Group	13	15.54	202.00	
	Total	26			
31. I practice writing in order to improve my skills.	Control Group	13	12.46	162.00	.47
	Experimental Group	13	14.54	189.00	
	Total	26			
32. I want the highest grade in the class on a writing assignment.	Control Group	13	14.88	193.50	.32
	Experimental Group	13	12.12	157.50	
	Total	26			
33. I would rather write an essay than answer multiple-choice questions.	Control Group	13	14.35	186.50	.56
	Experimental Group	13	12.65	164.50	
	Total	26			
34. I want others to recognize me as a good writer.	Control Group	13	10.77	140.00	.06
	Experimental Group	13	16.23	211.00	
	Total	26			
35. Spelling is easy for me.	Control Group	13	13.85	180.00	.81
	Experimental Group	13	13.15	171.00	
	Total	26			
36. Choosing the right word is easy for me.	Control Group	13	13.08	170.00	.76
	Experimental Group	13	13.92	181.00	
	Total	26			
37. I am motivated to write in my classes.	Control Group	13	13.62	177.00	.94
	Experimental Group	13	13.38	174.00	
	Total	26			

Appendix D

Mann Whitney U Test Results for the Pre-test Writing Anxiety of the Control and Experimental Groups

	Group	N	Mean Rank	Sum of Ranks	Asymp. Sig. (2-tailed)
1. While writing in English, I am not nervous at all.	Control Group	13	10.81	140.50	.06
	Experimental Group	13	16.19	210.50	
	Total	26			
2. I feel my heart pounding when I write English compositions under time constraint.	Control Group	13	15.46	201.00	.17
	Experimental Group	13	11.54	150.00	
	Total	26			
3. While writing English compositions, I feel worried and uneasy if I know they will be evaluated.	Control Group	13	14.62	190.00	.44
	Experimental Group	13	12.38	161.00	
	Total	26			
4. I often choose to write down my thoughts in English.	Control Group	13	12.27	159.50	.39
	Experimental Group	13	14.74	191.50	
	Total	26			
5. I usually do my best to avoid writing English compositions.	Control Group	13	14.50	188.50	.48
	Experimental Group	13	12.50	162.50	
	Total	26			
6. My mind often goes blank when I start to work on an English composition.	Control Group	13	14.96	194.50	.31
	Experimental Group	13	12.04	156.50	
	Total	26			
	Control Group	13	11.77	153.00	.23

7. I don't worry that my English compositions are a lot worse than others.	Experimental Group	13	15.23	198.00	
	Total	26			
8. I tremble or perspire when I write English compositions under time pressure.	Control Group	13	14.35	186.50	.56
	Experimental Group	13	12.65	164.50	
	Total	26			
9. If my English composition is to be evaluated, I would worry about getting a very poor grade.	Control Group	13	13.50	175.50	1.0
	Experimental Group	13	13.50	175.50	
	Total	26			
10. I do my best to avoid situations in which I have to write in English.	Control Group	13	14.15	184.00	.65
	Experimental Group	13	12.85	167.00	
	Total	26			
11. My thoughts become jumbled when I write English compositions under time constraint.	Control Group	13	13.38	174.00	.94
	Experimental Group	13	13.62	177.00	
	Total	26			
12. Unless I have no choice, I would not use English to write compositions.	Control Group	13	13.23	172.00	.85
	Experimental Group	13	13.77	179.00	
	Total	26			
13. I often feel fear when I write English compositions under time.	Control Group	13	15.00	195.00	.30
	Experimental Group	13	12.00	156.00	
	Total	26			
	Control Group	13	13.35	173.50	.91

14. I am afraid that the other students would laugh at my English composition if they read it.	Experimental Group	13	13.65	177.50	
	Total	26			
15. I freeze up when unexpectedly asked to write English compositions.	Control Group	13	14.15	184.00	.65
	Experimental Group	13	12.85	167.00	
	Total	26			
16. I would do my best to excuse myself if asked to write English compositions.	Control Group	13	11.92	155.00	.26
	Experimental Group	13	15.08	196.00	
	Total	26			
17. I don't worry at all about what other people would think of my English compositions.	Control Group	13	13.15	171.00	.81
	Experimental Group	13	13.85	180.00	
	Total	26			
18. I usually seek every possible chance to write English compositions outside of class.	Control Group	13	11.88	154.50	.25
	Experimental Group	13	15.12	196.50	
	Total	26			
19. I usually feel my whole body rigid and tense when write English compositions.	Control Group	13	14.27	185.50	.59
	Experimental Group	13	12.73	165.50	
	Total	26			
20. I am afraid of my English composition being chosen as a sample for	Control Group	13	12.73	165.50	.60
	Experimental Group	13	14.27	185.50	
	Total	26			

discussion in class.					
21. I am not afraid at all that my English compositions would be rated as very poor.	Control Group	13	10.58	137.50	.05
	Experimental Group	13	16.42	213.50	
	Total	26			
22. Whenever possible, I would use English to write compositions.	Control Group	13	13.85	180.00	.80
	Experimental Group	13	13.15	171.00	
	Total	26			

Appendix E

Mann Whitney U Test Results for the Post-test Writing Motivation of the Control and Experimental Group

	Group	N	Mean Rank	Sum of Ranks	Asymp. Sig. (2-tailed)
1. I enjoy writing.	Control Group	13	14.04	182.50	.71
	Experimental Group	13	12.96	168.50	
	Total	26			
2. I like to write down my thoughts.	Control Group	13	13.42	174.50	.95
	Experimental Group	13	13.58	176.50	
	Total	26			
3. I use correct grammar in my writing.	Control Group	13	16.15	210.00	.06
	Experimental Group	13	10.85	141.00	
	Total	26			
4. I complete a writing assignment even when it is difficult.	Control Group	13	14.12	183.50	.65
	Experimental Group	13	12.88	167.50	
	Total	26			
5. Being a good writer will help me do well academically.	Control Group	13	12.58	163.50	.47
	Experimental Group	13	14.42	187.50	
	Total	26			
6. I write as well as other students.	Control Group	13	14.38	187.00	.53
	Experimental Group	13	12.62	164.00	
	Total	26			
7. I write more than the minimum on writing assignments.	Control Group	13	12.04	156.50	.29
	Experimental Group	13	14.96	194.50	
	Total	26			
	Control Group	13	15.08	196.00	.27
	Experimental Group	13	11.92	155.00	

8. I put a lot of effort into my writing.	Total	26			
9. I like to participate in written online discussions.	Control Group	13	13.08	170.00	.77
	Experimental Group	13	13.92	181.00	
	Total	26			
10. I like to get feedback from an instructor on my writing.	Control Group	13	13.08	170.00	.75
	Experimental Group	13	13.92	181.00	
	Total	26			
11. I am able to clearly express my ideas in writing.	Control Group	13	13.88	180.50	.78
	Experimental Group	13	13.12	170.50	
	Total	26			
12. I easily focus on what I am writing.	Control Group	13	13.35	173.50	.92
	Experimental Group	13	13.65	177.50	
	Total	26			
13. I like my writing to be graded.	Control Group	13	15.88	206.50	.10
	Experimental Group	13	11.12	144.50	
	Total	26			
14. I am more likely to succeed if I can write well.	Control Group	13	12.62	164.00	.51
	Experimental Group	13	14.38	187.00	
	Total	26			
15. It is easy for me to write good essays.	Control Group	13	15.00	195.00	.29
	Experimental Group	13	12.00	156.00	
	Total	26			
16. I enjoy creative writing assignments.	Control Group	13	11.85	154.00	.24
	Experimental Group	13	15.15	197.00	
	Total	26			
17. I like classes that require a lot of writing.	Control Group	13	15.92	207.00	.10
	Experimental Group	13	11.08	144.00	
	Total	26			

18. I plan how I am going to write something before I write it.	Control Group	13	13.08	170.00	.74
	Experimental Group	13	13.92	181.00	
	Total	26			
19. Becoming a better writer is important to me.	Control Group	13	13.50	175.50	1.0
	Experimental Group	13	13.50	175.50	
	Total	26			
20. Being a better writer will help me in my career.	Control Group	13	12.81	166.50	.59
	Experimental Group	13	14.19	184.50	
	Total	26			
21. It is important to me that I make an A on a writing assignment.	Control Group	13	16.12	209.50	.05
	Experimental Group	13	10.88	141.50	
	Total	26			
22. I enjoy writing assignments that challenge me.	Control Group	13	14.46	188.00	.51
	Experimental Group	13	12.54	163.00	
	Total	26			
23. I revise my writing before submitting an assignment.	Control Group	13	15.27	198.50	.20
	Experimental Group	13	11.73	152.50	
	Total	26			
24. Punctuation is easy for me.	Control Group	13	14.23	185.00	.60
	Experimental Group	13	12.77	166.00	
	Total	26			
25. I enjoy writing literary analysis papers.	Control Group	13	14.31	186.00	.58
	Experimental Group	13	12.69	165.00	
	Total	26			
26. I like to write even if my writing will not be graded.	Control Group	13	12.92	168.00	.69
	Experimental Group	13	14.08	183.00	
	Total	26			
27. I like others to read what I have written.	Control Group	13	14.65	190.50	.42
	Experimental Group	13	12.35	160.50	
	Total	26			

28. I enjoy writing research papers.	Control Group	13	14.31	186.00	.58
	Experimental Group	13	12.69	165.00	
	Total	26			
29. I would like to have more opportunities to write in classes.	Control Group	13	15.00	195.00	.30
	Experimental Group	13	12.00	156.00	
	Total	26			
30. Being a good writer is important in getting a good job.	Control Group	13	14.85	193.00	.34
	Experimental Group	13	12.15	158.00	
	Total	26			
31. I practice writing in order to improve my skills.	Control Group	13	13.81	179.50	.82
	Experimental Group	13	13.19	171.50	
	Total	26			
32. I want the highest grade in the class on a writing assignment.	Control Group	13	15.50	201.50	.16
	Experimental Group	13	11.50	149.50	
	Total	26			
33. I would rather write an essay than answer multiple-choice questions.	Control Group	13	15.35	199.50	.21
	Experimental Group	13	11.65	151.50	
	Total	26			
34. I want others to recognize me as a good writer.	Control Group	13	14.08	183.00	.68
	Experimental Group	13	12.92	168.00	
	Total	26			
35. Spelling is easy for me.	Control Group	13	13.54	176.00	.98
	Experimental Group	13	13.46	175.00	
	Total	26			
36. Choosing the right word is easy for me.	Control Group	13	15.00	195.00	.29
	Experimental Group	13	12.00	156.00	
	Total	26			
37. I am motivated to write in my classes.	Control Group	13	13.92	181.00	.77
	Experimental Group	13	13.08	170.00	
	Total	26			

Özgeçmiş

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Adı Soyadı: Gülnihan ALTINAY

Uyruğu: T.C.

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Yüksek Lisans	İstanbul Medeniyet Üniversitesi, Lisansüstü Eğitim Enstitüsü, İngiliz Dili Eğitimi	Devam ediyor

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Tarih	Kurum	Görev
2022-halen	İstanbul Kültür Üniversitesi, Eğitim Fakültesi, Yabancı Diller Eğitimi Bölümü	Araştırma Görevlisi

YABANCI DİLLER

İleri düzeyde İngilizce; başlangıç düzeyinde İspanyolca