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L2 MOTIVATIONAL SELF SYSTEM, WRITING ENJOYMENT, AND WRITING ANXIETY AS PREDICTORS OF SYNTACTIC COMPLEXITY PRODUCTION AMONG EFL UNDERGRADUATE LEARNERS IN CHINA

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Abstrak

Kajian ini meneliti bagaimana faktor motivasi dan emosi secara bersama mempengaruhi kerumitan sintaksis dalam penulisan Bahasa Inggeris sebagai Bahasa Asing (EFL) dalam kalangan pelajar universiti di China. Walaupun kerumitan sintaksis diiktiraf secara meluas sebagai penunjuk penting kepada tahap kecekapan penulisan bahasa kedua (L2) yang lebih maju, kajian yang menerokainya secara sistematik daripada perspektif integrasi motivasi–emosi masih terhad. Bagi menangani jurang ini, kajian ini berasaskan Teori Penentuan Kendiri (SDT) dan Teori Kawalan-Nilai (CVT) untuk menyiasat peranan Sistem Kendiri Motivasi Bahasa Kedua (L2MSS), keseronokan menulis, dan kebimbangan menulis dalam membentuk penghasilan kerumitan sintaksis pelajar. Kajian ini menggunakan reka bentuk kaedah campuran penerangan berurutan. Data kuantitatif diperoleh daripada dua sampel. Respons daripada 206 orang pelajar prasiswazah bukan jurusan Bahasa Inggeris di China digunakan untuk menilai kebolehpercayaan dan kesahan soal selidik. Sub-sampel yang terdiri daripada 90 orang pelajar turut menyelesaikan tugasan penulisan bertempoh di samping prosedur pengesahan dan kebolehpercayaan. Bagi melengkapi analisis kuantitatif, data kualitatif dikumpulkan daripada 6 orang peserta fokus melalui jurnal reflektif, yang berfungsi untuk mentafsir dan menghuraikan dapatan kuantitatif. Dapatan kajian menunjukkan bahawa kendiri L2 ideal dan pengalaman pembelajaran L2 secara signifikan meramalkan tahap kerumitan sintaksis yang lebih tinggi, manakala kebimbangan menulis meramalkan kerumitan sintaksis secara negatif. Keseronokan menulis dan kebimbangan menulis berfungsi sebagai pengantara antara tiga konstruk L2MSS dengan kerumitan sintaksis. Dapatan kualitatif turut menunjukkan bahawa kendiri L2 ideal dan pengalaman pembelajaran L2 membentuk respons emosi pelajar terhadap penulisan, yang seterusnya mempengaruhi kesediaan mereka untuk menggunakan bahasa yang menuntut kerumitan sintaksis. Secara keseluruhannya, kajian ini menyumbang kepada pemahaman yang lebih mendalam tentang interaksi dinamik antara motivasi dan emosi dalam perkembangan penulisan EFL. Kajian ini juga menawarkan implikasi pedagogi bagi mereka bentuk pengajaran penulisan yang menyokong panduan kendiri motivasi pelajar serta memupuk persekitaran pembelajaran yang positif dari segi emosi, yang kondusif terhadap penghasilan kerumitan sintaksis.

Kata Kunci: Sistem Kendiri Motivasi Bahasa Kedua, keseronokan menulis, kebimbangan menulis, kerumitan sintaksis, pelajar EFL China

Abstract

This study examined how motivational and emotional factors jointly influenced syntactic complexity in English as a Foreign Language (EFL) writing among Chinese university students. Although syntactic complexity is widely recognized as a key indicator of advanced L2 writing proficiency, limited research has systematically explored it from an integrated motivation–emotion perspective. To address this gap, the present study drew on Self-Determination Theory (SDT) and Control-Value Theory (CVT) to investigate the roles of the Second Language Motivational Self System (L2MSS), writing enjoyment, and writing anxiety in shaping learners' syntactic complexity production. A sequential explanatory mixed-methods design was adopted. Quantitative data were obtained from two samples. Responses from 206 Chinese non-English-major undergraduates were used to examine the reliability and validity of the questionnaires. A subsample of 90 students additionally completed timed writing tasks alongside the validation and reliability procedures. To complement the quantitative analysis, qualitative data were gathered from 6 focal participants through reflective journals, which served to interpret and elaborate on the quantitative results. The results revealed that the ideal L2 self and L2 learning experience significantly predicted higher levels of syntactic complexity, whereas writing anxiety negatively predicted syntactic complexity. Writing enjoyment and writing anxiety functioned as the mediators between three L2MSS constructs and syntactic complexity. Qualitative findings further demonstrated that learners' ideal L2 self and L2 learning experience shaped their emotional responses to writing, which in turn influenced their willingness to engage in syntactically demanding language use. Taken together, this study contributed to a more understanding of the dynamic interplay between motivation and emotion in EFL writing development. It also offered pedagogical implications for designing writing instruction that supports learners' motivational self-guides and fosters emotionally positive learning environments conducive to syntactic complexity production.

Keywords: L2 Motivational Self System, writing enjoyment, writing anxiety, syntactic complexity, Chinese EFL learners

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List of Abbreviations

L2MSS	L2 Motivational Self System
IS	Ideal L2 Self
OS	Ought-to L2 Self
L2LE	L2 Learning Experience
BEL2LE	Behavioral Engagement L2 Learning Experience
IL2LE	Interactional L2 Learning Experience
SLWAI	Second Language Writing Anxiety Inventory
WA	Writing Anxiety
CA	Cognitive Anxiety
SA	Somatic Anxiety
AA	Avoidance Anxiety
WE	Writing Enjoyment
L2SCA	L2 Syntactic Complexity Analyzer
SEM	Structural Equation Modeling
CFA	Confirmatory Factor Analysis
EFA	Exploratory Factor Analysis
PP	Positive Psychology

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CHAPTER ONE
INTRODUCTION

1.1 Introduction

Syntactic complexity is characterized by the features of diversity and intricacy in manufacturing units or linguistic constructions (Lu, 2010), and it can be quantified by the parameters like the production unit length (i.e., clauses, sentence, T-units), the amount of embedding or subordination, coordination number of syntactic structures, and complex structure (Ortega, 2003). Due to its covariation with writing quality (Ansarifar et al., 2018; Casal & Lee, 2019; Plakans et al., 2019; Zhang & Ouyang, 2023), syntactic complexity has long been regarded as an independent variable in exploring English as Foreign Language (EFL) learners' language proficiency development within EFL writing education. Consequently, it has been treated as a dependent variable influenced by various factors in the EFL writing context. However, EFL learners in Chinese college settings often struggle to produce adequate syntactic complexity in their writing, which can adversely affect writing quality. Therefore, a comprehensive examination of the factors predicting syntactic complexity in EFL writing among college students in China is urgently needed.

Numerous studies have begun to take an interest in the factors to influence syntactic complexity. For example, it has been found those factors like writing task types (Staples & Reppen, 2016) and writing task complexity (Frear & Bitchener, 2015; Kormos, 2011; Kuiken & Vedder, 2012; Ong & Zhang, 2010; Ruiz-Funes, 2015) which affect the syntactic complexity production. However, recent researches

highlighted that beyond these external factors, psychological variables also play a crucial role in the syntactic complexity production. The studies also consistently argued that syntactic complexity production is likely to be predicted by the psychological factors like writing anxiety (Wang, 2020) and motivation (Housen & Kuiken, 2009). They elaborated on the reasons that students who are enthusiastic about writing tasks and perceive them as opportunities for growth are more likely to explore and utilize advanced syntactic constructions. In contrast, students who lack motivation may adhere to simpler patterns. Additionally, when students feel unable to control the syntactic complexity in their writing, this often leads to writing anxiety. Consequently, to avoid potential mistakes, they tend to produce simpler syntactic structures. Furthermore, the previous study (Rahimi & Zhang, 2019) appealed for psychological factors like motivation, anxiety and enjoyment as predictors of EFL syntactic complexity production.

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Motivation and emotion are both important psychological factors, which has found their significant predictive power on EFL writing achievement (e.g., Ellis & Yuan 2004; Kormos, 2011; Kuiken & Vedder, 2012; Rahimi & Zhang, 2019). For example, the most influential Second Language Motivational Self System (L2MSS) in L2 or EFL learning context emerged from Dörnyei's (2005, 2009) work, composed of three constructs, ideal L2 self, ought-to L2 self and L2 learning experience. Researchers have posited the constructs within the L2 motivational theoretical framework that play a crucial role in predicting EFL writing achievement (Hong, 2018; Kim, 2009). However, given the cause-and-effect relationship between

syntactic complexity and writing quality, it remains uncertain whether the three constructs of the L2 motivational self system that are significant predictors of EFL writing achievement can also be extended to predict the production of syntactic complexity in EFL writing. That is, the issue about whether they can be the variables to significantly predict the syntactic complexity production in EFL writing are still confirmed by following empirical studies. Meanwhile, writing anxiety and writing enjoyment are both essential emotional variables which have also been found to predict the writing achievement (Han & Xu, 2020). Nonetheless, whether both writing anxiety and writing enjoyment can be predictors of syntactic complexity of EFL writing production is still not clear either.

Due to the scant empirical studies on the L2 motivational self system constructs, writing anxiety and writing enjoyment as predictors of EFL writing syntactic complexity production, the current study mainly examines whether the three constructs within the system, writing anxiety and writing enjoyment can significantly predict EFL writing syntactic complexity production among EFL college learners in EFL educational context.

1.2 Background of Study

EFL writing, for Chinese learners, is a weak point in the EFL learning, due to the issues of the syntactic complexity production (Wang & Wang, 2015). If learners' syntactic complexity production is poor, it will affect their writing enthusiasm thus induce writing fear. Relevant studies showed that the worse the students' language

ability, the greater the anxiety of writing (Daly & Miller, 1975), thus, writing anxiety is likely to be correlated with EFL writing performance. At present, local university students in China are large in numbers, and Local universities primarily emphasize teaching foreign languages, particularly exploring the predictors of syntactic complexity in EFL writing through cognitive factors, ignoring the psychological factors as predictors of its production. However, Chinese EFL learners' three constructs of L2 motivational self system as motivational factors, and writing anxiety and writing enjoyment as emotional factors are the possibly potential psychological factors to predict syntactic complexity production of EFL writing.

Regarding the background in which a large number of foreign language learners in China fear for EFL writing because of poor syntactic complexity production, the investigations about the motivation and emotions as predictors of syntactic complexity production are urgently needed to systematically gain insights into how syntactic complexity production is predicted by the psychological factors, which, to some extent, is likely to alleviate the learners' pressure and demotivation, reverse the fear for EFL writing and facilitate the EFL syntactic complexity production and development. The following is to demonstrate the details of background information about why L2 motivational self system constructs, writing anxiety and writing enjoyment can be the variables to predict the EFL writing performance in Chinese education context.

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1.2.1 Motivation

Motivation is considered crucial in acquiring a second language and is widely recognized as a key variable in EFL learning (Chomsky, 1988; Cohen & Dörnyei, 2002), and even determines an individual's EFL learning outcome. In the late 1950s, Gardner and Lambert, from the social psychological perspective, conducted studies systematically on second language learning motivation and pointed out the two motivational types, used to explain the functions of language acquisition (Gardner & Lambert, 1972). The first type was integrative motivation, which refers to the attitude to learn the second language, emphasized the specific social culture of language under study such as language being studied, group dynamics, and language learning situation as predictors of the second language learning outcome. While the second type was the instrumental motivation, which is for learners' practical reasons for language learning, such as passing the exam in school and getting a promotion at work. Later the conception of motivation was further explained by Gardner et al. (1985) and his associates as well as other researchers in Second Language Acquisition (SLA) field from educational psychology perspective, and a wide range of mature theories about motivation has been elaborated (Dörnyei, 1990), in which some valuable suggestions for construction of motivation models in L2 learning have been provided to explain the predictive power of motivation on L2 achievement. For example, In the 1990s, with the further development of L2 motivation research, considerable attention was devoted to developing theories of motivation to comprehensively explain its underlying principle, among which Dörnyei (1990) proposed the constructive model of motivation, which emphasized the interpretation

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and measurement of language learners' motivation from the perspective of language itself, learning and learning environment. Then, Dörnyei (2005), reforming and synthesizing the prior conceptualizations and components of motivation, with the aid of possible selves (Markus & Nurius, 1986) and self-discrepancy theory (Higgins, 1987), complemented the theoretical modeling on motivation, and further constructed an influential L2 motivational self system in L2 learning context with empirical studies. By comparison with the concept of motivation put forward by Gardner and Lambert (1972), this system, proposed by Dörnyei (2005, 2009), has already been reported the significant predictive power for language achievement across different linguistic and cultural background (Hong, 2018). Its theoretical constructs and applicability across various cultural contexts, including the EFL education, have been thoroughly validated and proven feasible (e.g., Papi & Teimouri, 2012, 2014). However, the question whether it can be used to predict the syntactic complexity production of EFL writing has not been addressed.

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1.2.2 Foreign Language Anxiety

The terminology of Foreign Language Anxiety, proposed by Horwitz et al. (1986), was referred to be a complex emotion including beliefs, feelings and behaviors in connection with curriculum foreign language learning. It was described as context-specific anxiety related to the context of foreign language learning (MacIntyre, 1999). Writing anxiety, originated from foreign language anxiety, is recognized as a distinct aspect of anxiety. It relates to foreign language writing performance and plays a role in shaping the overall construct of anxiety within the foreign language classroom

(Pae, 2013).

Nowadays, numerous studies have found writing anxiety can negatively predict the writing achievement in EFL educational context (Cheng, 2002; Teimouri et al., 2019; Zabihi, 2018). Chinese EFL learners, while engaging in EFL writing, are prone to writing anxiety, which is likely to be detrimental to syntactic complexity production of EFL writing. That writing anxiety can negatively predict the writing achievement has become an indisputable fact. However, the issue whether writing anxiety can predict the syntactic complexity production of EFL writing still needs to be further investigated.

1.2.3 Foreign Language Enjoyment

Foreign Language Enjoyment was delineated to be a complex positive emotion (Dewaele et al., 2016), pertaining to cognitive process. That is, EFL learners with higher foreign language enjoyment can better predict the ability to learn foreign language through extending cognitive ability, especially while exposing to difficult tasks (Wu & Halim, 2024). Recently, due to being influenced by Positive Psychology, positive emotions have been attached much importance in second language acquisition and EFL context (MaIntyre, 2016). Positive Psychology, introduced into L2 learning, has facilitated in the development of the literature of emotions in second language acquisition and EFL context (Dewaele, 2019a; Han & Xu, 2020; Li et al., 2018; Li et al., 2020; Li & Xu, 2019; Prior, 2019). And numerous researches reported the facilitative impact of foreign language enjoyment on EFL achievement

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or L2 achievement (see Dewaele & Li, 2020; Tsang & Lee, 2023).

Writing enjoyment, a specific form of foreign language enjoyment related to writing tasks, is often lacking among Chinese EFL learners. This lack of enjoyment while engaging in writing tasks is detrimental to maintaining positive writing behaviors (Graham, 2018). Consequently, out of the individuals' preference in writing tasks, the quality of syntactic complexity is undoubtedly influenced by writing enjoyment. Nonetheless, the degree to which writing enjoyment can predict the syntactic complexity of EFL writing still requires further investigation.

1.3 Statement of the Problem

Syntactic complexity production is a core indicator of EFL writing proficiency and reflects learners' ability to deploy diverse and intricate linguistic structures. It is commonly operationalized through measures such as length of production units (clauses, sentences, T-units), subordination and embedding, and coordination (Lu, 2010; Ortega, 2003). Because it captures learners' developing control over language resources, syntactic complexity has been widely adopted as a key index of L2 writing ability and language development (Ellis, 2005:139). Consequently, it has attracted sustained scholarly attention across educational contexts (Chen, 2010; Cumming et al., 2005; Ellis & Yuan, 2014; Ojinma, 2006; Robinson, 2001; Skehan & Foster, 2001).

Despite methodological advances in measuring linguistic complexity (Chen, 2008, 2010; Gui & Yang, 2003; Lu, 2010; McCarthy & Jarvie, 2007; Wolfe-Quintero, 1998; Wu, 2006; Zalbidea, 2017), many Chinese EFL learners continue to demonstrate limited syntactic sophistication in writing. Prior research has largely attributed variation in syntactic complexity to cognitive factors such as task complexity and working memory (Gilabert, 2007; Kuiken & Vedder, 2007; Ong & Zhang, 2010; Xing & Luo, 2016). While these studies provide valuable insights, they foreground cognitive constraints and give comparatively less attention to learners' psychological characteristics. This creates an incomplete explanatory framework, as EFL writing is simultaneously a cognitive and psychological activity (Hyland, 2003; Ma, 2004; Xu, 2012).

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Theoretically, producing syntactically complex language requires sustained attention, effort investment, and risk-taking, all of which are closely linked to motivational and emotional conditions (Robinson, 2001). When learners experience anxiety or reduced motivation, their willingness and cognitive readiness to produce complex structures may decline, leading to syntactic simplification (Wu & Halim, 2024). Therefore, understanding syntactic complexity solely from cognitive perspectives risks overlooking important emotional mechanisms that shape writing performance.

Within motivational research, the L2 Motivational Self System (L2MSS) has emerged as one of the most influential frameworks, comprising Ideal L2 Self, Ought-

to L2 Self, and L2 Learning Experience (Dörnyei, 2005, 2009). The ideal L2 self is thought of as an individually idealized future self-image that can stimulate the learners' aspiration to acquire the language being studied (Dörnyei & Ryan, 2015), ought-to L2 self is considered to be an external factor to meet the expectation or avoid negative consequences (Dörnyei & Ryan, 2015), and L2 learning experience, unlike ideal L2 self and ought-to L2 self, which are both future-oriented, is the situated type of motivation that reflects students' engagement, and is related to the learning situation factors like teacher factor, textbook, curriculum environment, curriculum content, and even the learners' individual factors (Dörnyei, 2009; Dörnyei, 2019). These constructs of L2MSS have been shown to predict language proficiency and writing achievement (Hong, 2018; Tahmouresi & Papi, 2021). In parallel, emotional variables—particularly writing anxiety and writing enjoyment—have been found to predict writing achievement (Han & Xu, 2020), with anxiety often linked to writing achievement constraints (Cheng et al., 1999; Li & Liu, 2013; Li et al., 2023) and enjoyment associated with enhanced writing achievement outcomes (Li & Wei, 2023; Tsang et al., 2023).

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However, writing achievement and syntactic complexity are not equivalent constructs. Writing achievement may mask the underlying linguistic processes that generate textual complexity (Rahimi & Zhang 2019). Thus, it remains unclear whether motivational and emotional variables that predict writing achievement also predict syntactic complexity production. Without this distinction, pedagogical interventions may improve writing achievement scores without necessarily fostering

linguistic development.

Furthermore, although relationships between three L2MSS constructs, foreign language enjoyment, and foreign language anxiety have been explored (Papi, 2010; Papi & Khajavy, 2021; Teimouri, 2017; Wu, 2024), little is known about how these L2MSS constructs relate specifically to writing-related emotions (writing enjoyment and writing anxiety), or how motivation and emotion jointly shape syntactic complexity. This gap limits our understanding of the motivational–emotional mechanisms underlying complex language production in writing.

Therefore, there is a need for an integrated investigation that connects motivation, emotion, and syntactic complexity within a single framework. Such an approach can clarify how and why learners produce varying levels of syntactic complexity, rather than merely documenting writing achievement differences. Addressing this issue is pedagogically important because it can inform instructional practices that foster both positive emotional experiences and sustainable motivational resources, thereby supporting deeper linguistic development in EFL writing.

Given these considerations, the present study systematically examines how the three constructs of the L2 Motivational Self System relate to writing anxiety and writing enjoyment, and to what extent these motivational and emotional variables predict syntactic complexity production in Chinese EFL writing. It further explores whether writing anxiety and writing enjoyment mediate the relationship between L2MSS

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constructs and syntactic complexity production.

1.4 Research Objectives

This study is designed to accomplish the following objectives:

1- To examine the correlations among the three constructs of L2MSS (Ideal L2 Self, Ought-to L2 Self, and L2 Learning Experience), writing enjoyment, writing anxiety and syntactic complexity production among Chinese tertiary-level EFL students.

2- To examine whether the three constructs of L2MSS (Ideal L2 Self, Ought-to L2 Self, and L2 Learning Experience) predict writing enjoyment and writing anxiety among Chinese tertiary-level EFL students.

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3- To investigate whether the three constructs of L2MSS (Ideal L2 Self, Ought-to L2 Self, and L2 Learning Experience) predict syntactic complexity production among Chinese tertiary-level EFL students.

4- To examine whether writing enjoyment and writing anxiety predict syntactic complexity production among Chinese tertiary-level EFL students.

5- To examine whether the relationships between the three L2MSS constructs (Ideal L2 Self, Ought-to L2 Self, and L2 Learning Experience) and syntactic complexity production are mediated by writing enjoyment and writing anxiety among Chinese

tertiary-level EFL students.

1.5 Research Questions and Hypotheses

This study constitutes an interdisciplinary investigation into EFL writing, examining the extent to which three constructs of L2MSS—namely, the Ideal L2 Self, the Ought-to L2 Self, and the L2 Learning Experience—together with writing enjoyment and writing anxiety, serve as psychological predictors of syntactic complexity in EFL writing. Despite the recognized importance of these factors, few studies have explored the interrelationships among these three L2MSS constructs, writing enjoyment, writing anxiety, and syntactic complexity production among Chinese tertiary-level EFL students. To address this research gap, the present study aims to examine these relationships systematically and to answer the following research questions, for which corresponding hypotheses are proposed:

RQ1: How do the three constructs of the L2MSS (Ideal L2 Self, Ought-to L2 Self, and L2 Learning Experience), writing enjoyment, writing anxiety, and syntactic complexity production correlate among Chinese tertiary-level EFL students?

H1a: There is significant correlation between ideal L2 self and L2 learning experience within L2MSS.

H1b: There is significant correlation between ideal L2 self and ought-to L2 self within L2MSS.

H1c: There is significant correlation between ought-to L2 self and L2 learning experience within L2MSS.

H1d: There are significant correlations between writing enjoyment and writing anxiety.

H1e: There are significant correlations between the three L2MSS constructs and writing enjoyment.

H1f: There are significant correlations between the three L2MSS constructs and writing anxiety.

H1g: There are significant correlations between the three L2MSS constructs and syntactic complexity.

H1h: There are significant correlations between writing enjoyment, writing anxiety and syntactic complexity.

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RQ2: To what extent do the three L2MSS constructs (Ideal L2 Self, Ought-to L2 Self, and L2 Learning Experience) predict writing enjoyment and writing anxiety among Chinese tertiary-level EFL students?

H2a: Ideal L2 self can positively and significantly predict writing enjoyment.

H2b: L2 learning experience can positively and significantly predict writing enjoyment.

H2c: Ought-to L2 self can negatively and significantly predict writing enjoyment.

H2d: Ought-to L2 self can positively and significantly predict writing anxiety

H2e: Ideal L2 self and L2 learning experience can negatively and significantly predict writing anxiety.

RQ3: To what extent do the three L2MSS constructs (Ideal L2 Self, Ought-to L2 Self, and L2 Learning Experience) predict syntactic complexity production in EFL writing among Chinese tertiary-level EFL students?

RQ4: To what extent do writing enjoyment and writing anxiety individually predict syntactic complexity production in EFL writing among Chinese tertiary-level EFL students?

H4a: Writing enjoyment can significantly predict syntactic complexity.

H4b: Writing anxiety can significantly predict syntactic complexity.

RQ5: Do writing enjoyment and writing anxiety mediate the relationships between the three L2MSS constructs (Ideal L2 Self, Ought-to L2 Self, and L2 Learning Experience) and syntactic complexity production among Chinese tertiary-level EFL students?

H5a: Writing anxiety is a mediator between the three constructs of L2MSS and syntactic complexity.

H5b: Writing enjoyment is a mediator between the three constructs of L2MSS and syntactic complexity.

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1.6 Significance of the Study

This study is to scrutinize the relationships amidst three constructs within L2 motivational self system, anxiety, enjoyment, and syntactic complexity production and inquiry how the motivational and emotional variables predict the syntactic complexity production of EFL writing. This study can aid the EFL writing teachers to identify the relation between motivation and emotion in EFL writing class, which is beneficial for writing teachers to create a very comforting curriculum environment for language learners, and which is facilitated in maintaining long-time motivation of EFL writing. Also, the study conclusions can serve for improvement of syntactic complexity production in EFL writing.

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To be specific, the contribution of the study will be illustrated in relation to teachers, students, and theoretical contribution in syntactic complexity production of EFL writing as follows.

As for the EFL writing teachers, the findings are helpful for teachers to be familiar with diverse learning emotions generated in EFL writing class, and can supply the scaffoldings for students in regulation of learning emotions by monitoring students' motivation. Additionally, the findings may let teachers know about the motivation in EFL writing, as well as how the motivation and emotions predict the syntactic complexity production in EFL writing. Meanwhile, teachers can deeply gain insight into the details of the syntactic complexity production of EFL writing, which may help students develop syntactic complexity production of EFL writing in perspective

of psychological factors. The most important one is that the findings may help EFL writing teachers create the comforting EFL writing class environment.

As for the EFL learners, when the students' writing emotions are concerned in EFL writing, students may feel the caring from the teachers, and the students may be inspired the motivated behavior in EFL writing. And then syntactic complexity production of EFL writing could be improved to some extent.

The last but not least is that this study may contribute to expanding the EFL writing research perspective, and promote the motivation and emotion study in syntactic complexity production of EFL writing, which can be conductive to extend the terrain of L2 motivational self system, emotions to linguistic items production and development of EFL writing.

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1.7 Scope of the Study

This study focuses on examining how specific psychological factors relate to and predict syntactic complexity production in English as a Foreign Language (EFL) writing among Chinese university learners. In the present research, psychological factors are explicitly defined as the three constructs of Dörnyei's L2 Motivational Self System (Ideal L2 Self, Ought-to L2 Self, and L2 Learning Experience) and two writing-related achievement emotions, namely writing enjoyment and writing anxiety. These variables constitute the central explanatory factors investigated in relation to learners' syntactic complexity production. The selection of these constructs is

theoretically grounded rather than arbitrary. The L2 Motivational Self System provides a comprehensive yet parsimonious framework that captures learners' future-oriented self-guides (Ideal L2 Self), externally regulated obligations (Ought-to L2 Self), and situated learning experiences (L2 Learning Experience). Together, these three dimensions integrate identity-based and context-sensitive aspects of motivation, making them particularly suitable for examining sustained engagement in cognitively demanding tasks such as syntactically complex writing (Halim & Wu, 2025). Compared with broader motivational models (e.g., general expectancy–value or intrinsic–extrinsic frameworks), L2MSS offers domain-specific explanatory power tailored to second language learning and has demonstrated strong empirical relevance in Asian EFL contexts.

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Writing enjoyment and writing anxiety were selected as focal emotional variables because they represent theoretically central and contrasting achievement emotions within Control-Value Theory. Enjoyment reflects activating positive emotions associated with perceived value and competence, whereas anxiety reflects activating negative emotions linked to perceived threat and lack of control. Focusing on these two core emotions allows for a theoretically coherent examination of both facilitative and debilitative emotional processes without dispersing analytical focus across an excessive range of affective variables. While Self-Determination Theory informs the understanding of motivational quality and regulation, and Control-Value Theory frames achievement emotions, the L2 Motivational Self System serves as the central

motivational construct due to its integrative capacity to connect long-term self-guides with situated classroom experiences and observable language performance.

The study is delimited to syntactic complexity as one dimension of writing performance. Other aspects of writing quality, such as lexical complexity, coherence, accuracy, or holistic writing scores, are beyond the scope of the present research. Syntactic complexity was selected because it constitutes a developmentally sensitive and cognitively demanding indicator of advanced L2 writing proficiency. Unlike global writing scores that conflate multiple linguistic and rhetorical dimensions, syntactic complexity provides a linguistically operationalizable and theoretically meaningful index of learners' ability to produce elaborated clause structures, subordination, and coordination. Within second language acquisition research, syntactic complexity has long been regarded as a core dimension of interlanguage development and grammatical sophistication. By narrowing the focus to this specific linguistic domain, the study aims to examine more precisely how motivational self-guides and writing-related emotions may influence learners' willingness and capacity to engage in structurally demanding language production, rather than treating writing performance as an undifferentiated outcome variable.

Contextually, the study is situated in the Chinese tertiary EFL context and specifically targets Chinese university students enrolled in EFL writing courses at Hubei University of Science and Technology. The findings are therefore intended to reflect this instructional and sociocultural context rather than represent EFL learners

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in other educational settings or countries. The study also adopts a temporal boundary by focusing on data collected during the Autumn Semester of 2024, ensuring that the investigation reflects contemporary instructional practices and learner experiences.

Methodologically, the research adopts a sequential explanatory mixed-methods design, in which quantitative data are collected and analyzed in the initial phase, followed by qualitative inquiry to further interpret and elaborate on the quantitative findings. This design integrates questionnaire measures and learners' writing samples to explore associations and predictive relationships among the target variables. However, the primary emphasis is placed on identifying relational and predictive patterns rather than establishing causal claims.

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Given its focused theoretical, contextual, and methodological boundaries, the study does not attempt to account for broader cognitive, social, or instructional determinants of writing performance. Moreover, as the research concentrates on a specific group of Chinese tertiary EFL learners and a selected set of motivational and emotional constructs, the findings may not be directly generalizable to other populations or educational contexts. By clearly delineating these conceptual and empirical boundaries, the study aims to provide a theoretically coherent and analytically focused investigation of how motivational self-guides and writing-related emotions are associated with syntactic complexity production in EFL writing.

1.8 Definitions of Terms

Writing anxiety

Writing anxiety is considered to generate certain anxiety behavior like averting writing tasks, fear about writing being assessed, etc. (see Daly & Miller, 1975). It is operationalized as learners' self-reported level of anxiety toward EFL writing, measured through a Likert-scale questionnaire adapted from established writing anxiety scales. Higher scores indicate higher levels of writing anxiety.

Writing enjoyment

Writing enjoyment is a specific foreign language enjoyment related to the cognitive process of EFL (Graham, 2018). In this study, writing enjoyment is measured through a Likert-scale questionnaire assessing learners' perceived enjoyment, interest, and satisfaction in EFL writing tasks. Higher scores represent higher levels of writing enjoyment.

Motivation

Motivation is thought of as one of very important factors to give rise to certain behavior and give it direction (Cohen & Dörnyei, 2002). In this study, motivation is examined through the L2 Motivational Self System and measured using a questionnaire assessing learners' self-perceptions and learning experiences related to English learning.

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L2 motivation self system

L2 motivation self system is divided into ideal L2 self, ought-to self, and L2 learning experience (Dörnyei, 2005, 2009). In this study, L2MSS is operationalized through a validated Likert-scale questionnaire measuring the three components separately.

Ideal L2 self

The ideal L2 self represents an internal motivator—a future self-image that embodies the learner's aspirations in EFL learning, such as achieving success, proficiency, and fluent communication in the target language (Dörnyei & Ryan, 2015). It is Measured through questionnaire items assessing learners' envisioned future use and mastery of English writing.

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Ought-to L2 self

The ought-to L2 self reflects external pressures—a self-concept shaped by external expectations or the desire to avoid negative outcomes (Dörnyei & Ryan, 2015). It is Measured through questionnaire items capturing externally driven motivations and perceived responsibilities.

L2 learning experience

L2 learning experience is a type of situational motivation which is greatly related to teacher factor, textbook, curriculum environment, activity engagement and even the learners' individual factors (Dörnyei, 2019). It is Measured through questionnaire

items evaluating learners' perceptions of classroom environment, engagement, and learning experiences.

Syntactic complexity

Syntactic complexity is to demonstrate how differentiated, and complicated the production units or grammatical constructions are in EFL writing (Wolfe-Quintero et al. 1998; Lu, 2010). In this study, syntactic complexity is measured using multiple indices of length, subordination, coordination, and phrasal sophistication calculated from learners' writing samples using syntactic analysis procedures based on Lu (2010).

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Sentence

A sentence is typically defined as a sequence of words, which begins with a capital letter, with the exception of proper nouns (Lu, 2010).

Clause

A clause is understood as linguistic units consisting of a subject and a finite verb (Hunt, 1965; Polio, 1997).

T-unit

T-unit is defined as a main clause combined with any subordinate clauses or non-clausal elements that are attached to or embedded within it (Hunt, 1965).

The Mean Length of Sentence (MLS)

MLS is a sentence unit length of syntactic complexity production, which is calculated by counting the number of words in a sentence.

The Mean Length of Clause (MLC)

MLC is a clause unit length of syntactic complexity production, which is calculated by the average number of words in a clause.

Mean Length of T-unit (MLT)

MLT is a T-unit length of syntactic complexity production, which is calculated by the number of words within T-units.

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Clauses per Sentence (C/S)

C/S serves as a comprehensive metric for assessing both clausal coordination and subordination within sentences, which is calculated by the number of clauses within a sentence.

Clauses per T-unit (C/T)

The C/T index, representing the number of clauses per T-unit (where a T-unit is a main clause plus any subordinate clauses attached to it), gauges the degree of clausal subordination within a text.

Complex T-unit (CT)

A Complex T-unit is defined by the presence of both an independent clause and at least one dependent clause (Lu, 2010).

Complex T-units to total T-units (CT/T)

The ratio of complex T-units to total T-units (CT/T) reflects the proportion of T-units that include dependent clauses, indicating the frequency of complex T-units in the text.

Dependent Clauses per Clause (DC/C)

The Dependent Clauses per Clause (DC/C) index is a subordinated unit of syntactic complexity production, which is calculated by the number of dependent clauses in relation to the total number of clauses.

Dependent Clauses per T-unit (DC/T)

DC/T is a subordinated unit of syntactic complexity production, which is calculated by the average number of dependent clauses per T-unit.

Coordinate Phrases per Clause (CP/C)

Coordinate Phrases per Clause (CP/C) ratio is to measure the coordination of syntactic complexity production, which is calculated by the number of coordinate phrases relative to the total number of clauses.

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Coordinate Phrases per T-unit (CP/T)

Coordinate Phrases per T-unit (CP/T) ratio is to measure the coordination of syntactic complexity production, which is assessed by the frequency of coordinate phrases in relation to the total number of T-units, reflecting the overall use of coordination across larger syntactic units.

T-units per Sentence (T/S)

the Sentence Coordination Ratio (T/S) is calculated by the ratio of T-units to sentences, highlighting how sentence coordination is employed in writing.

Complex Nominals per Clause (CN/C)

The metric of Complex Nominals per Clause (CN/C) assesses the frequency of complex nominals within individual clauses, revealing how noun phrases contribute to syntactic sophistication.

Complex Nominals per T-unit (CN/T)

Complex Nominals per T-unit (CN/T) evaluates the prevalence of these structures across larger discourse units, which is calculated by the ratio of complex nominals to T-units.

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Verb Phrases per T-unit (VP/T)

Verb Phrases per T-unit (VP/T) quantifies the number of verb phrases including finite and non-finite verbs present in each T-unit, highlighting the variability and complexity of verbal actions within the text.

1.9 Overview of the Thesis

The present study contains five chapters, which is organized as follows.

Chapter One is about the introduction of the present study based on this topic, which is composed of the following contents like background information, problem statements, research goals, research questions, the range of study, study significance, and a summary involved in this study.

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Chapter Two is the literature review of the related study based on this topic. It presents the topics consisted of the outline of the theory of L2 motivational self system, writing enjoyment, writing anxiety and syntactic complexity in EFL writing context, and then the introduction of the relationship between three constructs within the system, writing enjoyment, writing anxiety, and syntactic complexity production. At last, the study design as well as the summary of this chapter is presented.

Chapter Three details the methodology utilized in this study. It encompasses the research framework, sampling, data collection approaches, data interpretation, study results, stages of the research process, and concludes with a chapter summary.

Chapter Four reports the findings about the correlations between L2 motivational self system constructs, writing enjoyment, writing anxiety, and syntactic complexity dimensions, the predictive power of L2 motivational self system constructs on foreign language writing emotions and on syntactic complexity dimensions, the predictive power of both writing enjoyment and writing anxiety on syntactic complexity dimensions, and the writing enjoyment and writing anxiety as mediators between L2 motivational self system constructs and syntactic complexity dimensions. Additionally, the discussions of the current study findings are also presented.

Chapter Five presents a comprehensive conclusion of the five main findings of the current study. This chapter also addresses the implications of the study, highlights its strengths, acknowledges its limitations, and provides directions for future research. Finally, it concludes by summarizing the key insights and contributions of the study.

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1.10 Summary of Chapter One

Chapter one introduces the topic of the study related to motivation, writing anxiety, writing enjoyment, syntactic complexity in EFL writing education, the relation between motivation, anxiety, enjoyment and syntactic complexity production among the provincial public university students in Hubei province of China, the problems of the previous studies among the relations between motivation, anxiety, enjoyment and EFL writing. And then it presents the research objectives, research questions, research scope, and the study implications.

In the subsequent chapter, the literature review based on the topic which concentrates on the introduction of different variables in this study, the introduction of correlated study between constructs within L2 motivational self system, writing enjoyment, writing anxiety and syntactic complexity production in EFL writing education among the provincial public university students in Hubei province of China. In addition, the different measurements of syntactic complexity production are introduced. Last but not least is that the conclusion of the chapter is presented.

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CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

Chapter two recalls the studies regarding to the topic, which consists of researches of syntactic complexity production, the different measurements of syntactic complexity, the types of motivation, the introduction of L2 motivational self system, writing enjoyment, and writing anxiety, the relations between the constructs within the system, writing enjoyment, writing anxiety, and syntactic complexity production of EFL writing. The following also includes approaches to the study of syntactic complexity production of EFL writing, and evaluations on the study of syntactic complexity production in EFL writing. Additionally, the recent literature review about the relations between the constructs within the system, emotions and syntactic complexity production have been presented. The last but not least is that the theoretical frameworks and conceptual framework based on the present study have been already included.

2.2 Syntactic Complexity Production of EFL Writing

Syntactic complexity, which can be demonstrated through varied and intricate linguistic structures, reflects the level of sophistication in EFL writing (Lu, 2010). It helps us to comprehensively analyze the EFL learners' language development. Due to the syntactic complexity as a significant predictor of EFL writing achievement, its development in EFL writing has long been a focal point of academic attention. The review covers the following sections. First, syntactic complexity is explained in lens

of construction grammar theory proposed by Fillmore (1988). Next, syntactic complexity indices outlined by Wolfe-Quintero et al. (1998) are taken into account in L2 writing performance. Finally, indices of syntactic complexity, as measured by L2 Syntactic Complexity Analyzer (L2SCA) and employed in several recent studies on L2 writing, are considered (Lei et al., 2023; Lu, 2010; Paquot, 2018; Plakans et al., 2019; Wu et al., 2020; Zhang & Ouyang, 2023).

2.2.1 Construction Grammar Theory and Syntactic Complexity

Charles Fillmore's Construction Grammar Theory (1988) provides a valuable framework for understanding syntactic complexity by conceptualizing language as a system of constructions—conventionalized patterns that link linguistic forms with their meanings. This perspective suggests that syntactic complexity is not merely defined by sentence length or the number of embedded clauses, but rather by the variety and sophistication of the constructions used by speakers and writers (Fillmore, 1988).

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In Construction Grammar, constructions are viewed as fundamental units of linguistic competence. These constructions can vary from simple word forms to intricate sentence structures. Thus, syntactic complexity can be analyzed in terms of the types and intricacies of constructions present in a text. For example, sentences featuring multiple clauses or complex syntactic structures, such as relative clauses or participial phrases, exhibit higher levels of complexity. This complexity reflects the learner's or writer's ability to effectively use diverse constructions to convey detailed

meanings (Fillmore, 1988).

The theory emphasizes that constructions are acquired through exposure and practical use, which aligns with a usage-based approach to language learning (Fillmore, 1988). As individuals engage with and practice various constructions, they internalize and apply more complex patterns. Therefore, increased syntactic complexity in writing can indicate a writer's proficiency with advanced constructions. For instance, a writer who consistently employs complex sentence structures and varied syntactic patterns likely demonstrates a deeper understanding of these constructions and their functional applications (Fillmore, 1988).

Moreover, Construction Grammar underscores the integration of form and meaning. Syntactic complexity involves not only structural elements but also how these structures facilitate precise communication and the expression of complex ideas. By examining how different constructions function within sentences, researchers can gain insights into how syntactic complexity enhances both communication and textual depth (Fillmore, 1988).

Above all, Construction Grammar Theory offers a robust framework for analyzing syntactic complexity by focusing on the role of constructions in shaping sentence structure and meaning. This approach reveals that complexity arises from the range and sophistication of constructions employed, which are learned and refined through usage. This perspective provides a deeper understanding of how syntactic complexity

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contributes to effective communication and the richness of written expression (Fillmore, 1988).

2.2.2 The Metrics for Syntactic Complexity

In the domain of L2 writing research or EFL writing research, a range of syntactic complexity indices have been developed and utilized (Wolfe-Quintero et al., 1998). While numerous indices have been proposed, the majority are derived from the framework established by Wolfe-Quintero et al. (1998). And all the indices are used to measure the parameters like the production unit length (i.e., clauses, sentence, T-units), the amount of embedding or subordination, coordination number of syntactic structures (Ortega, 2003). Despite this, only a few indices have seen consistent application in various studies to examine unit length production, the amount of embedding or subordination, and coordination number of syntactic structures (Lei et al., 2023; Lu, 2011; Wu & Halim, 2024; Zhang & Ouyang, 2023). This section gains insights into a detailed examination of these prevalent indices, with particular attention given to those outlined by Ortega (2003) and Wolfe-Quintero et al. (1998).

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2.2.2.1 Unit Length Production

Unit length production encompasses the measurement of sentence length, clause length, and T-unit length. The following are the detailed definitions of each type of unit length production.

The Mean Length of Sentence (MLS) is calculated by counting the number of words in a sentence. A sentence is typically defined as a sequence of words. It begins with a capital letter, with the exception of proper nouns. Additionally, it concludes with punctuation marks such as a period, question mark, or exclamation point. This straightforward definition of sentence offers a significant practical advantage in implementation. In contrast to measurements based on clauses or T-units, it is less complex. Consequently, this result is more efficient and accurate counting. Numerous studies have reported the significant positive relationship between MLS and writing quality (see Lei et al., 2023; Zhang & Ouyang, 2023).

The Mean Length of Clause (MLC) is calculated by the average number of words in a clause. A clause is understood as linguistic units consisting of a subject and a finite verb (Hunt, 1965; Polio, 1997). They encompass various types, including main clauses, relative clauses, adverbial clauses, and noun clauses (Lu, 2010). Specifically, the MLC values can be increased by phrasal coordination and modification, aspect use in main clause. For example, "She reads every day" is a main clause. The complexity of a main clause can increase with phrasal coordination, such as in "She reads every day and writes the details of literature in her journal," where "reads" and "writes" are coordinated by "and." Similarly, the MLC values can be increased by phrasal modification in relative clauses. For example, in "The book that she borrowed is on the table," the relative clause "that she borrowed" modifies the noun "book." Additionally, MLC values can be increased by modification and aspect use in adverbial clause. For instance, "She left early because she was tired" contains an

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adverbial clause "because she was tired," explaining the reason for the action in the main clause. The aspect use can vary, such as "She left early because she had been working hard," where the perfect continuous aspect "had been working" adds depth to the time frame. Finally, the MLC values can be increased by phrasal coordination and modification, aspect use in main clause in noun clauses. The noun clauses act as a noun within a sentence and can function as subjects, objects, or complements. An example is "What she said surprised everyone," where "What she said" is a noun clause acting as the subject of the main clause. Aspect use is less relevant here, but noun clauses can be complex, as in "What she said about the meeting yesterday was unexpected," where the clause includes additional modification. Each type of clause contributes to sentence complexity, and their lengths and structures are influenced by factors like coordination, modification, and aspectual variations, which can affect overall syntactic complexity. Previous studies have attested the MLC as a significant positive predictor of language proficiency (see Cumming et al., 2005; Ortega, 2003; Wolfe-Quintero et al., 1998; Zhang & Ouyang, 2023).

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According to Hunt (1965), a T-unit is defined as a main clause combined with any subordinate clauses or non-clausal elements that are attached to or embedded within it. For example, the sentence "She reads every day and writes the details of literature in her journal" contains two main clauses: "She reads every day" and "She writes the details of literature in her journal," resulting in two T-units. Conversely, the sentence "She reads the details of literature in her journal because this practice helps her deepen her understanding and appreciation of the texts" includes one main clause and

a subordinate clause, thus forming a single T-unit. Research has indicated that the Mean Length of T-unit (MLT) is a positive predictor of language proficiency in EFL writing (see Cumming et al., 2005; Zhang & Ouyang, 2023).

2.2.2.2 Sentence Complexity

Sentence complexity is often indexed by the number of Clauses per Sentence (C/S) (Lu, 2010). The inclusion of multiple clauses can enhance syntactic elaboration, enabling writers to express more nuanced and logically connected ideas. The C/S index therefore serves as a commonly used indicator for capturing both coordination and subordination at the sentence level. However, like other sentence-based measures, it may not fully account for issues such as run-on sentences or punctuation-related segmentation problems.

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Empirical findings on C/S have shown mixed patterns across contexts and learner populations. For instance, Ishikawa (1995), in a longitudinal study of Japanese EFL learners' written compositions, reported a positive relationship between C/S and learners' language development, suggesting that increased clause density may reflect growing syntactic maturity. In contrast, Lu (2010), analyzing a large corpus of L2 English writing produced by learners at different academic levels, found that C/S did not consistently increase with grade level and in some cases showed a negative association with school year. Lu argued that more advanced learners may rely less on clause chaining and more on phrasal elaboration. These contrasting findings indicate that the developmental trajectory of C/S may vary depending on instructional context,

learner proficiency, and writing tasks, individual differences, thereby warranting further empirical investigation.

2.2.2.3 Subordination

Subordination in syntactic complexity pertains to how sentences incorporate dependent (subordinate) clauses, which introduce additional layers of meaning (Lu, 2010). This process of expanding sentences through embedded clauses can either enrich or complicate their overall structure. Here's an overview of how subordination can be assessed using the specified dimensions.

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"The C/T index, representing the number of clauses per T-unit (where a T-unit is a main clause plus any subordinate clauses attached to it), gauges the degree of clausal subordination within a text. It reflects sentence complexity by indicating how many clauses are present in each T-unit, with a higher C/T ratio suggesting more complex sentence structures with multiple clauses. However, the relationship between the C/T ratio and language proficiency remains controversial. Some studies have found a positive relationship between C/T and language proficiency, while others have reported that C/T does not significantly predict language proficiency in EFL writing (Cumming et al., 2005; Lu, 2010).

A complex T-unit is defined by the presence of both an independent clause and at least one dependent clause (Lu, 2010). The ratio of Complex T-units to total T-units (CT/T) reflects the proportion of T-units that include dependent clauses, indicating

the frequency of complex T-units in the text. A higher CT/T ratio suggests a greater prevalence of subordinate clauses within T-units. While previous studies have not found the significant relationship between CT/T and language proficiency (Lu, 2010; Zhang & Ouyang, 2023).

The Dependent Clauses per Clause (DC/C) index is akin to the C/T index in that it measures the degree of clausal subordination within a clause. Specifically, the DC/C ratio assesses the number of dependent clauses in relation to the total number of clauses, offering insight into how frequently dependent clauses are used compared to the overall clause count. It was found by Lu (2010) that DC/C presents negative predictive power on language proficiency. This indicates a shift towards less subordination as proficiency develops, reflecting changes in the complexity of their writing.

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DC/T calculates the average number of dependent clauses per T-unit. It indicates how many dependent clauses are embedded within each T-unit, providing a measure of the complexity and depth of sentence structures. Due to the similarities between DC/T and DC/C, the negative relationship between DC/T and language proficiency in EFL writing are also reported by Lu (2010).

2.2.2.4 Coordination

Coordination is a key aspect of syntactic complexity in EFL writing, and it can be analyzed through several metrics. Coordination is a key aspect of syntactic

complexity in EFL writing, and it can be analyzed through several metrics. The Coordinate Phrases per Clause (CP/C) ratio measures the number of coordinate phrases relative to the total number of clauses, providing an indication of how often writers use coordinate phrases within individual clauses. Similarly, the Coordinate Phrases per T-unit (CP/T) ratio assesses the frequency of coordinate phrases in relation to the total number of T-units, reflecting the overall use of coordination across larger syntactic units. Additionally, the Sentence Coordination Ratio (T/S) evaluates the ratio of T-units to sentences, highlighting how sentence coordination is employed in writing. This ratio helps to understand the structural organization of sentences and the extent to which different clauses are combined to form more complex syntactic structures. Previous studies have reported the positive relationship between CP/C, CP/T, and language proficiency in EFL writing (Lu, 2010), and the negative relationship between T/S and language proficiency in EFL writing (Wolfe-Quintero et al., 1998). Together, these measures offer a comprehensive view of how coordination contributes to the syntactic complexity of EFL writing.

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2.2.2.5 The Structure of Complex Nominals and Verb Phrase

Complex nominals are widely regarded as an important indicator of syntactic sophistication in L2 or EFL writing because they allow writers to condense information and express ideas with greater precision and density. Complex nominals typically involve noun phrases that are expanded or modified by various grammatical elements. These may include nominal clauses, infinitives or gerunds functioning as subjects, and nouns modified by adjectives, relative clauses, appositives,

prepositional phrases, or possessives (Lu, 2010). The use of such structures reflects a writer's ability to elaborate meaning within phrasal units rather than relying solely on clausal expansion.

To operationalize this construct, researchers have proposed several indices. One commonly used measure is Complex Nominals per Clause (CN/C), which assesses the frequency of complex nominals within individual clauses and thus captures the extent to which noun phrase elaboration contributes to syntactic complexity. Empirical evidence suggests that CN/C is a significant positive predictor of language proficiency in EFL writing (Lu, 2010).

A related measure is Complex Nominals per T-unit (CN/T), which examines the distribution of complex nominals across larger discourse units. While CN/T similarly reflects the integration of phrasal elaboration into writing, its predictive power for language proficiency has been found to be weaker than that of CN/C (Lu, 2010).

In addition to nominal complexity, verb phrase complexity is another dimension of syntactic complexity. Verb Phrases per T-unit (VP/T) measures the number of verb phrases, including both finite and non-finite forms, within each T-unit. This index is intended to capture variation in verbal constructions. However, previous research has not established a significant relationship between VP/T and language proficiency in EFL writing (Lu, 2010).

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Although some studies have selectively employed a subset of syntactic complexity measures, the present study adopts all fourteen indices proposed by Lu (2010). This decision is theoretically and methodologically motivated.

First, Lu's (2010) framework represents one of the most comprehensive and systematically validated models for measuring syntactic complexity in L2 writing. The fourteen measures cover multiple dimensions, including length of production unit, subordination, coordination, and phrasal sophistication, thus providing a multidimensional profile of learners' syntactic performance.

Second, since this study aims to explore how motivational and emotional factors relate to syntactic complexity, employing the full set of indices allows for a more comprehensive examination of how psychological variables may differentially predict various aspects of syntactic complexity. Limiting the analysis to only a few measures might overlook important relationships.

Finally, recent empirical studies have continued to adopt Lu's full set of indices when examining developmental and individual differences in L2 writing (e.g., Lei et al., 2023; Zhang & Ouyang, 2023), supporting the appropriateness of a comprehensive approach.

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Therefore, the inclusion of all fourteen indices in the present study is intended to capture the multidimensional nature of syntactic complexity and to provide a fuller understanding of how motivational and emotional factors interact with learners' syntactic performance.

2.2.3 The Research about Syntactic Complexity and Writing Quality

Its measurements in EFL writing have been well concerned in the previous studies (Lu, 2010; Ortega, 2003). For example, Ortega (2003) conducted an early exploration into syntactic complexity by examining production unit lengths, such as clauses, sentences, and T-units, along with the occurrence of embedding, subordination, and coordination, and the variety of syntactic structures, providing the comprehensive understanding of how these elements contribute to overall syntactic intricacy. Furthermore, some researches about reliable indices of syntactic complexity related with the language proficiency has been investigated (Stockwell & Harrington, 2003). For instance, the typical study conducted by Stockwell and Harrington (2003), based on authentic email writing materials among university learners, found that the number of T-units can envision EFL writing quality.

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However, manually analyzing reliable metrics of syntactic complexity production remains a challenge for teachers and researchers. To address the absence of automated analysis tools for syntactic complexity, Lu (2010) integrated the findings of Ortega (2003) and Wolfe-Quintero et al. (1998) with an analysis of a corpus consisting of written data by Chinese college-level EFL students, compiled by Wen

et al. (2005). As a result of this integration, fourteen unique measures were created for the automatic analysis of syntactic complexity in EFL writing.

To date, numerous studies have attested the validity of fourteen different measures of syntactic complexity in EFL writing (Lei et al., 2023; Li & Yang, 2023; Paquot, 2018; Plakans et al., 2019; Wu et al., 2020; Zhang & Ouyang, 2023). They attempted to make the studies about which are dimensions out of fourteen different measures to predict the writing quality. Among the previous studies, Lei et al. (2023), by corpus of EFL writing, examined the developmental trajectory of syntactic complexity in EFL writing among Chinese EFL learners, and found all the fourteen metrics of syntactic complexity, but only amount of coordination can predict EFL writing quality. Meanwhile, Li and Yang (2023) also found that both Mean Length of Sentence (MLS) and Mean Length per Clause (MLC) out of fourteen indicators of syntactic intricacy can significantly predict the EFL writing quality in either L2 writing context or EFL writing context. Zhang and Ouyang (2023) highlighted the writing assessment performance with regard to the linguistic features of language complexity, by integration of fourteen syntactic complexity measures, also further found that the dimensions of syntactic complexity such as MLS, MLC, T/S, CT/T, CP/T, and CP/C are the contributors to writing quality. Considering above fourteen syntactic complexity dimensions' effect on writing quality, the definitions of fourteen syntactic complexity dimensions have been thus outlined in Table 2.1.

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Table 2.1

The Description of 14 Measures in Syntactic Complexity

Gauge	Symbol	Clarification
Type 1: Production Units Length		
Average clause length	MLC	The count of words within per clause
Average sentence length	MLS	The count of words within per sentence
Average T-Units length	MLT	The count of words within T-units
Type 2: Sentence Complexity		
Sentence complexity ratio	C/S	The count of clauses within per sentence
Type 3: Subordination		
Clause ratio	C/T	Number of clauses per T-unit
Dependent clause ratio	DC/C	Number of dependent clauses per clause
Dependent clause ratio	DC/T	Number of dependent clauses per T-unit
Complex T-unit ratio	CT/T	Number of complex T-units per T-unit
Type 4: Coordination		
Coordinate phrases per clause	CP/C	The count of coordinated phrases within per clause
Coordinate phrases per T-unit	CP/T	The count of coordinated phrases within per T-unit
Sentence coordination ratio	T/S	The total T-units in each sentence
Type 5: Complex structure		
Complex nominals	CN/C	Complex nominals divided by clauses
Complex nominals	CN/T	Complex nominals divided by T-units
Verb phrases	VP/T	Verb phrases by T-units

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While previous research has linked syntactic complexity to writing quality, it is important to clarify that syntactic complexity in the present study is not treated as equivalent to overall writing achievement. Writing achievement is a multidimensional construct involving content, organization, vocabulary, accuracy, and fluency. Syntactic complexity represents only one linguistic dimension of writing performance, focusing on the structural elaboration of language.

The present study focuses on syntactic complexity for three main reasons. First, syntactic complexity has been widely recognized as a sensitive indicator of L2 or EFL development and linguistic sophistication (Ortega, 2003; Lu, 2010). Second, compared to holistic writing scores, syntactic complexity measures provide more objective and fine-grained linguistic evidence that is less influenced by rater subjectivity. Third, since this study aims to explore how motivational and emotional factors relate to learners' language production, syntactic complexity serves as a more direct reflection of learners' linguistic choices and cognitive engagement during writing.

Therefore, syntactic complexity is conceptualized as a developmental and performance-related indicator rather than a comprehensive measure of writing achievement. Accuracy is not considered less important; rather, it represents a different dimension of writing that falls outside the primary focus of this study. The decision to concentrate on syntactic complexity allows for a more targeted examination of how psychological factors shape learners' structural language use in EFL writing.

2.2.4 Factors in Predicting Syntactic Complexity: Cognitive and Psychological Perspectives

For the above significant correlation between the production of syntactic and the quality of EFL writing, recent studies begun to shift to the predictors of syntactic complexity production. For example, numerous studies concern about the envision capability of cognitive factors on syntactic complexity production, and found the

complexity and difficulty of tasks, along with the various types and genres of tasks within EFL settings are all predictors of syntactic complexity production in EFL writing (Awwad & Tavakoli, 2022; Malicka, 2020; Plakans et al., 2019; Robinson, 2001).

Among the preceding studies, Robinson (2001) conducted innovative research, building on Skehan's (1998) findings, to develop a cognitive hypothesis framework for examining how task complexity and difficulty contribute to language production. Robinson's study revealed that task complexity significantly affects lexical variety in spoken language, as greater complexity directs cognitive resources towards generating more diverse lexical outputs. Additionally, Robinson explored the impact of task difficulty on language production and found that psychological factors such as motivation, confidence, and interest positively influence lexical diversity in spoken language.

However, Robinson's study focused solely on cognitive and psychological factors related to lexical diversity, without addressing their effects on syntactic complexity. Furthermore, task types can also influence language production, with written English potentially exhibiting different complexities compared to spoken English. Thus, it is important to investigate these aspects to gain a comprehensive understanding of language complexity.

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To build upon previous studies, recent research has increasingly focused on syntactic complexity in spoken English by incorporating a range of cognitive and individual factors. For instance, Awwad and Tavakoli (2022) aimed to explore additional cognitive factors influencing syntactic complexity in L2 oral language. They integrated factors such as language acquisition skills and working memory into the study of task complexity to examine the interaction effects of these cognitive factors on syntactic complexity. Their findings indicated that L2 proficiency, working memory, and task complexity are significant predictors of syntactic complexity production.

However, Awwad and Tavakoli's study primarily utilized three indices—Mean Length of T-unit (MLT), Mean Length of Clause (MLC), and the ratio of subordination—to measure syntactic complexity. This limited approach does not fully capture the mechanisms through which various dimensions influence syntactic complexity. Additionally, the study did not address syntactic complexity in L2 or EFL writing, which represents another important aspect of language complexity that warrants further investigation.

In order to further explore the cognitive factors related with syntactic complexity production in EFL writing, previous studies attempted to examine the effect of task types on syntactic complexity production in perspective of EFL writing by importing multiple syntactic complexity dimensions. For instance, Berman and her team have conducted significant research that highlights the varying demands of complexity

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across different genres from a developmental perspective (e.g., Berman & Nir-Sagiv, 2004, 2007; Ravid & Berman, 2010). Their extensive studies have compared personal experience narratives and expository texts (both spoken and written) across a range of educational levels from middle school to college. These genres are fundamental to many individuals' experiences both within and outside of academic settings. Narratives are found in various forms such as fiction, biographies, and historical accounts, while expository texts appear in formats like encyclopedias, textbooks, and academic journals. Berman and her colleagues have demonstrated that, in general, expository texts tend to exhibit more advanced lexical and grammatical features. For instance, expository writings often include a greater number of relative clauses (Berman & Nir-Sagiv, 2007) and showcase more complex noun phrases with longer words, increased syntactic depth, more abstract head nouns, and more sophisticated modifiers (Ravid & Berman, 2010).

Despite the fact that the syntactic complexity dimensions are affected by the cognitive elements, task types, and individual factors including task complexity, working memory, L2 proficiency, the predictive power of affective factors, like motivation, anxiety and enjoyment, on syntactic complexity production remains insufficiently researched focus. There are some typical studies that attempted to link the motivation and emotion to syntactic complexity production. For example, Robinson (2001) investigated the impact of psychological factors, including motivation, confidence, and anxiety, on language complexity production. However, his study's item pool for motivation and anxiety was limited and did not provide a

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comprehensive representation of these constructs. Robinson himself appealed for future research to expand the item pool for motivation and anxiety to better understand their effects on language complexity production. Moreover, the prior studies (Rahimi & Zhang, 2019; Tabari & Goetze, 2024) also called for more integration of psychological factors like motivation, anxiety and enjoyment into the scope of syntactic complexity production of EFL writing performance in the future. As such, the current study will attest the predictive power of psychological factors like motivation, anxiety and enjoyment on the syntactic complexity production in EFL writing, which contributes to explaining the failure or success of syntactic complexity production in EFL writing beyond what the cognitive factors can do. As a result, the current study, with that gap in mind, is to examine, to what extent, can the psychological factors like motivation, anxiety and enjoyment predict on the syntactic complexity production in EFL writing.

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2.3 The L2 Motivational Self System

Motivation is undeniable to be the key psychological factor in language learning (Ellis, 2001: 508). Language teachers explain the students' failure of EFL learning by their lack of motivation. Numerous studies strived to systematically clarify the conception of motivation in different ways (Crookes & Schmidt, 1991; Dörnyei, 1990; Gardner, 2001; Skehan, 1989), among whom, Skehan (1989) proposed four theoretical hypotheses about motivational types.

These hypotheses initially systematically introduce the conception of motivation as well as the classifications of motivations. The initial study conducted by Gardner (2001), based on the internal cause hypothesis, clarified the conception of integrativeness in motivation and subsequently put forward integrative motivation. The concept of integrativeness in EFL motivation affects the subsequent development of motivational theory.

Under Gardner's socio-educational theory, integrative motivation consists of two primary components. The first involves a desire to learn the target language, along with attitudes and interests in the target language and its community. The second component includes attitudes towards the learning situation, encompassing evaluations of teachers and courses. Language learners who demonstrate integrative motivation by actively engaging with the target language community, group, and learning environment are considered 'integratively motivated'. Additionally, Gardner and MacIntyre (1991), building on The Carrot and Stick Hypothesis, identified another type of motivation known as instrumental motivation. To date, instrumental motivation, as an external motivation, is always considered to be the predictors of EFL learning achievement within no context of target language culture (Gardner & Lambert, 1972; Lukmani, 1972).

However, due to lack of the studies about the internal relationship between motivational variables, above the conception of motivation as well as the classifications of motivation cannot comprehensively be insightful into complicated

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interaction between motivational variables. That is, the motivational theoretical models need to be explored to examine the potential relations between motivational variables. As a response to this gap, the L2 motivational self system was proposed and has since been extensively developed.

L2 motivational self system put forward by Dörnyei (2005, 2009), based on the previous concept of motivation, has enriched motivational theoretical model development in EFL learning, and further clarified the insignificant roles played by integrative motivation in EFL education context. To illustrate this problem, L2 motivational self system emerged out of studies based on the students who have no target language context (Dörnyei et al., 2006), found that there is no obvious integrative motive to learn foreign language within no target language community and no target groups, so it is doubtful whether integrative motive could contribute to learning foreign language in EFL context. Notably, L2 motivational self system, compared to integrative motivation, can be a better contributive factor in EFL learning, due to lack of target culture and environment.

As for the origin and development of L2 motivational self system, Dörnyei (2009) extends the concept of motivation by integrating ideas from the theory of possible selves, introduced by Markus and Nurius in 1986, as well as elements from Higgins' self-discrepancy theory, proposed in 1987. He posits that L2 motivation comprises two distinct identities: the ideal L2 self and the ought-to L2 self. The ideal L2 self represents an internal motivator—a future self-image that embodies the learner's

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aspirations in EFL learning, such as achieving success, proficiency, and fluent communication in the target language (Dörnyei & Ryan, 2015). This ideal L2 self is a potent predictor of motivation in EFL contexts, particularly outside of the learner's native language environment.

Conversely, the ought-to L2 self reflects external pressures—a self-concept shaped by external expectations or the desire to avoid negative outcomes (Dörnyei & Ryan, 2015). This aspect of motivation underscores the importance of meeting external standards and fulfilling perceived obligations in language learning. So, it is the expectation of what others think of you and is decided by the individual's social environment. For instance, the learners want to learn English because they want to get the teacher's praise in English class or learners learn English for getting a degree in university or get a promotion in working field. Research has revealed that ought-to L2 self image is a dynamic process which could be affected by the social environment and even could be changed into the ideal L2 self image (Dörnyei, 2009; Kim, 2009; Ryan & Deci, 2008). So, the framework initiated the step to explore the internal relationship between ideal L2 self and ought-to L2 self, which is, for teachers, contributive to examining the interaction of these two self-constructs on EFL learning.

Also, there is another major construct within L2 motivational self system, together with the two self-constructs, called the L2 learning experience. It, in contrast to the two self-constructs which are future-oriented, pertains to the present learning

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environment and is thus known as situational motivation, and it emphasizes how current learning conditions directly influence learning behavior. This type of motivation, out of L2 learning experience, is greatly related to teacher factor, textbook, curriculum environment, activity engagement and even the learners' individual factors (Dörnyei, 2019). It is noted by Dörnyei (2019) that L2 learning experience should be justified in lens of engagement into classroom activity, calling for integration of engagement into L2 learning experience.

Recent scholarship has increasingly emphasized the role of behavioral engagement as a central dimension of learners' L2 learning experience. For example, Mercer and Dörnyei (2020), as well as Li (2023), underscore the importance of learners' active involvement in classroom activities, positioning behavioral engagement as a key theoretical underpinning of L2LE. In the present study, behavioral engagement is incorporated into the L2LE framework for two main reasons. First, it reflects learners' observable participation and effort investment in EFL learning, which has been identified as a core component of L2LE and a significant predictor of motivated learning behavior (Jones & Carter, 2019; Li, 2023). Second, embedding behavioral engagement within the L2LE construct enables a more comprehensive evaluation of the quality of learner involvement, in line with the reconceptualization of L2LE proposed by Dörnyei (2019), where situational and experiential factors are foregrounded.

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Additionally, L2LE was originally conceptualized by Dörnyei (2009) as a form of situated motivation closely tied to learners' immediate learning environment. In foreign language contexts where authentic target-language exposure is limited, classroom interaction becomes a crucial contextual resource. It is therefore reasonable to argue that teacher–student and peer interactions play a pivotal role in shaping learners' motivational experiences. Drawing on the perspective of Positive Psychology, Li (2023), based on two samples totaling 589 learners, operationalized L2LE to include relational components, highlighting the significance of teacher–student rapport in foreign language education. Empirical research further supports the pedagogical value of such interactional dynamics, demonstrating that constructive teacher–student engagement positively predicts learning behaviors and academic development (Goetz et al., 2021; Muir et al., 2021).

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Within this framework, Interactional L2 Learning Experience (IL2LE) can be understood as the relational dimension of L2LE, encompassing learners' perceptions of supportive and meaningful interpersonal interactions in the classroom. Attending to both behavioral engagement and relational dimensions provides a coherent platform for linking learners' classroom experiences with the two self-guides of the L2 Motivational Self System (L2MSS). This integrative approach may help address the conceptual tension among the three components of L2MSS noted by Dörnyei (2019), by situating self-guides within concrete experiential and social contexts.

Empirical findings lend support to this integrative perspective. For instance, Zhu et al. (2023), in a study of 589 Chinese EFL learners, reported significant associations between Ideal L2 Self, behavioral engagement, and L2 achievement. Similarly, Ghasemi (2023), drawing on data from 748 Iranian secondary school students, found that both Ideal L2 Self and Ought-to L2 Self significantly predicted academic engagement, particularly its behavioral dimension. These findings corroborate Dörnyei's (2019) proposition that behavioral engagement can be conceptualized as an experiential manifestation of L2LE.

Despite growing attention to engagement, the relational or interactional dimension of L2LE has received comparatively limited attention, especially in the specific domain of EFL writing. Given that both behavioral engagement and interpersonal relationship constitute essential elements of L2LE, further investigation is warranted into how behavioral engagement L2 learning experience (BEL2LE) and IL2LE jointly operate within EFL writing classrooms. Examining how learners' active participation and perceived relational support contribute to foreign language writing achievement may deepen our understanding of the motivational–experiential mechanisms underlying L2 writing development. Such inquiry would not only enrich the theoretical elaboration of L2LE but also provide pedagogical implications for fostering engagement and supportive classroom relationships in EFL writing contexts.

Building on the above theoretical and empirical foundations, the present study operationalizes L2LE as comprising two interrelated dimensions: Behavioral

Engagement L2 Learning Experience (BEL2LE) and Interactional L2 Learning Experience (IL2LE), representing learners' active participation and relational classroom experiences respectively. This conceptualization enables a more fine-grained examination of how experiential and relational dimensions of L2LE function within the EFL writing context.

The system includes significant relationships between the three constructs each other, as evidenced by studies (Dörnyei & Ryan, 2015; Moskovsky et al., 2016; Papi, 2010; Taguchi et al., 2009). For instance, Moskovsky et al. (2016) explored Saudi English learners and discovered a notable correlation between these two self-constructs. Both were identified as predictors of the L2 learning experience. This study confirms the triangular relationships proposed by Dörnyei (2005, 2009) among three constructs within the system, with the details illustrated in Figure 2.1.

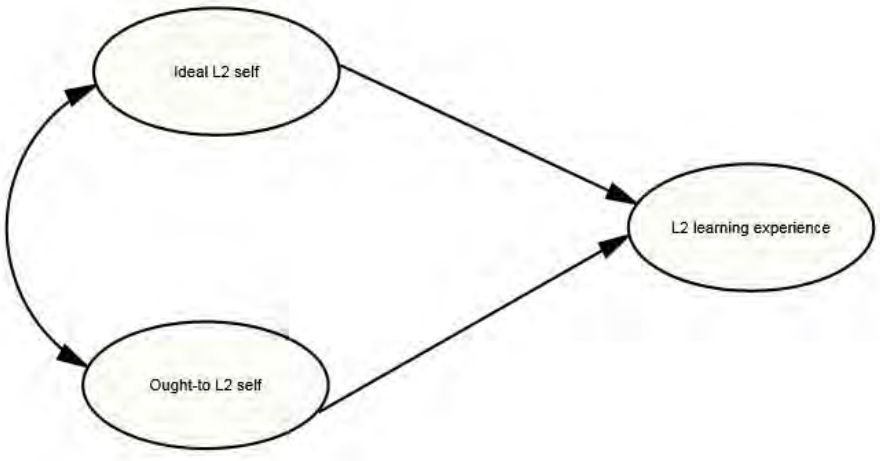


Figure 2.1. Triangle Relation about the Three Constructs (drawn from Dörnyei, 2005)

To date, numerous studies have identified the system as a predictor of EFL learning across various educational contexts (Al-Hoorie, 2018; Dörnyei & Ryan, 2015; Hong, 2018; Jang & Lee, 2019). For example, Hong (2018) examined the function of the three constructs in learning among EFL learners in China. Hong's findings indicated that the ideal L2 self and the L2 learning experience can predict EFL learning achievement, but the role of ought-to L2 self in learning achievement is not significant.

To further substantiate the facilitative power of the system on EFL learning achievement, Al-Hoorie (2018) conducted a comprehensive meta-analysis involving 39 studies and 32,078 language learners. Al-Hoorie's meta-analysis reported that all the three constructs within the system significantly predict objective measures of EFL achievement.

Recent studies on the system have shifted focus towards determining whether the three constructs continue to predict specific aspects of EFL learning. For instance, Jang and Lee (2019) examined the two self-constructs as predictors of EFL writing achievement. They found that the ideal L2 self predicts EFL writing achievement more strongly than the ought-to L2 self does. However, these findings are subject to dispute due to the use of questionnaire scales for the two self-constructs specifically in the context of EFL writing.

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The controversy is about the issue whether items of ideal L2 self and ought-to L2 self can be applicable to the specific technique of EFL learning, for example, EFL writing. To eliminate controversies, recent studies developed the item pools of ideal L2 self and ought-to L2 self into ideal L2 writing self and ought-to L2 writing self, which is more applicable in EFL writing. The pioneering work conducted by Tahmouresi and Papi (2021), who, by using the qualitative data, developed the questionnaire scales to measure ideal L2 writing self and ought-to L2 writing self, and further demonstrated the reliability and validity of them in L2 or EFL writing context. Ideal L2 writing self is defined, by Tahmouresi and Papi (2021), to be the aspiration for idealized image of L2 writing, while ought-to L2 writing self be done to be the obligation for L2 writing. Both ideal L2 writing self and ought-to L2 writing self are the subcomponents of ideal L2 self and ought-to L2 self, and their item pool of both ideal L2 writing self and ought-to L2 writing self are adapted from those of ideal L2 self and ought-to L2 self, which can be thus applied to EFL writing context.

Subsequent studies examined the predictive power of ideal L2 writing self and ought-to L2 writing self on EFL writing achievement in EFL writing context. For example, Tsao et al. (2021), based on Chinese university undergraduate students, explored the causal relationship between both writing self-constructs and writing achievement, and found that only ideal L2 writing self can indirectly predict the EFL writing score mediated by learners' engagement. They did not find the significant effect of ought-to L2 writing self on writing scores directly or indirectly. Zhao et al.

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(2023), based on the investigation of ideal L2 writing self among 239 Chinese EFL university learners, also found the indirect relation between ideal L2 writing self and the EFL writing performance. However, Tahmouresi and Papi (2021), by recruiting 85 EFL university learners in Iran, analyzed the facilitative power of ideal L2 writing self and ought-to L2 writing self on EFL writing achievement, with the result that both can directly predict the EFL writing achievement. Above inconsistent findings about the predictive power of two self-constructs on EFL writing achievement lie in the different objective measures of EFL writing adopted. For instance, the sum of writing scores from two tests as objective measurement of EFL writing achievement in the work of Tahmouresi and Papi (2021), while one-time writing achievement test results used in both works by Tsao et al. (2021) and Zhao et al. (2023). Importantly, the above studies have linked the two writing self-constructs to writing achievements and exhibited the influence on the forecasting capabilities of these two writing self-constructs on EFL writing achievement.

However, there are likely to be some mediated variables between both ideal L2 writing self and ought-to L2 writing self, and writing achievements respectively. Regarding the positive relationship between syntactic complexity and writing achievements presented earlier, syntactic complexity as a dependent variable in the current study can assist us in comprehensively understand the mechanisms of how both ideal L2 self and ought-to L2 self predict the writing achievements.

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Additionally, it is noted, to our knowledge, there are numerous studies mainly concerning about the ideal L2 writing self and ought-to L2 writing self as predictors of EFL writing achievement. However, L2 learning experience has been disregarded in EFL writing context. L2 learning experience, relative to two self-motivational constructs, lacked for adequate introductions in motivational literature (Al-Hoorie 2018), due to being absent from the introductions of theoretical foundation about how L2 learning experience comes into being. The previous studies only highlighted its strong envision power of motivated behavior and L2 learning achievement (Papi & Teimouri 2012; You & Dörnyei 2016). Nonetheless, the potential power of L2 learning experience on L2 learning achievement still cannot be justified in L2 motivation. A decade later, Dörnyei (2019) further proposed that, in class language learning, the quality of the learners' engagement into class activities can be perceived by L2 learning experience, and called for reconceptualizing the L2 learning experience from the perspective of class activity engagement. Engagement is defined by (Seligman, 2011) as the invest and devotions into the specific activity, and can explain EFL learners' specific learning experience. For example, behavior engagement and emotional engagement with the class activities can improve language learning achievement (Ren, 2021). Mercer and Dörnyei (2020) highlighted the behavioral engagement, which can serve as the theoretical foundation for L2 learning experience, and Li (2023) also emphasized the function of behavioral engagement in EFL learning, which can also serve as the foundation for L2 learning experience. Thus, the current study also attempts to construct EFL writing learning experience from the perspective of behavioral engagement into EFL writing to justify

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its predictive power on syntactic complexity.

Given the significant positive predictive power of three constructs of L2 motivational self system and syntactic complexity on EFL writing achievement, the syntactic complexity as the objective measures is used in the ongoing study. It seeks to explore whether the constructs within the L2 motivational self system can predict the syntactic complexity production. By examining these factors, the research aims to ascertain their applicability as predictors of syntactic complexity, extending beyond their established role in predicting overall EFL writing achievement.

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2.4 Writing Anxiety

Foreign language anxiety is another prominent variable which has attracted plenty of attention in L2 acquisition or EFL learning. The concept of foreign language anxiety was first advanced by Horwitz (1986), who developed Foreign Language Classroom Anxiety Scale. Subsequently, Horwitz et al. (2010) categorized the anxiety associated with learning a foreign language into three distinct classifications: trait anxiety, which refers to a general predisposition to feel anxious across various situations; state anxiety, defined as a temporary emotional state triggered by specific events; and situation-specific anxiety, which occurs in particular contexts related to language learning. They characterized foreign language classroom anxiety as anxiety that manifests in specific learning situations, shaped by recurrent experiences within those contexts.

Clearly, writing anxiety often falls into the category of situation-specific anxiety. This type of anxiety is experienced in particular contexts related to writing tasks, such as composing essays, reports, or other written assignments. Unlike trait anxiety, which is a stable aspect of personality, or state anxiety, which arises from temporary situations, writing anxiety is specifically tied to the act of writing itself.

In educational settings, students may experience heightened anxiety when faced with writing assignments due to concerns about their writing skills, the quality of their work, and the potential evaluation by instructors (Cheng, 2017). This anxiety can manifest in various forms, including a lack of confidence and motivation in one's writing abilities. Understanding writing anxiety as a situation-specific issue helps in developing targeted strategies to alleviate it, such as providing clear guidelines, offering constructive feedback, creating a supportive writing environment, enhancing motivation in writing.

Research has demonstrated that writing anxiety is not only prevalent but also distinct from other forms of anxiety associated with language learning. For instance, Cheng et al. (1999) found that writing anxiety, which is context-specific to the act of writing, can predict writing achievement and differs from general foreign language classroom anxiety or speaking anxiety. Similarly, Pae (2013) highlighted that writing anxiety, as a subcomponent of foreign language classroom anxiety, is uniquely tied to the writing context and does not extend to other language skills such as reading, listening, or speaking. These findings underscore the importance of addressing writing anxiety

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with strategies tailored to its specific context.

Owing to the specific nature of writing anxiety within writing contexts, Cheng (2004, 2017), drawing upon research into the effects of different types of writing anxiety on L2 writing performance, it formulated the Second Language Writing Anxiety Inventory (SLWAI). writing anxiety has been conceptualized by Cheng (2004) as multidimensional anxiety, which established the basis for systematically examining writing anxiety as a predictor of EFL writing achievement. It is proposed that writing anxiety has three dimensions. The first dimension is the somatic anxiety which is used to explain the participates' physical and bodily discomfort in writing, and this form of anxiety is often visible through symptoms like increased heart rate, sweating, and general nervousness. For instance, a student might feel their heart racing and their hands becoming sweaty while working on a foreign language essay, which can contribute to feelings of nervousness and disorientation. The second is avoidance behavior anxiety used to account for the participates' avoidance from foreign language writing, and an example would be a student who, due to a lack of self-confidence or motivation in their writing skills, avoids starting their foreign language writing assignments, or they might procrastinate and only tackle the assignment at the last minute. And the third is cognitive anxiety referring to the mental stress that individuals feel in a foreign language writing class due to worries about their writing proficiency and the quality of their work, and this type of anxiety is often reflected in negative thought patterns and self-doubt about one's writing abilities. For example, a student might have difficulty focusing on their writing because they are preoccupied

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with fears of making mistakes or not meeting the instructor's expectations, leading to disorganized thoughts and trouble with writing.

Above three dimensions of writing anxiety could be facilitative in systematically explaining them as predictors of EFL writing achievement. Its validity and reliability in the scope of writing context has been attested in several studies. For example, Teimouri et al. (2019), by the meta-analysis about the relationship between foreign language anxiety and foreign language learning, have found writing anxiety is the impeding factor of foreign language writing achievement. And another work by Li et al. (2023) reported the predictive validity of the Second Language Writing Anxiety Inventory in writing-specific emotion measure. These studies collectively underscored the importance of understanding and measuring writing anxiety to enhance our insights into its impact on language learning outcomes.

In the previous studies, the questionnaire of Second Language Writing Anxiety Inventory has been used to assess the impact that writing apprehension has on writing proficiency within the domain of L2 writing anxiety research. However, the previous findings about how writing anxiety predicts writing achievement in foreign language context are still inconsistent. For instance, Cheng (2004), with 421 Taiwan English majors as participants, initiated the first step to investigate the relation between anxiety in writing and performance within limited time English writing task and found heightened writing anxiety adversely affects writing performance. Another investigation led by Tahmouresi and Papi (2021), sampled with 85 English majors

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from Iran, also reported the negative relation between writing anxiety and writing achievement in EFL writing context. However, Li et al. (2023), using a sample of junior middle school EFL learners, also examined the contribution of writing anxiety to EFL writing achievement, with the unexpected results to demonstrate that the impact of writing anxiety on writing achievement is not significant. The above inconsistent findings lie in the different samples and moderate variables used in respective study. For example, university EFL learners as the samples were used in the works of Cheng (2004) and Tahmouresi and Papi (2021), while the EFL learners from secondary school be done in the work of Li et al. (2023). Notably, the samples chosen in respective studies are likely to result in different findings. Besides, Li et al. (2023) simultaneously examined the influence of boredom, enjoyment and anxiety on writing achievement, due to the predictive power of writing anxiety being buffered by those of enjoyment and boredom, indicating that writing anxiety does not significantly predict the writing achievement.

The inconsistencies in the findings regarding the relationship between writing anxiety and writing achievement highlight the need for a more detailed exploration of how writing anxiety affects various aspects of writing performance. While previous studies predominantly used EFL writing scores as objective measures of writing achievement, there has been limited focus on how writing anxiety influences more specific aspects of writing, such as syntactic complexity.

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Syntactic complexity, recognized as a robust predictor of writing achievement, warrants significant attention in EFL writing research. Given that writing anxiety has been shown to impact overall writing performance, investigating its effects on syntactic complexity can provide deeper insights into the ways anxiety manifests in specific writing dimensions.

In light of these gaps, Rahimi and Zhang (2019) have called for examining the predictive power of writing anxiety through multidimensional anxiety models and syntactic complexity measures. Addressing this call, the present study seeks to explore how the three dimensions of writing anxiety—somatic anxiety, avoidance behavior anxiety, and cognitive anxiety—predict syntactic complexity in EFL writing. By focusing on syntactic complexity as an objective measure, this research aims to bridge the connection between writing anxiety and writing outcomes, providing a clearer understanding of how anxiety influences the structural aspects of writing.

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2.5 Foreign Language Writing Enjoyment

Foreign language enjoyment, as conceptualized by Teimouri (2017), denotes a positive affective state encountered in the course of learning a foreign language, shaped by the unique educational context of EFL or real-world scenarios. In contrast to foreign language anxiety, which tends to be more pronounced, foreign language enjoyment is frequently more readily experienced within EFL teaching settings (Dewaele & MacIntyre, 2014). Therefore, emphasizing the importance of nurturing

positive emotional states to optimize language acquisition and proficiency in EFL learning.

Recently, a substantial body of research indicated a strong positive association between foreign language enjoyment and proficiency in foreign language acquisition. It can be used to positively predict the foreign language achievement as well. For instance, Dewaele and Alfawzan (2018), sampled with primary and secondary students, investigated the relation between enjoyment and foreign language achievement, with a research result that foreign language enjoyment can positively predict foreign language achievement. The consensus result is also confirmed by Li et al. (2020). Additionally, the research also found there was other mediated variables from foreign language enjoyment to language achievement. For example, Dong and Liu (2022), based on the samples of Chinese high school students, examined the relation between foreign language enjoyment and EFL achievement and found that foreign language enjoyment can positively predict EFL achievement directly or positively affect other mediated variables like motivation to predict the foreign language achievement indirectly. Also, it has been found that foreign language enjoyment as positive predictor can be also applicable to online English classroom, and concurrently found the facilitative effect of enjoyment in learning foreign language on foreign language achievement (Li & Han, 2022).

Given the consistent evidence that foreign language enjoyment facilitates language learning, the hypothesis issue about whether foreign language enjoyment can be still

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positive predictor of EFL writing achievement or not has been raised recently. The studies about the enjoyment of writing as predictor of EFL writing achievement in EFL writing educational context is still lacking. However, there are still some exceptions in which enjoyment of writing and its predictive power on EFL writing achievement (Li et al., 2023; Tahmouresi & Papi, 2021; Zhao et al., 2023) has been examined, however, with inconsistent findings. For instance, in an examination of 85 Iranian students majoring in English, Tahmouresi and Papi (2021) discovered a strong positive relationship between writing enjoyment and EFL writing achievement. Their findings suggest that writing enjoyment is a significant predictor of success in EFL writing. Also, Li et al. (2023), based on Chinese Junior EFL learners, found writing enjoyment as the significant predictor of EFL writing achievement. However, Zhao et al. (2023), sampled with 239 Chinese university EFL learners, examined the effect of writing enjoyment on EFL writing performance, and found that writing enjoyment cannot directly predict the EFL writing achievement. Above inconsistent findings are likely to lie in the different samples and different questionnaires used. English majors in Iran are different from Chinese university EFL learners in terms of language proficiency. Furthermore, even in Chinese EFL educational context, junior students, by comparison with university students, may present different relations between writing enjoyment and EFL writing achievement. Besides, questionnaire used in Iran educational context is obviously not applicable to Chinese EFL educational context.

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Writing enjoyment, being a subcomponent of foreign language enjoyment, is the specific positive emotion in EFL writing context, which, thus, is applicable to the context of EFL writing. To measure the writing enjoyment in EFL writing educational context, a few of studies begun to concern about systematically developing the writing enjoyment scale in EFL writing instructional context. A typical study, conducted by Jin (2023), based on Chinese EFL educational context, systematically developed the EFL writing enjoyment scales. By the Psychometrical measure techniques such as Principal componential analysis and Confirmatory Factor Analysis (CFA), the EFL writing enjoyment scales has been attested to reliable and valid in measuring the enjoyment of EFL writing in Chinese EFL writing educational context.

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Regarding the link between writing enjoyment and writing achievement, it should be pointed out that the previous studies mainly adopted the EFL writing scores as objective measure in writing achievement, and few studies focused on writing enjoyment as a predictive power of linguistic features such as syntactic complexity of EFL writing. Considering the positive relation between syntactic complexity and writing achievement, syntactic complexity of EFL writing as the objective variable should be incorporated.

In view of the well-established reliable and valid instrument to measure writing enjoyment in Chinese EFL writing educational context, and scant researches about syntactic complexity as the objective variable in writing proficiency, this study

attempts to examine whether the writing enjoyment can predict syntactic complexity of EFL writing, so as to bridge the relations between enjoyment of writing and the achievement in writing.

2.6 L2 Motivational Self System, Foreign Language Writing Anxiety, and Foreign Language Writing Enjoyment

According to Higgins (1987) and his self-discrepancy theory, EFL learners might experience emotional states while navigating the gap between their present selves and their envisioned future selves, influencing their motivation to learn a foreign language. This system includes constructs such as the ideal L2 self, ought-to L2 self, and L2 learning experience, which are theoretically linked to emotions and may predict varied emotional responses. Within the context of EFL writing, foreign language writing anxiety and enjoyment are fundamental emotions influenced by these motivational factors. The following will demonstrate the connections between three constructs within the L2 motivational self system, foreign language writing anxiety, and enjoyment explored by the previous researches.

2.6.1 L2 Motivational Self System and Foreign Language Writing Anxiety

Based on Higgins' self-discrepancy theory (1987), the constructs of ideal L2 self, ought-to L2 self, and L2 learning experience are foundational constructs of L2 motivational self system and are theoretically linked to foreign language anxiety. The following will elaborate on the connections between three constructs within the system and foreign language anxiety theoretically and empirically.

When there is a notable discrepancy between the learners' actual foreign language proficiency and their ideal L2 self, anxiety can emerge (Papi, 2010). The ideal L2 self embodies the aspirational identity that learners strive to achieve. When learners perceive themselves as significantly distant from this ideal, it can generate feelings of inadequacy and heightened anxiety about their language abilities. For instance, if a learner envisions themselves as a fluent speaker but struggles with basic communication, the gap between this ideal and their actual performance can lead to substantial psychological distress.

In parallel, the discrepancy between a learner's current self and their ought-to L2 self representing the attributes they believe they should possess to meet external expectations can also induce anxiety (Papi, 2010). This gap arises when learners feel they are not fulfilling the expectations imposed by others, such as parents, teachers, or societal standards. For example, if a student believes they should be proficient in a foreign language to secure future career opportunities but falls short of this standard, the anxiety stemming from this perceived failure to meet external expectations can be significant.

Furthermore, the L2 learning environment and the experiences within it can markedly influence levels of anxiety. Positive and supportive learning experiences in engaging classroom activities generally serve to alleviate anxiety, fostering a more constructive learning atmosphere. Conversely, negative or stressful experiences in engaging classroom activities within the learning environment can generate anxiety.

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For example, a learner who consistently faces challenges in their language class activities engagement may experience increased anxiety due to the compounded discrepancy between their actual performance, their ideal aspirations, and the expectations they believe they must meet.

Additionally, extensive empirical research has explored these relationships. For example, Papi (2010) conducted a study involving 1011 high school EFL learners in Iran, revealing that ideal L2 self and L2 learning experience are negative predictors of foreign language anxiety, while ought-to L2 self positively predicts it. This pattern was corroborated by Sadoughi and Hajazi (2023) in their study with 387 Iranian EFL learners, where ideal L2 self and L2 learning experience can alleviate foreign language anxiety, whereas ought-to L2 self exhibited a positive association. Similarly, Farahan, Razaee, and Wang (2023) studied 280 Chinese university EFL learners, finding that they negatively predicted foreign language anxiety, while ought-to L2 self was a positive predictor. These consistent findings underscore the significant relationships between three constructs within this system and foreign language anxiety within the EFL educational context, as depicted in Figure 2.2.

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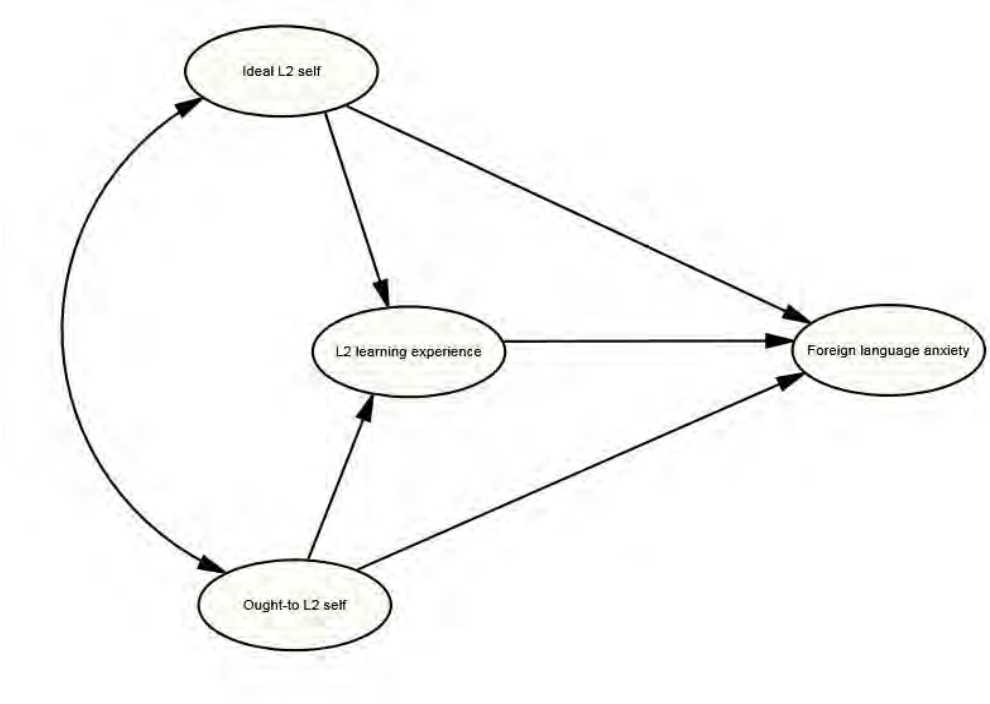


Figure 2.2. Relation Between Three Constructs in the System and Foreign Language Anxiety (Papi, 2010)

However, due to deficiency in the empirical studies, the problem whether predictive power of ideal L2 self, ought-to L2 self and L2 learning experience on foreign language anxiety is applicable or not in EFL writing context is still unknown. Namely, the issue about three constructs as predictors of writing anxiety needs to be attested by subsequent studies. Albeit there is exception where Tahmouresi and Papi (2021), based on Iranian university EFL learners, examined the relation between ideal L2 self, ought-to L2 self and writing anxiety, and reported ideal L2 self can negatively predict the writing anxiety, while ought-to L2 self can positively do it, the above study does not address how the two self-constructs within the L2 motivational self system serve as predictors for specific subcomponents of writing anxiety. Specifically, it remains unclear which type of writing anxiety such as somatic anxiety, avoidance behavior anxiety, or cognitive anxiety is influenced by these self-constructs. Additionally, the study is situated within the Iranian educational context,

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which may differ significantly from the Chinese context. Furthermore, the study neglects to consider the role of L2 learning experience, which could also impact writing anxiety.

As of now, the question of whether the three constructs within the system can predict writing anxiety in the EFL writing educational context remains unresolved. Therefore, the present study seeks to explore the predictive potential of these subcomponents regarding writing anxiety within the EFL writing educational context.

2.6.2 L2 Motivational Self System and Foreign Language Writing Enjoyment

Drawing from Higgins' self-discrepancy theory (1987), the constructs of ideal L2 self, ought-to L2 self, and L2 learning experience within the system are theoretically associated with foreign language enjoyment. This suggests that EFL learners experience positive emotions when their current self aligns with their ideal self during the process of EFL learning. Notably, foreign language enjoyment, characterized by positive affect, correlates with various factors such as EFL teachers, text content, and the overall learning environment (Dewaele & Li, 2021; Li et al., 2018). Theoretically, EFL learners, when their present self attained what their future aspiration required, and plus the enjoyable EFL learning environment can be available in EFL learning, can undoubtfully lead to foreign language enjoyment in EFL educational context.

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Various studies have explored the connections between ideal L2 self, ought-to L2 self, L2 learning experience, and foreign language enjoyment. For instance, Teimouri (2017) conducted research with 524 high school EFL learners in Iran, investigating how two self-constructs relate to foreign language enjoyment. Through regression analysis, the study revealed significant associations between both self-constructs and foreign language enjoyment in the EFL educational context. Particularly noteworthy was the stronger positive predictive influence of ideal L2 self on EFL achievement compared to ought-to L2 self.

Additionally, Fathi et al. (2023), studying 601 intermediate EFL learners, examined how foreign language enjoyment and ideal L2 self predict willingness to communicate in the EFL educational context. Using structural equation modeling, they found that ideal L2 self significantly and positively predicts foreign language enjoyment.

Previous research has consistently affirmed the significant relationship between two self-constructs within the system and foreign language enjoyment (Dewaele & Li, 2021; Li, 2022; Tsang & Lee, 2023), with specific details provided in Figure 2.3.

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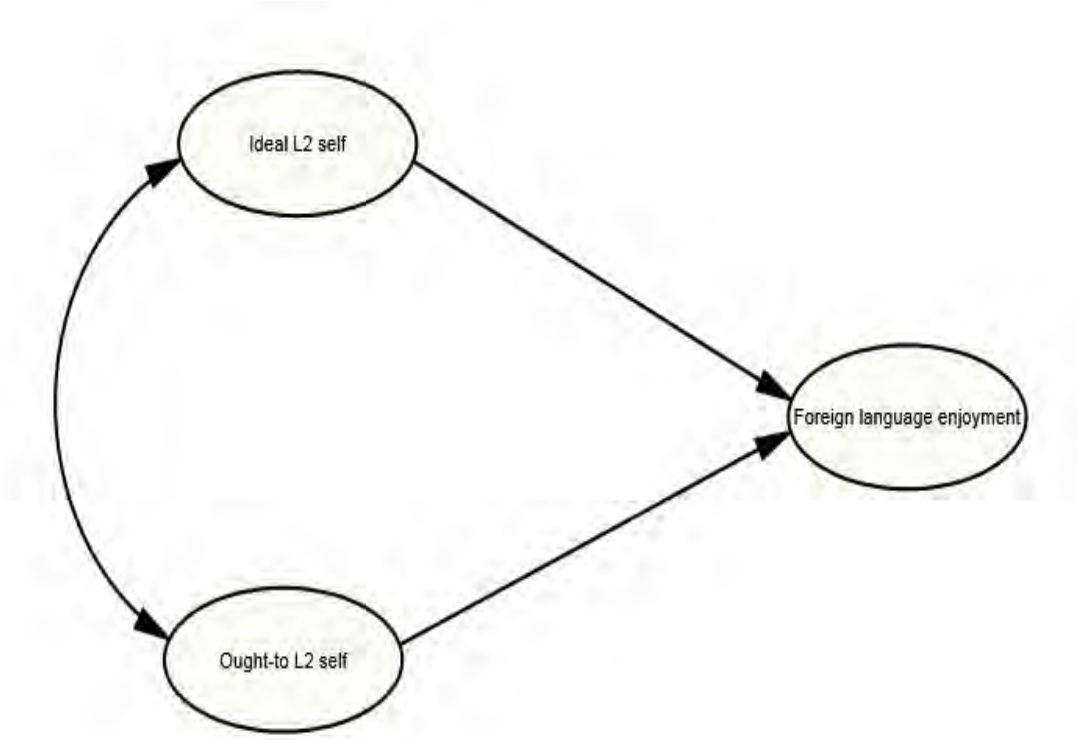


Figure 2.3. Relation Between Two Self Constructs and Foreign Language Enjoyment (Teimouri, 2017)

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However, due to deficiency in the empirical studies, the problem whether predictive power of ideal L2 self, ought-to L2 self and L2 learning experience on foreign language enjoyment is tenable or not in EFL writing context is still unknown. That is, the issue about them as predictors of writing enjoyment needs to be confirmed by following studies. Recent studies have explored the roles of both ideal L2 self and ought-to L2 self as predictors of enjoyment in writing contexts, with some exceptions noted (Tahmouresi & Papi, 2021; Zhao et al., 2023; Zhu et al., 2022). Tahmouresi and Papi (2021) investigated university EFL learners from Iran, finding that ideal L2 self positively predicts enjoyment in writing, whereas ought-to L2 self does not. Similarly, Zhu et al. (2022), focusing on English major students in China, observed that ideal L2 self positively predicts enjoyment in the Chinese educational writing context. Zhao et al. (2023) also affirmed ideal L2 self as a positive predictor of

enjoyment in the Chinese EFL writing context.

Albeit above studies have attested the consistent relation between ideal L2 self and writing enjoyment in EFL writing context, the relation between L2 learning experience and writing enjoyment has been disregarded in EFL writing context. To date, the studies about three constructs in the system simultaneously being considered as predictors of writing enjoyment are very scant. Therefore, the present study aims to investigate whether three constructs of the system can predict enjoyment in the EFL writing educational context.

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2.7 Writing Anxiety and Writing Enjoyment as Mediated Variables between Three Constructs within L2 Motivational Self System and Syntactic Complexity of EFL Writing

Deci and Ryan's (2000) posited self-determining theory, which highlighted the relation between individuals' self conceptions, emotion, and learning achievement. That is, self conception out of internal desire leads to positive emotions, such as enjoyment and happiness, while self conception out of external pressure may evoke negative feelings like anxiety and boredom. Ideal L2 self, ought-to L2 self, and L2 learning experience are essential components of the L2 motivational self system, reflecting individuals' self-conceptions. For instance, both ideal L2 self and L2 learning experience embody self-conceptions stemming from internal desires, while ought-to L2 self is the reflection of self conception out of external pressure. Thus, EFL learners, when their current self conceptions match with ideal L2 self, lead to enjoyment, which is contributive to EFL learning achievement. However, EFL

learners, when their self conceptions do not match with ideal L2 self, may induce pressure or anxiety of EFL learning, which is detrimental to EFL learning achievement. Theoretically, foreign language enjoyment as well as anxiety are not only influenced by the three constructs within the L2 motivational self system but also have an impact on EFL learning achievement. Therefore, they can act as mediating variables between the three constructs within the system and EFL learning achievement.

Empirical evidence from numerous studies supports the role of anxiety and enjoyment as mediating variables in the relationship between the L2 motivational self system constructs and EFL learning achievement. For example, Papi (2010) conducted a study with 1011 high school EFL learners in Iran, examining the relationships among ideal L2 self, ought-to L2 self, L2 learning experience, foreign language anxiety, and motivated behavior. Papi found that foreign language anxiety mediates the relationships between three constructs within the system and motivated behavior respectively. Similarly, Teimouri (2017) studied 524 high school EFL learners from Iran, investigating the relationships between ideal L2 self, ought-to L2 self, foreign language enjoyment, foreign language anxiety, and motivated behavior. By regression analysis, he found that enjoyment and anxiety both as mediated variables rest in between two self-constructs and motivated behavior. Motivated behavior is considered to be the effort put in the course of EFL learning, which is the mediated variable between emotions and EFL learning achievement. For example, Dong and Liu (2022), based on the samples of Chinese high school students,

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examined the relation between foreign language enjoyment, motivated behavior, and EFL achievement. They found that foreign language enjoyment not only directly predict EFL achievement but mediated by motivated behavior. Recently, Tsang and Lee (2023), based on 110 primary EFL learners in EFL educational context, examined the relation between speaking motivated behavior, enjoyment, anxiety and language proficiency. They also found the direct or indirect relationship between enjoyment, anxiety and language proficiency respectively. Considering the link between three constructs within the system, foreign language enjoyment, anxiety, and learning achievement, enjoyment and anxiety have theoretically or practically been attested to be the mediated variables between the constructs within L2 motivational self system and EFL learning achievement, with the diagram demonstrated in Figure 2.4.

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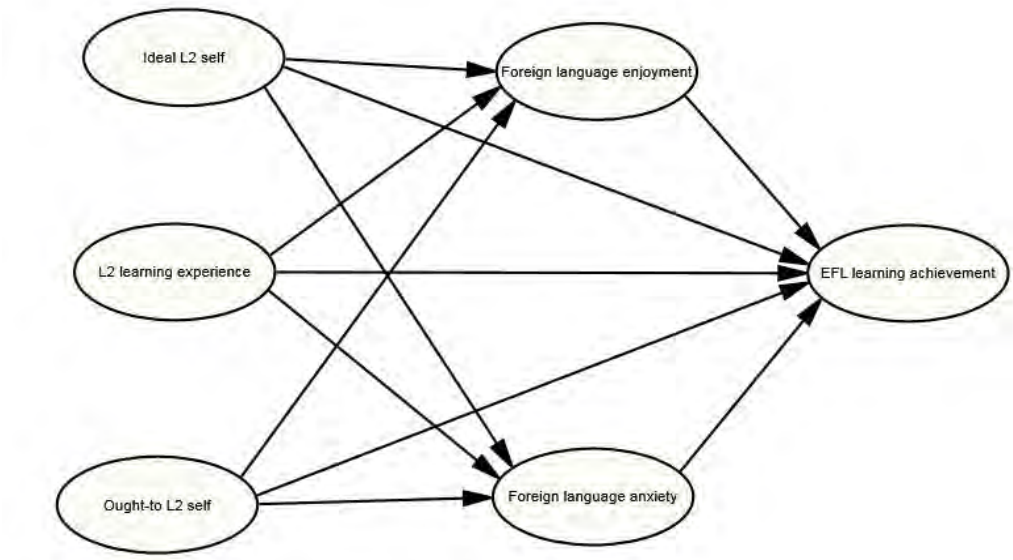


Figure 2.4. Relation Between Motivational Self System Constructs, Foreign Language Enjoyment, Foreign Language Anxiety, and EFL Learning Achievement (Tsang and Lee, 2023)

However, writing enjoyment and writing anxiety both as specific emotions, different from foreign language enjoyment and foreign language anxiety as what have been presented earlier, are related with EFL writing context. The issue whether they can be mediated variables between three constructs of L2 motivational self system and EFL writing achievement is still further attested in the subsequent studies. In view of the positive relation between syntactic complexity and EFL writing achievement, the current study attempts to examine whether writing enjoyment as well as writing anxiety are mediated variables between three constructs within the system and syntactic complexity, so as to gain insights into the mechanisms of how three constructs within the system predict the EFL writing achievement.

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2.8 Theoretical Framework

This study integrates Self-Determination Theory (SDT) (Deci & Ryan, 2000) and Control-Value Theory (CVT) (Pekrun, 2006) to investigate the impact of motivational and emotional factors on syntactic complexity in L2 writing. Although SDT and CVT were originally developed to explain the interaction between motivation, emotion, and learning achievement, this research extends their application to syntactic complexity, a core component of writing proficiency. The theoretical framework presents how the three basic needs outlined in SDT—autonomy, competence, and relatedness—interact with the CVT components of perceived control and task value. This interaction influences learners' emotional experiences such as anxiety and enjoyment, which in turn affect their syntactic decision-making processes in writing.

2.8.1 Self-Determination Theory

Self-Determination Theory (Deci & Ryan, 2000) emphasizes that intrinsic motivation and optimal learning outcomes arise when individuals' basic psychological needs for autonomy, competence, and relatedness are satisfied. In the context of L2 writing, these needs shape learners' motivation to engage with syntactically complex structures. The following sections explain how each need contributes to syntactic complexity production.

2.8.1.1 Autonomy and Syntactic Complexity Production

The Ideal L2 Self contributes to autonomy by aligning learners' writing behaviors with their envisioned identity as proficient L2 users (Tahmouresi & Papi, 2021). This aspirational self-image motivates learners to experiment with advanced syntactic structures as a way to close the gap between their current and desired language proficiency. In contrast, the Ought-to L2 Self, which reflects external expectations such as teacher demands or social obligations, may lead to the adoption of complex syntax as a means of compliance. However, when this adoption lacks internalized motivation, the result may be superficial adherence rather than meaningful development of syntactic competence.

2.8.1.2 Competence and Syntactic Complexity Production

L2 Learning Experience plays a crucial role in shaping perceived competence (Dörnyei, 2019). Positive experiences, such as successfully using complex sentences and receiving constructive feedback, enhance learners' belief in their syntactic

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abilities, thereby encouraging further risk-taking in writing. On the other hand, repeated failures or lack of support may hinder such engagement. Learners who perceive themselves as competent L2 writers are more likely to pursue syntactic complexity, as it reflects and reinforces their self-concept. In this way, competence beliefs operate in tandem with the Ideal L2 Self to motivate the integration of complex structures in writing tasks.

2.8.1.3 Relatedness and Syntactic Complexity Production

Social support within the learning environment, including collaborative peer interactions and teacher encouragement, fosters a sense of relatedness. This emotional connection reduces fear of making mistakes and creates a safe space for syntactic experimentation. Moreover, when learners perceive that using complex syntax aligns with the norms and expectations of their academic or social community, they may feel a stronger motivation to incorporate such structures in their writing. This motivation is most effective when it aligns with intrinsic goals rather than being driven solely by external validation.

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2.8.2 Control-Value Theory

Control-Value Theory (Pekrun, 2006) explains how learners' emotional experiences in academic settings are shaped by their appraisals of control over outcomes and the value they attach to tasks. In the context of L2 writing, writing anxiety often emerges when learners perceive low control, particularly in terms of grammatical mastery and syntactic accuracy. This anxiety not only diminishes learners' willingness to use

complex structures but also consumes cognitive resources, prompting them to simplify sentence construction to avoid errors. In contrast, writing enjoyment arises when learners perceive both high control and high task value (Han & Xu, 2020). When writing is seen as personally meaningful and achievable, learners experience increased cognitive flexibility and are more inclined to engage with syntactically sophisticated language.

2.8.3 The Interaction of Self-Determination Theory and Control-Value Theory

Self-Determination Theory and Control-Value Theory are interrelated in multiple ways. For instance, a well-developed Ideal L2 Self may buffer the negative emotional effects described in Control-Value Theory, such as anxiety, by sustaining learners' motivation even in the face of writing challenges (Tahmouresi & Papi, 2021). In contrast, the Ought-to L2 Self may intensify anxiety if the learner perceives low control over task outcomes. Intrinsic motivation, as emphasized in Self-Determination Theory, can amplify the positive emotional states described in Control-Value Theory, particularly enjoyment (Nguyen-Viet et al., 2025). This creates a synergistic effect in which autonomy and perceived control work together to support greater syntactic complexity in writing. Additionally, positive feedback loops may emerge; successful engagement with complex syntax reinforces a sense of competence, enhancing perceived control and reducing anxiety. This process further encourages enjoyment and deepens learners' commitment to challenging writing tasks.

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This dynamic theoretical framework, visually represented in Figure 2.5, demonstrates how motivational and emotional processes jointly shape syntactic complexity in L2 writing. It offers educators a conceptual tool for designing pedagogical interventions that support learners' autonomy, build their competence, and cultivate positive emotional experiences.

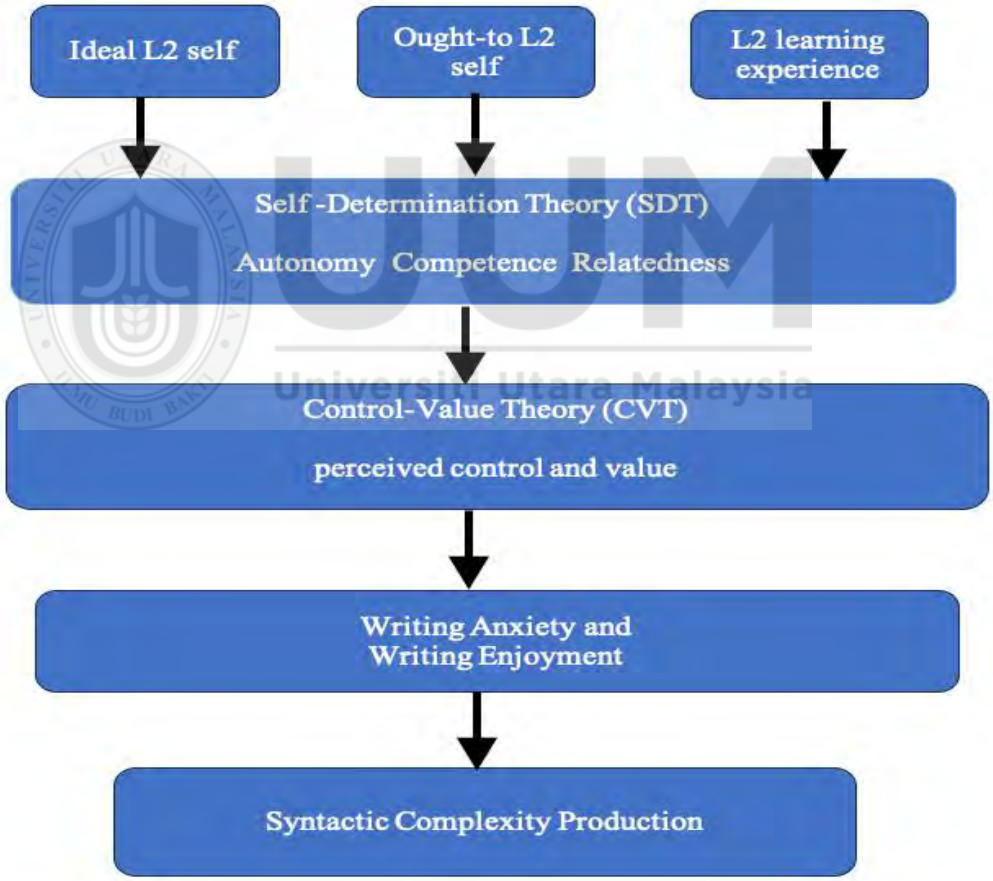


Figure 2.5. Theoretical Framework Involved in the Present Study (adapted from Deci & Ryan, 2000 and Pekrun, 2006)

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2.9 Conceptual Framework

In gaining insights into the predictive power of the constructs of L2 motivational self system, writing enjoyment, writing anxiety on syntactic complexity of EFL writing in EFL writing educational context. The questionnaires and EFL task writing test have been administered among the sophomore students from educational school, science and engineering school, medicine school at Hubei University of Science and Technology respectively.

In this study, we have adapted the conceptual framework proposed by Tahmouresi and Papi (2021). In their model, key variables include the ideal L2 self, ought-to L2 self, writing anxiety, writing enjoyment, L2 motivation, and writing achievement. Among these, the ideal L2 self and ought-to L2 self are treated as independent variables, while writing enjoyment and writing anxiety serve as mediating variables. L2 motivation and writing achievement are considered the dependent variables.

Through the literature review in this chapter, we have explored the relationships between the L2 learning experience, ideal L2 self, and ought-to L2 self. Additionally, we have examined how these variables relate to writing anxiety and writing enjoyment, as well as the connections between syntactic complexity and writing achievement. Therefore, in the present study, as illustrated in Figure 2.6, we have expanded the original conceptual framework by incorporating the L2 learning experience and syntactic complexity production as key components.

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Figure 2.6 further demonstrated, in the current study, the details of the relationship about all the variables in between. Specifically, the single-headed arrow indicates cause and effect relations between the variables. It is indicated, in Figure 2.6, that the constructs within L2 Motivational Self System, writing enjoyment, and writing anxiety, are conceived of to be independent variables, and syntactic complexity of EFL writing is assumed to be dependent variables. Figure 2.6 has demonstrated a clear picture of how the constructs within the system, writing enjoyment, and writing anxiety predict syntactic complexity of EFL writing respectively, as well as how the constructs can predict syntactic complexity of EFL writing mediated by writing enjoyment and writing anxiety respectively.

To be specific, Figure 2.6 demonstrated multiple regression paths from motivational ideal L2 self, ought-to L2 self, L2 learning experience to syntactic complexity of EFL writing, which is used to examine L2 motivational self system constructs as predictors in syntactic complexity production of EFL writing in Chinese EFL educational context. The multiple regressions are aligned with the third research question. Meantime, Figure 2.6 also revealed multiple regression paths from writing enjoyment and writing anxiety to syntactic complexity of EFL writing, which is to examine both writing enjoyment and writing anxiety as predictors in syntactic complexity production of EFL writing in Chinese EFL educational context. The multiple regression paths are correspondent with the fourth question. Besides, Figure 2.6 further shed light on the mechanisms of how motivational variables respectively predict syntactic complexity of EFL writing mediated by both writing enjoyment and

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writing anxiety. The mechanisms are coordinated with the research questions.

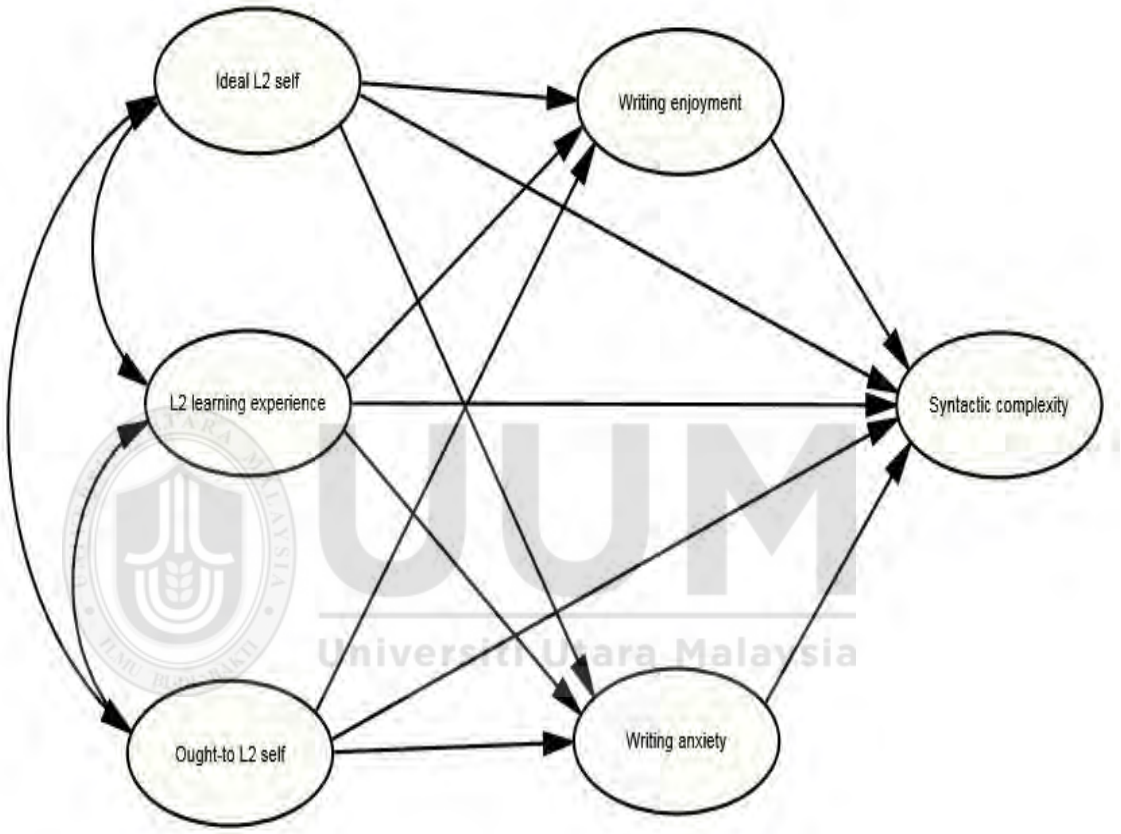


Figure 2.6. Conceptual Framework Involved in the Present Study (adapted from Tahmouresi and Papi, 2021)

2.10 Summary of the Chapter

This chapter presents the theoretical and empirical foundations relevant to the present study. It first outlines the key concepts underlying the L2 Motivational Self System, writing enjoyment, writing anxiety, and syntactic complexity in EFL writing. The chapter then explains the role of the L2 Motivational Self System in EFL learning

and discusses how motivational and emotional factors function in language learning contexts.

In addition, this chapter reviews previous empirical studies on the relationships among L2 motivational self system constructs, writing enjoyment, writing anxiety, and language learning or writing performance. Special attention is given to research that examines these variables as predictors of EFL learning and writing outcomes. The chapter also introduces major approaches to measuring syntactic complexity and summarizes commonly used indices in L2 writing research.

Finally, the conceptual framework and theoretical framework of the study are presented to illustrate how motivational and emotional variables are assumed to relate to syntactic complexity production in EFL writing. Together, these discussions establish the theoretical and research basis for the subsequent investigation.

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CHAPTER THREE
METHODOLOGY

3.1 Introduction

Chapter three elaborates the quantitative and qualitative research design utilized in this study, presenting details on participant demographics, sampling techniques, instruments used, procedures for data collection, the subsequent data analysis, and content analysis. Furthermore, preliminary findings from a pilot study are also discussed.

3.2 Research Design

This study is primarily quantitative, aiming to examine the relationships among the three constructs of the L2 Motivational Self System (L2MSS), writing enjoyment, writing anxiety, and syntactic complexity in EFL writing. Quantitative methods are appropriate because the study is theory-driven and seeks to test hypothesized correlations, predictive relationships, and mediation effects. Using only a quantitative design allows for robust statistical analysis of these relationships but may not fully capture learners' subjective experiences or the underlying psychological mechanisms, particularly in the context of mediation effects.

For RQ5, which investigates whether writing enjoyment and writing anxiety mediate the relationships between the L2MSS constructs and syntactic complexity, a sequential explanatory mixed-methods component was incorporated. In this phase, quantitative mediation analyses were conducted first, followed by qualitative data

collection from students' reflective journals to triangulate and further interpret the mediation mechanisms. This approach allows the study to both test theoretical predictions and provide deeper insights into learners' experiences, enhancing the validity of the findings.

Compared with other possible methodologies, the chosen approach offers clear advantages. A purely quantitative design, while suitable for testing hypotheses and examining relationships among variables, would not be able to reveal the underlying mechanisms of mediation. Conversely, a purely qualitative design could provide rich descriptive insights into learners' experiences but would not permit statistical verification of relationships or mediation effects. A concurrent mixed-methods design, which collects quantitative and qualitative data simultaneously with equal priority, is less appropriate for the present study because it emphasizes theory-driven quantitative testing first, followed by qualitative explanation. Similarly, an exploratory mixed-methods design, which typically begins with qualitative data collection to generate hypotheses, is not compatible with the existing theoretical framework of the Self-determination theory, Control-value theory, and the L2 Motivational Self System (L2MSS), which guides this study. Therefore, the combination of a primarily quantitative approach with a sequential explanatory mixed-methods component for RQ5 was deemed the most suitable methodological choice.

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Therefore, the combination of a primarily quantitative design with a sequential explanatory mixed-methods component for RQ5 was deemed most suitable. Table 3.1 presents the detailed research design, including research questions, sample size, data collection procedures, instruments, and data analysis methods.

Table 3.1
Study Design

Research	Methodology	Sample size	instruments	Procedure	Data analysis
The construct validity of questionnaire scales	Quantitative study	N1=206	Questionnaire scales of L2LE	Structure exploration	EFA (SPSS 19.0)
				Structure confirmation	CFA (Mplus 8.3)
		N2=90	Questionnaire scales of L2LE	Structure reconfirmation	CFA (Mplus 8.3)
			Questionnaire scales of IS, OS, L2LE, WE, and WA	Reliability test	Reliability Alpha (SPSS 19.0)

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RQ1: How do the three constructs of the L2MSS (IS, OS, and L2LE), WE, WA, and syntactic complexity production correlate?	Quantitative study	N2=90	Questionnaire and writing task	Data collection for questionnaire and syntactic complexity dimensions	Pearson correlation analysis (SPSS 19.0)
RQ2: To what extent do the three L2MSS constructs (IS, OS, and L2LE) predict WE and WA?	Quantitative study	N2=90	Questionnaire	Data collection for questionnaire	Regression analysis (SPSS 19.0)
RQ3: To what extent do the three L2MSS constructs (IS, OS, and L2LE) predict syntactic complexity production?	Quantitative study	N2=90	Questionnaire and writing task	Data collection for questionnaire and syntactic complexity dimensions	Regression analysis (SPSS 19.0)
RQ4: To what extent do WE and WA individually predict syntactic complexity	Quantitative study	N2=90	Questionnaire and writing task	Data collection for questionnaire and syntactic complexity dimensions	Regression analysis (SPSS 19.0)

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production?					
RQ5: Do WE and WA mediate the relationships between the three L2MSS constructs (IS, OS, and L2LE) and syntactic complexity production?	A sequential explanatory mixed-methods	N2=90	Questionnaire and writing task	Data collection for questionnaire and syntactic complexity dimensions	Regression analysis (SPSS 19.0)
		N3=6	Reflective journal	Data collection for reflective journal	Content analysis

***Note*:** L2LE =L2 learning experience; IS = Ideal L2 self; OS= Ought-to L2 self; WE = Writing enjoyment; WA = Writing anxiety

3.3 Sampling

In the present study, participants were selected using opportunity sampling from three schools at Hubei University of Science and Technology, China: The School of Education and, the school of medicine, and the School of Science and Engineering. As Byrne (2005) notes, complex knowledge systems are characterized by dynamic and context-sensitive interactions among multiple variables. In such cases, selecting a local sample enhances internal validity by controlling for contextual variation (e.g., curriculum, instructional practices, and sociocultural environment), thereby allowing a more focused investigation of how motivational and emotional variables interact to influence syntactic complexity in EFL writing.

All participants are second-year Chinese EFL students with similar social and cultural backgrounds. They have received approximately 9 years of English education before university, resulting in nearly 11 years of English study by the time

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of the survey and writing test. Additionally, all participants have recently taken part in the CET-4 proficiency test, a national English proficiency examination in China with a maximum score of 710. The test's reliability and validity have been well established (Jin, 2014), with a passing score set at 425 or above.

Based on their extensive English learning experience and language proficiency (Lei et al., 2023), all participants were categorized as intermediate Chinese EFL university learners (Jiang et al., 2019). To ensure that there was meaningful variability within this intermediate category, a one-way ANOVA was conducted on students' English proficiency scores (Table 3.2). This analysis was not intended to form new proficiency groups, and post hoc tests were therefore unnecessary; its sole purpose was to confirm the presence of variability within the intermediate range.

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For the current study, three samples were prepared. The first sample comprised 206 sophomore students from three schools at Hubei University of Science and Technology, including 96 female and 110 male participants. This sample was used to assess the reliability and validity of the questionnaire scales. Specifically, internal consistency was evaluated using Cronbach's α, and construct validity was examined through confirmatory factor analysis (CFA). Although this sample consisted primarily of intermediate learners, it provided a suitable context for testing the performance of the questionnaires and supported the generalizability of the reliability and validity findings within this proficiency group.

Table 3.2

One-Way ANOVA Results for High, Medium, and Low CET Score Groups

Group	Sample Size	Mean	Standard Deviation	F	P
High	52	523.69	31.92		
Medium	106	449.75	29.44	218.75	<.001
Low	48	390.79	36.91		
Total	206	454.68	56.45		

The second sample consists of 90 students out of 206 students, with 48 females and 42 males. The average age of participants is 19 years. This sample size of 90 to collect the data about the writing task test exceeds the minimum of 46 participants in L2 writing test recommended by Mustafa and Robillos (2020) and is comparable to the 85 participants used in a similar study by Tahmouresi and Papi (2021). 90 Participants were divided into high-score group, middle-score group and low-score group based on their Chinese English Test (CET-4) results. The One-Way Analysis of Variance showed significant difference in CET-4 scores between these groups, with the data demonstrated in Table 3.3, confirming 90 students from different language proficiency levels and also homogeneous feature with the first sample.

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Table 3.3

One-Way ANOVA Results for High, Medium, and Low CET Score Groups

Group	Sample Size	Mean	Standard Deviation	F	P
High	24	540.58	33.37		
Medium	43	472.42	30.78	134.24	<.001
Low	23	370.78	45.7		
Total	90	464.62	71.5		

The third sample, with the number of 6 students, was selected to write a reflective journal on their learning experiences in the EFL writing curriculum at the end of the academic semester. To ensure this sample accurately represents the 90 students in the study, we recruited 2 students from each of three proficiency levels: high, middle, and low.

3.4 Ethical Considerations

The study adheres to strict ethical guidelines to ensure participant welfare. Informed consent was obtained from all participants, who were fully aware of the study's objectives, procedures, and potential risks (see Appendix E and F). Participant privacy is maintained through the anonymization of data, which will be used solely for research purposes. Data is securely stored with restricted access to authorized personnel only. Participants were informed of their right to withdraw from the study at any time without facing any adverse consequences.

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3.5 Instruments

The instruments in the present study consists of questionnaire and writing test. The questionnaire is named “English Writing Learner Questionnaire”, with 48 items presented in Appendix A. The questionnaire comprises two sections. The initial part incorporates three questions to cover demographic information, like age, sex, major. Part B includes the items which are used to measure three constructs of L2 motivational self system, writing anxiety, and writing enjoyment in Chinese EFL writing educational context. Writing test is mainly to examine the English learners’

syntactic complexity production, with the specific content demonstrated in Appendix B. The following is the introduction of the specific instruments used in the current study. The instruments used in this study were adopted or adapted from previously published and widely used scales in L2 or EFL research. All sources were properly cited. These instruments were used solely for non-commercial academic research purposes. As they are publicly reported in peer-reviewed publications, their use in the present study follows common academic practice.

3.5.1 The Scales of L2 Motivational Self System

The scales of L2 motivational self system include "closed-ended" 17 items elicited from the research of Tahmouresi and Papi (2021) and Zhu et al. (2022) with three constructs within it. Participants were instructed to selected the responses on a Likert scale to indicate their level of disagreement or agreement.

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3.5.1.1 Measuring Ideal L2 Self in EFL Writing Context

Five items pertaining to the ideal L2 self were selected from Zhu et al. (2022) questionnaire on the ideal L2 writing self without any modifications. They converted the item pools of ideal L2 self into of ideal EFL writing self, used to measure the aspiration for idealized image of EFL writing, which is applicable in EFL writing. In the study by Zhu et al. (2022), the scale of the ideal L2 self in writing is operationalized through five specific items. These items, presented in English and Chinese versions, are detailed in Appendix A and are identified by the following code numbers: 1, 4, 5, 13, and 14. Furthermore, the scales of ideal L2 self based on

Chinese EFL writing context achieved high Cronbach's alphas (α = .81). It has been attested to be valid and reliable in the study conducted by Zhu et al. (2023).

3.5.1.2 Measuring Ought-to L2 Self in EFL Writing Context

Ought-to L2 self is presented with five items which were elicited from the study made by Tahmouresi and Papi (2021) without any alterations. In the study by Tahmouresi and Papi (2021), the ought-to L2 self scale for writing is assessed through five specific items, which are provided in English and Chinese in Appendix A, identified by code numbers 6, 7, 8, 9, and 10. This scale evaluates participants' perceptions of social obligations related to English writing and their concerns about potential failure in this area (e.g., "I should learn how to write in English or I will face difficulties in my education"). The ought-to L2 self scale in the context of EFL writing demonstrated strong reliability, with a high Cronbach's alpha of .84, and has been confirmed as both valid and reliable.

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3.5.1.3 Measuring L2 Learning Experience in EFL Writing Context

The third variable is "L2 learning experience" with seven items which were adapted from the works of Li (2023). The original seven items of L2 learning experience are presented in both English and Chinese versions in the study by Li (2023). This adaptation is rooted in Dörnyei's (2019) refined conceptualization of L2 learning experience, which emphasizes learners' perceived engagement quality across different facets of the language learning journey. Similarly, according to the original definition about L2 learning experience proposed by Dörnyei (2009), L2 learning

experience is type of situational motivation, related with teachers, curriculum, and peer group. Thus, L2 learning experience in the current study consists of two subcomponents: engagement and interactions.

Specifically, three items, drawing on the works of Li (2023) about the students' engagement in the process of EFL learning, have been adapted to the individual's engagement in the EFL writing learning experience. For example, the item "I am actively involved in the language class" has been adapted into "I am actively involved in EFL writing Class". By Li's (2023) study about the reconstruction of L2 learning experience, the engagement in the scale of L2 learning experience consists of three items, which has labelled as behavioral engagement. This type of engagement factor has been reported by Mercer and Dörnyei's (2020) to be the key element of engagement construct.

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Additionally, another four items of L2 learning experience are also adapted from Li's (2023) reconstruction of L2 learning experience, which are labeled as interactional L2 learning experience, which are used to describe the relationship in learning environment between students and teachers, and peer groups in between. Four items of L2 learning experience in Li's (2023) have been adapted to EFL writing educational context. For example, the item "I receive help and support from my teachers when Learning the second language" has been adapted to "I receive help and support from my teachers in the process of EFL writing". Appendix A provides a comprehensive list of all seven original and adapted items from Li (2023), with each

item presented in both English and Chinese versions. These items are designated by the following code numbers: 2, 3, 11, 12, 15, 16, and 26.

3.5.2 Foreign Language Writing Anxiety Inventory

According to the study conducted by Cheng (2004), the inventory for foreign language writing anxiety includes twenty-two items are classified into three construct factors, which are called the anxiety of somatic (seven items), avoidance behavior anxiety (seven items) and cognition (eight items). Somatic anxiety is used to measure the participates' physical reflection during the foreign language writing period; Avoidance behavior anxiety is used to measure the participates' avoidance in engaging writing activities; Cognitive anxiety is used to scale the participants' thought and concept during writing test. The measurement scale is well-established to evaluate the students' anxiety in foreign language writing in China (Li & Liu, 2013).

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The questionnaire of EFL writing anxiety is a five-point Likert scale. Due to better comparing with the research findings of those earlier studies, twenty-two items were drawn from the work of Cheng (2004) without any alterations. The original twenty-two items of writing anxiety scale are in Appendix A presented with the sequence number 17, 18, 19, 20, 21, 22, 23, 24R, 29, 30, 31, 32, 33R, 34R, 35R, 36, 38R, 39, 42, 43R, 44, 45R, among which, the items of number 17, 18, 19, 20, 21, 22, 23 are somatic anxiety, the items of number 24R, 29, 30, 31, 32, 33R, 34R are avoidance behavior anxiety, and the items of number 35R, 36, 38R, 39, 42, 43R, 44, and 45R

are cognitive anxiety. The reverse-scored items in the writing anxiety scale are marked with a number followed by an "R." Cheng (2004) reported high internal consistency reliability (Cronbach's α = .91) and satisfactory construct validity.

3.5.3 Writing Enjoyment Scale

Foreign language writing enjoyment inventory was drawn from the work of Jin (2023) who, based on Chinese education of EFL writing, developed the EFL writing enjoyment scales. It employs a five-point Likert scale comprising nine items designed to assess participants' enjoyment of foreign language writing (eg., I feel satisfied in English writing). The original nine items of writing enjoyment have been presented in Chinese and English versions in Appendix A, with the correspond number being 25, 27, 28, 37, 40, 41, 46, 47, 48. The reliability and validity have been attested in Jin's (2023) study.

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3.5.4 Proficient Writing Test

The writing material of this study is adapted from the writing task presented by Kuiken and Vedder (2008). This material has been fine-tuned to fit the Chinese cultural context by simulating a scenario where a native English speaker intent to visit China. Participants will assist foreign tourists in creating a detailed travel plan through email, focusing primarily on dining options, lodging, and the sightseeing selection.

Two restaurants and four hotels are offered, along with information about the foreign tourists' preferences for accommodation and tourist attractions. Participants are required to select the most suitable tourist attraction, restaurant, and hotel for the tourists based on this information. Due to the inadequacy of the provided restaurants and hotels in meeting all requirements, participants must analyze and reason to choose the most suitable options from the alternatives. An essay justifying for their choices should be written, with no restriction on word count, to be finished within one hour.

This writing material above is used to make an analysis of the students' EFL writing syntactic complexity in China (Jin & Wang, 2021; Yan & Zhang, 2015). To be better to make comparison with the findings in the past few years, the researcher adopts the similar writing materials with that of prior studies. The original and adapted version of writing material have been supplied in Appendix B.

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3.5.4.1 The Syntactic Complexity Measurement

The metrics of syntactic complexity can be automatically processed by L2SCA developed by Lu (2010), which has been confirmed to be reliable in the previous studies (Güvendir & Uzun, 2023).

L2SCA is the software package, which can automatically analyze plain text format of EFL writing, and calculate fourteen indexes of syntactic complexity. It can process the 400 sentences per second, which, thus, for teachers, is conductive to efficiently

assessing learners' EFL writing quality.

3.5.5 Reflective Journal

Reflective journaling is a qualitative research method that involves individuals recording and critically thinking about their experiences, thoughts, and learning processes in written form. In educational research, reflective journals are used to prompt learners to revisit and analyze what they have learned, how they felt during learning tasks, and how their perceptions and behaviors may have changed over time (Lew & Schmidt, 2011; Thorpe, 2004). As a form of reflective writing, this method moves beyond simple description to include personal interpretation and evaluation, encouraging metacognitive engagement with one's experiences (reflective writing involves revisiting events, noting their meaning, and relating them to broader learning;). Reflective journals can be structured with specific prompts or open-ended, depending on research goals, and are commonly used to explore internal processes such as beliefs, emotions, and strategies that may not be readily observable through traditional assessments (reflective journals provide opportunities for deeper learner insights;). In the context of language learning, this method allows researchers to gather rich, first-person data on learners' perceptions of their motivations and emotional reactions during task performance, making it particularly valuable for studies examining affective and cognitive dynamics in writing.

The reflective journal was employed as a qualitative instrument in this study to explore how the constructs of the L2 motivational self system—specifically, the ideal

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L2 self, the ought-to L2 self, and the L2 learning experience—affect syntactic complexity in EFL writing. The journal also mainly investigates how these effects are mediated by writing enjoyment and writing anxiety. Reflective journals provide a unique opportunity for participants to introspectively document their personal writing experiences, motivations, and emotional states, offering rich insights into how these factors collectively shape their use of complex syntactic structures in writing.

The use of reflective journals in this study is aimed at capturing the participants' internal thought processes and emotional responses related to their writing tasks. This qualitative approach allows for an in-depth understanding of how motivational constructs (ideal L2 self, ought-to L2 self, L2 learning experience) influence writing behaviors, particularly the choice and complexity of syntactic structures, through the mediating effects of writing enjoyment and anxiety. Reflective journals are well-suited for this purpose as they enable participants to provide detailed, narrative accounts of their evolving motivations, feelings, and writing strategies over time (Piniel & Csizér, 2015). The detailed instructions of reflective journal are presented in Appendix C.

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3.6 Data Collection

Data collection is divided into two stages. The first stage is to collect the quantitative data including questionnaire administration and writing task test, and the second stage to collect the qualitative data by asking students to write reflective journal about EFL writing learning experience with the course.

Quantitative data for this study were collected on November 15th, 2024, which was 76 days, or approximately 11 weeks, after the beginning of the writing course. This timing was strategically chosen for two main reasons. First, according to Yoon and Polio (2017), a duration exceeding half a semester (more than 60 days) provides a sufficient timeframe to observe changes in syntactic complexity production among students. Second, scheduling the data collection before the final EFL writing examinations, which occur two weeks later, minimizes the impact of test anxiety on the research outcomes. As noted by Cassady and Johnson (2002), test anxiety can significantly influence students' performance and thus affect the validity of the study's results.

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The total duration for completing both the questionnaire and the writing test was approximately 80 minutes. Specifically, 20 minutes were allocated for the administration of the questionnaire to 206 students, followed by a 10-minute interval, and then 60 minutes were dedicated to the writing task for 90 students.

Qualitative data is collected at the end of autumn semester of 2024. In this qualitative study, the focus is on understanding how motivation influences emotions and subsequently impacts the complexity of second language writing, with writing enjoyment and writing anxiety acting as a mediating variable. To achieve this, six students who completed the writing course are selected based on their diverse language proficiency. This selection aims to ensure a comprehensive and representative sample for the study.

It is noted that participation in the study was entirely voluntary, with participants assured of anonymity. Quantitative data is collected by the questionnaires, and qualitative data is collected by the reflective journals.

3.7 Data Analysis

The general data analysis procedure has been indicated in Table 3.1. The following demonstrated the details of data analysis procedure.

Quantitative data could be processed by using SPSS 19 and Mplus 8.3, including reliability and validity test. And then following descriptive analysis of all variables was involved in the present study. Beyond that, such inference statistical analysis as exploratory factor analysis, Pearson correlation analysis, multiple regression analysis. Additionally, structural equation modelling (Moustaki et al., 2004) could be employed to make the Confirmatory Factor Analysis (CFA).

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Besides, qualitative data was analyzed to identify key themes and patterns related to motivational variables like ideal L2 self, ought-to L2 self, and L2 learning experience, emotional variables like writing anxiety and writing enjoyment, and writing complexity. Initial readings helped in coding and categorizing the text, followed by a thematic analysis to uncover major themes about the role of writing emotions as mediators between the constructs of L2 motivational self system and syntactic complexity dimensions in EFL writing process.

To enhance the dependability of the qualitative coding, the coding process was conducted by two researchers. Both coders were familiar with the coding scheme and theme descriptions prior to analysis. In the first round, the two coders independently coded all journal entries according to the predefined coding framework.

To assess coding consistency, 50% of the data (three journals) were randomly selected and double-coded by both researchers. The two sets of coding were then compared to examine the consistency of code application and theme categorization. A high level of agreement (100%) was observed, indicating satisfactory inter-coder reliability.

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Any discrepancies were carefully discussed and resolved through consensus. Where necessary, code definitions were refined and the original data were re-examined to ensure that interpretations remained grounded in participants' accounts. This procedure follows commonly recommended practices for establishing inter-coder reliability in qualitative research. Detailed coding examples are provided in Appendix C.

The results were synthesized to explore the mediating role of emotions between motivation and syntactic complexity production. The findings were detailed in a comprehensive research report, discussing how emotions mediated the relationship between motivation and writing complexity. This report provided theoretical insights, practical implications, and recommendations for future research, enriching the

overall understanding of the complex interplay between motivation, emotions, and second language writing, further complemented the imperfection of the quantitative data involved in the current study.

3.7.1 The Reliability and Validity of the Questionnaire

3.7.1.1 Reliability Analysis

The reliability analysis of each subscale of the questionnaire is demonstrated using Cronbach's alpha, it is demonstrated, in Table 3.4, that Cronbach's alpha of each subscale of questionnaire has outnumbered cut-off value 0.70. Thus, the subscales of questionnaire in the present study have also attested to be reliable.

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Table 3.4

The Subscales of Questionnaire with Alpha Coefficients

Scale	N	Alpha	M	SD
IS	5	0.759	3.189	0.71
WE	9	0.73	3.98	0.63
OS	5	0.78	3.13	1.01
L2LE	7	0.91	3.51	0.72
IL2LE	4	0.83	3.46	0.63
BEL2LE	3	0.87	3.26	0.61
SA	7	0.89	3.07	0.79
AA	7	0.85	3.25	0.62
CA	8	0.81	3.19	0.66
WA	22	0.91	3.17	0.57

Note: IS indicates ideal L2 self; OS indicates ought-to L2 self; L2LE indicates L2 learning experience; IL2LE indicates interactional L2 learning experience; BEL2LE indicates behavioral engagement L2 learning experience; WE indicates writing enjoyment; WA indicates writing anxiety; SA indicates somatic anxiety; AA indicates avoidance anxiety; CA indicates cognitive anxiety.

3.7.1.2 Exploratory Factor Analysis of L2 Learning Experience

To align with the adaptation of items that construct the L2 learning experience as proposed by Li (2023) and considering Dörnyei's (2019) conceptualization of L2 learning experience—defined as the perceived quality of learners' engagement with various aspects of the language learning process—an Exploratory Factor Analysis (EFA) was conducted. This analysis aimed to identify a small number of factors that explain the variance in the L2 learning experience within the EFL writing educational context, particularly through the lens of learner engagement. The first step involved conducting the EFA using SPSS 19 on a sample of 206 students, a sample size deemed sufficient for EFA (Kline, 2011). To assess the suitability of the data for factor analysis, the Bartlett's Test of Sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy were performed. The results indicated that the data were appropriate for EFA, with the KMO value for the L2 learning experience being 0.776 (greater than the recommended threshold of 0.60) and a significant Bartlett's test result ($p < .001$), confirming the adequacy of the sample for the analysis (Kaiser, 1974; Field, 2013). Then, EFA was conducted with the extraction method of principal components, with the data demonstrated in Table 3.5.

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Table 3.5

Factor Loadings on the L2 learning Experience Scale Post Varimax Rotation Depict Item Associations with the Two Extracted Factors

	constituent	
	1	2
I am actively involved in English writing class	**0.670**	0.359
I try hard to learn new writing knowledge in the English writing class	**0.802**	0.268
I stay focused in English writing class	**0.746**	0.010
I received help and support from my teachers, while studying English writing	0.298	**0.621**
The teacher is encouraging in our English writing learning process	0.268	**0.725**
The positive teacher-student interaction is motivating in learning English writing	0.154	**0.823**
Teacher's English writing history (overseas experience) leaves me a deep impression	0.042	**0.758**

Note. Items strongly associated with a factor are highlighted in bold type

Table 3.5 reveals that the L2 learning experience scale comprises two underlying dimensions, accounting for 44.79% and 15.20% of the variance, respectively. And the two components are significantly correlated. The items of L2 learning experience were adapted from the behavioral engagement and relationship items of the curriculum activities in Li's (2023) study. Based on the studies conducted by Li (2023), the first component was related to specific behavioral engagement of L2 learning experience and was therefore tagged by "Behavioral engagement L2 learning experience". It can describe the specific behavioral engagement process in EFL writing class. The second dimension pertains to the specific relationship between students and teachers in the L2 learning experience and is designated as "Interactional L2 learning experience", describing the particular the teacher and student, or peer interactions in EFL writing classes.

3.7.1.3 Confirmatory Factor Analysis of L2 Learning Experience

The initial confirmatory factor analysis has also been conducted to check the construct validity of L2 learning experience among a sample of 206 students, and the final confirmatory factor analysis of L2 learning experience among a sample of 90 students has also been conducted to show the stable construct validity of L2 learning experience. The common model fit indexes that Mplus 8.3 supplied in both initial confirmatory factor analysis and final confirmatory factor analysis have been reported in Table 3.6 and Table 3.7. The results indicated that the construct model with two components of L2 learning experience was acceptable (P value is sensitive to sample size) (Kline, 2011).

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Table 3.6
The Initial CFA of L2LE

Index	χ2/df	P	TLI	CFI	RMSEA	SRMR
Reference	<3	>0.05	≧0.90	≧0.90	≦0.80	≦0.08
L2LE	2.743	0.001	0.918	0.949	0.08	0.04

Note: L2LE = L2 learning experience

Table 3.7
The Final CFA of L2LE

Index	χ2/df	P	TLI	CFI	RMSEA	SRMR
Reference	<3	>0.05	≧0.90	≧0.90	≦0.80	≦0.08
L2LE	1.464	0.122	0.952	0.970	0.072	0.062

Note: L2LE = L2 learning experience

The second step is that descriptive statistics analysis was conducted to sort out the data, demonstrating the profile of the data about all the variables, which is the

foundation for further inferential statistical analysis. The descriptive statistics analysis in the current study was presented with the means, standard deviation, maximum, minimum, skewness, and kurtosis of all independent variables and the fourteen dimensions of syntactic complexity. Most importantly, the current data normality was reported to decide whether parametric statistics analysis should be applicable or not.

The third step is to examine the relationship between the constructs within the system, writing enjoyment, writing anxiety and fourteen dimensions of syntactic complexity by using Pearson correlational analysis. Significant correlation coefficient will demonstrate covariance of all the variables in the present study, which is basis for further regression analysis.

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The fourth step is to examine the forecasting power of the constructs within L2 motivational self system on writing anxiety and writing enjoyment, and on fourteen dimensions of syntactic complexity by multiple regression analysis. Given the potential influence of language proficiency on both writing enjoyment and writing anxiety, language proficiency has been included in the multiple regression model. This allows us to evaluate the constructs within the L2 motivational self system as predictors of writing enjoyment and writing anxiety while controlling for the effects of language proficiency on these emotional variables.

The fifth step is to check out the forecasting ability of writing enjoyment and anxiety on fourteen dimensions of syntactic complexity by multiple regression analysis. Similarly, considering the possible effect of language proficiency on syntactic complexity production, language proficiency has been included in the multiple regression model. This allows us to evaluate the writing enjoyment and writing anxiety as predictors of syntactic complexity production while controlling for the effects of language proficiency on syntactic complexity production.

The last step is to examine the mediation role of writing anxiety and writing enjoyment between the constructs within the system and syntactic complexity production in EFL writing educational context by multiple regression analysis. To be specific, according to the mediation analysis procedure proposed by Baron and Kenny (1986), three essential conditions must be met to establish mediation. First, the independent variable must significantly predict the dependent variable. Second, the independent variable must also significantly predict the mediator. Third, the mediator must significantly predict the dependent variable. Once these three conditions are satisfied, if the effect of the mediator on the dependent variable is controlled for, the effect of the independent variable on the dependent variable should either become non-significant or be significantly reduced. This indicates that the mediator explains, either fully or partially, the relationship between the independent and dependent variables. Most importantly, a mediation analysis was conducted to examine the indirect effects, with language proficiency controlled for its influence on syntactic complexity production. This approach allows for a more

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accurate understanding of the mediating factors while accounting for the potential impact of language proficiency on syntactic complexity.

3.8 Pilot Study

3.8.1 Introduction of the Pilot Study

The pilot study functioned primarily as a preparatory phase for the main research, with a focus on testing the feasibility of research procedures and evaluating the quality of the research instruments. Rather than serving as a full-scale investigation of variable relationships, the pilot study aimed to refine the questionnaire design, ensure clarity of item wording, and identify potential procedural issues in data collection within the Chinese EFL context.

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In this study, reliability was examined in terms of internal consistency, referring to the extent to which items within each construct (e.g., Ideal L2 Self, Ought-to L2 Self, L2 Learning Experience, writing enjoyment, and writing anxiety) consistently measured the same underlying concept. Internal consistency indices (e.g., Cronbach's alpha) were calculated for each scale separately. The purpose was not to assess reliability across different constructs or across syntactic complexity indices, as these indices represent distinct aspects of writing performance rather than a single unified construct.

Validity was preliminarily checked through expert review and item adaptation from established instruments in prior studies. Feedback from the pilot participants also

helped refine ambiguous or culturally inappropriate items, thereby improving content validity and contextual appropriateness.

For the qualitative component, which was based on students' reflective journals, several strategies were adopted to enhance the trustworthiness of the data. These included systematic coding procedures, repeated reading of the journals, and careful examination of participants' entries to identify consistent patterns. In addition, prolonged engagement with the data and cross-checking of interpretations helped ensure credibility and accuracy in understanding the participants' experiences.

Taken together, the pilot study mainly served to ensure that the instruments and procedures used in the main study were appropriate, clear, and reliable, thereby strengthening the methodological rigor of the subsequent large-scale investigation.

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3.8.2 Sampling

In the pilot study, opportunity sampling was used to select 54 sophomores at Hubei University of Science and Technology, China, from the Education School. All participants were representative of the typical characteristics of students in local universities of Hubei province, China. These second-year students were chosen because their curriculum includes a writing course, which facilitates the collection of relevant data for the study. The inclusion of a writing course at this stage in their education ensures that the students are currently engaged in writing activities, providing a timely and appropriate context for assessing their L2 motivational self-

system constructs, writing enjoyment, and writing anxiety. This context allows for the collection of data that is both relevant and reflective of their current academic experiences, thereby enhancing the reliability and validity of the findings.

3.8.3 Instruments

The instruments consist of questionnaire, writing test and reflective journal. The details have been demonstrated in Appendix A, Appendix B, and Appendix C. The following will demonstrate the reliability and validity of the questionnaire, writing task, as well as reflective journal in this study.

3.8.4 Data Collection Procedure in Pilot Study

Data has been collected in the autumn semester of 2023, which last for 16 weeks. The semester started from the mid-September and ended at the end of December. Investigations have been taken in October, during which, 54 English learners have taken the EFL writing curriculum. On September 15th, questionnaire was administered to students, 15 minutes later, followed by writing test. The total time of spending on questionnaire and writing test last for about an hour and twenty minutes. It is noted that participation voluntarily attended the investigation, anonymity being guaranteed as well. Data were processed with the aid of SPSS 19.

3.8.5 Initial Piloting of Questionnaire

As suggested by Dörnyei and Taguchi (2009), we selected 3 people for initial piloting of the item pool. They are my colleagues. Two of them are female and one is

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male. They have been teaching English in college for 15 years, and they thus know the Chinese EFL learners well. They are asked to sift through the items and answer them, and supplied any feedback on all the items of questionnaire including the wording, ambiguity, unnecessary items, and additional items. After answering the items of the questionnaire, their reactions are demonstrated as follows. One of the colleagues advised me to adapt the item "learning to writing in English is important to me in order to gain the approval of my peers/teachers/family/boss" into "learning to writing in English is important to me in order to find a job". They explained that English learning in college is self-determined behavior, unrelated with family members and boss, thus, this item is not applicable to Chinese EFL learning context. English learning is related to finding a job, because learning English and technical skills are both required for students to find an idealized job in China. Based on the initial piloting of questionnaire, 48 items have been confirmed to perform the final piloting among EFL writing learners.

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3.8.6 Final Piloting of Questionnaire

In an attempt to obtain reliability and validity, the final piloting of questionnaire has been carried out. The number of the students who attended the final piloting study of questionnaire was 54, and all of students were sophomores from educational school. The time students spent in answering the questionnaire was roughly 20 minutes. Then, the data was imported into the statistical software of SPSS 19 to check the missing values and response range, followed by the analysis of reliability, validity and exploratory factor analysis.

3.8.6.1 Missing Values and Response Range

The processed data reveals no consistent missing values. Considering the diverse range of responses across all adapted questionnaire items, it is evident that respondents did not uniformly answer each item. This variation among the pilot samples indicates sufficient diversity for statistical analysis.

3.8.6.2 The Reliability and Validity of all the Scales in Questionnaire

Cronbach Alpha reliability coefficient was computed to measure the reliability of the scales of questionnaire by software SPSS 19. The scales of ideal L2 self, ought-to L2 self, writing anxiety, and writing enjoyment of the questionnaire were attested to be highly reliable with the data demonstrated in Table 3.8. Also, the scale of L2 learning experience were adapted from the work by Li (2023), which, thus, is very essential to conduct its internal consistent reliability and validity.

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Table 3.8

The Subscales of Questionnaire with Alpha Coefficients

Scale	N	Alpha	M	SD
IS	5	0.85	3.28	0.71
WE	9	0.73	3.98	0.63
OS	5	0.78	3.13	1.01
SA	7	0.89	3.07	0.79
AA	7	0.85	3.25	0.62
CA	8	0.81	3.19	0.66
WA	22	0.91	3.17	0.57

Note: IS indicates ideal L2 self; OS indicates ought-to L2 self; WE indicates writing enjoyment; WA indicates writing anxiety; SA indicates somatic anxiety; AA indicates avoidance anxiety; CA indicates cognitive anxiety.

Regarding the adaptation of the items that constructs the L2 learning experience from Li (2023), plus the conceptualization of L2 learning experience defined by Dörnyei (2019), who thought of L2 learning experience to be the perceived quality of the learners' engagement with various aspects of the language learning process, the present items in L2 learning experience were extracted two components by principal component, with the specifics shown in Table 3.9.

Table 3.9 reveals that the L2 learning experience scale comprises two underlying dimensions, accounting for 44.79% and 15.20% of the variance, respectively. And the two components are significantly correlated. The items of L2 learning experience were adapted from the behavioral engagement and relationship items of the curriculum activities in Li's (2023) study. Based on the studies conducted by Li (2023), the first component was related to specific behavioral engagement of L2 learning experience and was therefore tagged by "behavioral engagement L2 learning experience". It can describe the specific behavioral engagement process in EFL writing class. The second dimension pertains to the specific relationship between students and teachers in the L2 learning experience and is designated as "relationship" in L2 learning experience, describing the particular emotional involvement process in EFL writing classes.

By the function of "Cronbach Alpha if Item Deleted" offered by SPSS 19, I can clearly see the total alterations of Alpha coefficient value, when certain item was deleted. That is, the overall internal consistence of the scales will be increased by

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deleting the particular items. Table 3.10 demonstrated the outcome of the reliability analysis for the scales of L2 learning experience in EFL writing educational context. It has been found that the reliability of the scales of L2 learning experience has arrived at high reliability (Cronbach's Alpha = 0.788), Due to the fact that Cronbach Alpha coefficient in the piloting study has outnumbered the 0.7 cut-off value, all the items within the scale of L2 learning experience should be retained.

In terms of the construct validity within L2 learning experience of EFL writing, the two components of L2 learning experience in EFL writing context are significantly correlated, besides, it has been found, by confirmatory factor analysis, that the model of L2 learning experience can be acceptable, with the model fix indices presented in Table 3.11.

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Table 3.9

Factor Loadings on the L2 learning Experience Scale Post Varimax Rotation Depict Item Associations with the two Extracted Factors

	constituent	
	1	2
I am actively involved in English writing class	**0.670**	0.359
I try hard to learn new writing knowledge in the English writing class	**0.802**	0.268
I stay focused in English writing class	**0.746**	0.010
I received help and support from my teachers, while studying English writing	0.298	**0.621**
The teacher is encouraging in our English writing learning process	0.268	**0.725**
The positive teacher-student interaction is motivating in learning English writing	0.154	**0.823**
Teacher's English writing history (overseas experience) leaves me a deep impression	0.042	**0.758**

Note. Items strongly associated with a factor are highlighted in bold type

Table 3.10

The Reliability Analysis for the Scales of L2 Learning Experience

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
an2	19.77	13.21	0.544	0.755
an3	19.51	13.27	0.569	0.751
an11	19.61	14.46	0.334	0.796
an12	19.59	13.70	0.528	0.759
an15	19.56	13.28	0.584	0.748
an16	19.62	12.82	0.596	0.745
an26	19.72	13.98	0.464	0.771
Cronbach's Alpha = 0.788; N of items = 7				

Table 3.11

The CFA of L2 Learning Experience of EFL Writing

Index	χ2/df	P	TLI	CFI	RMR	RMSEA
Reference	≦3	>0.05	≧0.90	≧0.90	≦0.10	≦0.08
L2LE	2.53	0.001	0.918	0.949	0.045	0.08

Note: L2LE = L2 learning experience;

3.8.7 The Reliability and Validity of Reflective Journal

During the initial design stage of the journal task, the prompts explicitly included key theoretical constructs such as Ideal L2 Self, Ought-to L2 Self, L2 Learning Experience, writing anxiety, and writing enjoyment. However, to ensure that the prompts were appropriate for student participants and did not require prior knowledge of theoretical terminology, two experts in the field of second language writing and motivation were invited to review the journal instructions.

Both experts expressed concern that directly presenting theoretical labels might increase cognitive load and potentially confuse participants. They advised that the prompts should be framed in accessible, experience-based language so that students could respond based on their genuine learning experiences rather than their interpretation of abstract constructs. They further suggested replacing theoretical terms with descriptive phrases related to students' future goals, perceived expectations from others, prior learning experiences, and emotional responses during writing.

In addition, the experts recommended encouraging students to draw on authentic classroom experiences and real writing tasks when composing their journal entries. This would help elicit richer and more ecologically valid data. Based on these suggestions, the journal prompts were revised to use learner-friendly language while still aligning conceptually with the target constructs. This expert consultation process contributed to strengthening the content validity and comprehensibility of the instrument used in the main study. The following demonstrated the instructions of reflective journal.

Participants were asked to complete reflective journal entries one week after the conclusion of the writing curriculum. The instructions for this journal are as follows: Write a short essay of approximately 400 words, addressing the specific topics outlined below:

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1. Your future goals in English Writing

Consider your personal vision of becoming a skilled English writer. Reflect on how this vision motivates you to experiment with complex syntactic structures in your writing. Include specific examples from your writing experiences that illustrate how your goals influence your syntactic choices.

2. Expectations from others

Think about the external expectations or obligations you face, such as academic or social pressures, and how they influence your writing process. Discuss how these pressures affect your levels of writing anxiety and your willingness to use complex sentence structures. Provide concrete examples from your experiences to support your reflections.

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3. Your past and present English writing experiences

Examine your past and current experiences with learning to write in English. Consider how these experiences have shaped your motivation, enjoyment, or anxiety when writing. Describe specific situations that have influenced your emotional responses and syntactic decisions in your writing.

4. How your future goals, experiences, and feelings work together

Discuss how your goals, learning experiences, and feelings influence each other when you write in English. Explain how they affect your sentence choices and writing style. Use examples to make your ideas clear.

5. Use specific examples

Support your ideas with real examples from your own writing or learning experiences.

3.8.8 Summary of the Pilot Study

The pilot study has found the reliability and validity of the questionnaire and reflective journal. By initial piloting the questionnaire, three teachers have been invited to provide the suggestions about the wording, ambiguity, unnecessary items of the questionnaire. By final piloting the questionnaire, EFA, internal consistent analysis, and CFA of L2 learning experience have been conducted. It has been found that both subscales of the L2 learning experience in EFL writing educational context has been attested to be reliable and valid. Consequently, the reliability and validity of the scales have provided the firm basis for the investigations of the constructs within L2 motivational self system, writing anxiety, and writing enjoyment in EFL writing context. Also, in the pilot study, we have found the reliability and validity of reflective journal is acceptable, which have laid the foundation for the regression analysis in the subsequent formal study.

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3.9 Summary

To sum up, this chapter has detailed the research design adopted in the study, providing a comprehensive rationale for the methodological choices. The study is primarily quantitative, aimed at examining the relationships among the three constructs of the L2 Motivational Self System (L2MSS), writing enjoyment, writing anxiety, and syntactic complexity in EFL writing. The sampling procedure, instruments, and data collection methods were carefully designed to ensure the reliability and validity of the data, while a pilot study was conducted to refine the instruments and procedures.

For RQ5, which investigates the mediating roles of writing enjoyment and writing anxiety, a sequential explanatory mixed-methods component was incorporated. In this phase, quantitative mediation analyses were followed by qualitative data collection from students' reflective journals, enabling triangulation and a deeper understanding of the mechanisms underlying the mediation effects. Compared with other possible methodologies, such as purely quantitative, purely qualitative, concurrent mixed-methods, or exploratory designs, the chosen approach was deemed most suitable for addressing both the theory-driven hypotheses and the complex psychological processes under investigation.

Taken together, this chapter establishes a solid methodological foundation for the study, linking the theoretical framework of L2MSS and established motivational-emotional constructs with empirical data collection and analysis strategies. The next

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chapter will present the results of the data analysis, providing empirical evidence for the hypothesized relationships and mediation effects.

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CHAPTER FOUR
RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

The research findings in the present study are demonstrated by the following five sections, which are in line with the five research questions presented in chapter one. Section One relates to the issues about the correlations between ideal L2 self, ought-to L2 self, L2 learning experience, writing enjoyment, writing anxiety, and syntactic complexity of EFL writing among intermediate students at the local public university in China. Section Two relates to the constructs of L2 motivational self system as predictors of writing anxiety and writing enjoyment among intermediate students at the local public university in China. The second section consists of two parts. The first part addresses the predictive power of the constructs of L2 motivational self system on writing anxiety, and the second part addresses the predictive power of the system on writing enjoyment. Section Three states the constructs of L2 motivational self system as predictors of syntactic complexity of EFL writing among intermediate students at the local public university in China. Section Four states the predictive power of writing enjoyment and writing anxiety on syntactic complexity of EFL writing. The last section addresses writing enjoyment and writing anxiety as mediators between the constructs of L2 motivational self system and syntactic complexity among intermediate students at the local public university in China. Additionally, the discussions of the current findings are presented as well.

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4.2 The Overview of the Findings

The present study investigates the correlations between the constructs of the L2 motivational self system, writing anxiety, writing enjoyment, and syntactic complexity, and examined both motivational variables and emotional variables as predictors of EFL writing syntactic complexity among intermediate students at a local public university in China.

To begin with, an Exploratory Factor Analysis (EFA) was conducted on the items related to L2 learning experience, resulting in the extraction of two components, as shown in Table 4.1. Based on Li's (2023) study, the first component was identified as "Behavioral Engagement L2 Learning Experience", reflecting specific behavioral engagement processes in the EFL writing classroom. The second component, labeled "Interactional L2 Learning Experience", pertains to the interaction between teachers and students within the L2 learning experience, capturing the dynamics of teacher-student relationships in EFL writing classes.

The study finds that the constructs of the L2 motivational self system are significantly correlated with writing enjoyment and writing anxiety, and they can respectively predict these emotional variables. Moreover, the L2 motivational self system constructs, including the ideal L2 self, ought-to L2 self, and the two components of L2 learning experience, are significantly related to the dimensions of syntactic complexity in EFL writing. The results further demonstrate that these

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constructs can predict the dimensions of syntactic complexity, both directly and indirectly through the mediation of writing anxiety and writing enjoyment.

4.2.1 The Descriptive Statistical Analysis Findings

Descriptive statistical analysis, shown in Table 4.1, has been conducted, indicating that, among the two self-guides of L2 motivational self system, ideal L2 self in writing presents moderated mean value, which is lower than ought-to L2 self in EFL writing, revealing that Chinese EFL learners engage in EFL writing with less idealized vision than responsibilities and obligations. That is, Chinese EFL learners are motivated to learn EFL writing from more external motivation than individual desire. Also, we have observed that the mean values of behavioral engagement L2 learning experience is higher than those of interactional L2 learning experience, suggesting that Chinese EFL learners participate in EFL writing activities with more behavioral engagement than interaction between students and teachers.

Among the emotional variables, the mean values of writing enjoyment are lower than those of writing anxiety, revealing that Chinese EFL learners present more writing anxiety than writing enjoyment in EFL writing. Moreover, the level of writing anxiety is very high, suggesting that Chinese university EFL learners tend to have high writing anxiety when engaging into EFL writing, which is likely to exert the influence on syntactic complexity of EFL writing in the present study.

Table 4.1

Psychometric Properties of all the Variables in the Present Study

Index	Mean		Skewness		Kurtosis	
	Statistic	SD	Statistic	Std. Error	Statistic	Std. Error
IS	3.19	0.62	-0.274	0.254	-0.27	0.50
OS	3.47	0.74	-0.526	0.254	-0.18	0.50
BEL2LE	3.32	0.61	-0.438	0.254	-0.58	0.50
IL2LE	3.06	0.63	0.145	0.254	-0.80	0.50
WE	2.73	0.61	0.389	0.254	-0.06	0.50
SA	3.08	0.75	-0.113	0.254	-1.24	0.50
AA	3.16	0.59	-0.079	0.254	0.04	0.50
CA	3.14	0.72	-0.270	0.254	-0.36	0.50
WA	3.22	0.54	-0.052	0.254	-0.74	0.50
MLS	10.23	0.69	1.408	0.254	0.16	0.50
MLT	9.74	0.01	0.863	0.254	0.56	0.50
MLC	6.83	0.04	0.199	0.254	0.004	0.50
C/S	1.49	0.256	0.90	0.254	0.87	0.50
VP/T	1.63	0.312	0.65	0.254	-0.48	0.50
C/T	1.43	0.351	2.36	0.254	7.04	0.50
DC/C	0.26	0.109	0.30	0.254	0.08	0.50
DC/T	0.37	0.209	0.86	0.254	0.08	0.50
T/S	1.10	0.114	-0.512	0.254	0.41	0.50
CT/T	0.28	0.123	0.28	0.254	0.59	0.50
CP/T	0.18	0.083	0.57	0.254	0.47	0.50
CP/C	0.15	0.075	0.68	0.254	0.30	0.50
CN/T	0.85	0.383	0.70	0.254	0.87	0.50
CN/C	0.57	0.200	0.71	0.254	0.87	0.50

***Note*:** IS indicates ideal L2 self; OS indicates ought-to L2 self; WE indicates writing enjoyment; WA indicates writing anxiety; SA indicates somatic anxiety; AA indicates avoidance anxiety; CA indicates cognitive anxiety; MLS indicates mean length of sentence; MLC indicates mean length of clause; MLT indicates mean length of T-unit; C/S indicates the number clauses per sentence; DC/C indicates the umber of dependent clauses per clause; VP/T indicates verb phrases per T-unit; T/S indicates the total T-units in each sentence; CT/T indicates the number of complex T-units per T-unit; CP/T indicates coordicated phrases per T-unit; CP/C indicates coordicated phrases per clause; CN/T indicates complex nominals divided by T-units; CN/C indicates complex nominals divided by clauses

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With regards to the frequency of the constructs of L2 motivational self system in the present study, most of the participants fall in the scope of moderate ideal L2 self, ought-to L2 self, and L2 learning experience in EFL writing, accounting for 62.4%, 45.1%, and 50.5% of the total of participants respectively.

Meanwhile, the participants fall on the scope of moderate writing enjoyment and writing anxiety, accounting for 50% and 49% of the total of participants respectively, even higher than their respective high level group and low level group.

By the values of skewness and kurtosis among all the variables, the values of skewness and kurtosis are close to 0, which indicates that all data in the current study are normally distributed. Additionally, Moore and McCabe (2006) suggested that a sample size exceeding 30 allows the data to be considered as approximately normally distributed. Data's normal distribution laid the foundation for the following inferential analysis like Pearson correlation analysis, and regression analysis.

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4.2.2 RQ1: The Correlations between Ideal L2 Self, Ought-to L2 self, L2 Learning Experience, Writing Enjoyment, Writing Anxiety, and Syntactic Complexity Dimensions

The current study has found the significant correlations between L2 motivational self system constructs, foreign language writing emotions, and syntactic complexity production. The following will demonstrate the details of correlations between them.

H1a: There is significant correlation between ideal L2 self and L2 learning experience within L2MSS

Within the three constructs of L2 motivational self system, as for the relationship between ideal L2 self and L2 learning experience in EFL writing context, Table 4.2 reports the significant positive relation between ideal L2 self and L2 learning experience. Specifically, ideal L2 self is positively correlated with behavioral engagement L2 learning experience ($r = .26$, $P < 0.05$) and interactional L2 learning experience ($r = .28$, $P < 0.05$) in EFL writing educational context, revealing that Chinese EFL learners with higher ideal L2 self will accompany with higher positive behavioral engagement in EFL writing and better teacher-student interactions in EFL writing.

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H1b: There is significant correlation between ideal L2 self and ought-to L2 self within L2MSS

Additionally, regarding the relationship between ideal L2 self and ought-to L2 self in EFL writing context, it is unexpectedly found that ideal L2 self is negatively correlated with ought-to L2 self in Chinese EFL writing context ($r = -.52$, $P < 0.01$), suggesting that Chinese EFL learners with higher ideal L2 self can go with lower ought-to L2 self in EFL writing context.

Table 4.2

The Significant Relationship Between Three Constructs of L2 Motivational Self System, WE, WA, and Syntactic Complexity Dimensions

	IS	OS	BEL2LE	IL2LE	WE	SA	AA	CA	MLS	MLC	CP/T	CP/C	C/T	CT/T
IS	-													
OS	-.52**	-												
BEL2LE	.260*	-.275**	-											
IL2LE	.280*	-.397**	.487**	-										
WE	.525**	-.593**	.270*	.414**	-									
SA	-0.099	.274**	-.210*	-0.163	-.466**	-								
AA	-.424**	.442**	-.478**	-.366**	-.523**	.357**	-							
CA	-.528**	.440**	-.253*	-.249*	-.616**	.578**	.508**	-						
MLS	.403**	-.314**	.407**	.325**	.280**	0.071	-.401**	-.418**	-					
MLC	.548**	-.414**	.510**	.301**	.417**	-.228*	-.527**	-0.196	.537**	-				
CP/T	.400**	-.465**	0.169	.381**	.504**	-0.174	-.340**	-.297**	.213*	.299**	-			
CP/C	.429**	-.501**	.286**	.376**	.607**	-.309**	-.472**	-.330**	.373**	.351**	.632**	-		
C/T	-0.062	0.186	-0.065	-0.044	-.223*	0.163	.237*	.368**	0.042	-.318**	-0.126	-0.024	-	
CT/T	-0.04	0.161	0.12	0.08	-0.121	.231*	0.029	.284**	-0.016	-0.11	0.038	-0.08	.325**	-

***Note*:** IS indicates ideal L2 self; OS indicates ought-to L2 self; BEL2LE indicates behavioral engagement L2 learning experience; IL2LE indicates relationship in L2 learning experience; WE indicates writing enjoyment; SA indicates somatic anxiety; AA indicates avoidance anxiety; CA indicates cognitive anxiety.

H1c: There is significant correlation between ought-to L2 self and L2 learning experience within L2MSS

Also, concerning the relationship between ought-to L2 self and L2 learning experience in EFL writing context, Table 4.2 demonstrates that ought-to L2 self is negatively correlated with L2 learning experience, with the details that ought-to L2 self is negatively correlated with Behavioral engagement L2 learning experience ($r = -.275$, $P < 0.01$) and Interactional L2 learning experience ($r = -.397$, $P < 0.01$), suggesting that Chinese EFL learners with higher ought-to L2 self in EFL writing join with lower engagement and fewer teacher-student interactions in EFL writing.

H1d: There are significant correlations between writing enjoyment and writing anxiety

Regarding the relationship between writing enjoyment and writing anxiety, Table 4.2 reports that writing enjoyment is negatively correlated with the subcomponents of writing anxiety. To be specific, writing enjoyment is negatively correlated with somatic anxiety ($r = -.466$, $P < 0.01$), avoidance behavior anxiety ($r = -.523$, $P < 0.01$), and cognitive anxiety ($r = -.616$, $P < 0.01$), indicating that Chinese EFL learners with lower writing enjoyment will come with higher writing anxiety.

H1e: There are significant correlations between the three L2MSS constructs and writing enjoyment

With respect to the relationship between three constructs of L2 motivational self system, and writing enjoyment, Table 4.2 reports both ideal L2 self and L2 learning experience are positively correlated with writing enjoyment. In the view of details, ideal L2 self in EFL writing is positively correlated with writing enjoyment ($r = .525$, $P < 0.01$), suggesting that Chinese EFL learners with higher ideal L2 self will accompany with higher writing enjoyment in EFL writing context. Additionally, both Behavioral engagement L2 learning experience and Interactional L2 learning experience are also positively correlated with writing enjoyment ($r = .27$, $P < 0.05$; $r = .414$, $P < 0.01$), indicating that Chinese EFL learners with higher L2 learning experience with behavioral engagement and interactions, will emerge with higher writing enjoyment in EFL writing context. However, the ought-to L2 self in EFL writing is negatively correlated with writing enjoyment in the current study,

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suggesting that Chinese EFL learners' higher external pressures or obligations for the EFL writing come with lower writing enjoyment.

H1f: There are significant correlations between the three L2MSS constructs and writing anxiety

As for the relationship between three constructs of L2 motivational self system and writing anxiety, Table 4.2 demonstrates the relationship between ideal L2 self and writing anxiety, and indicates that the ideal L2 self is negatively correlated with writing anxiety. To be specific, when learners have high and clear expectations for their L2 writing abilities, they are likely to feel more confident, which can reduce the occurrence of somatic anxiety in EFL writing. Conversely, if learners perceive their ideal L2 self as difficult to achieve, this might increase their somatic anxiety in EFL writing. Also, Learners with a strong and positive ideal L2 self are usually more motivated and less likely to exhibit avoidance behaviors, thus experiencing lower avoidance behavior anxiety. However, if the ideal L2 self is too lofty and seems unattainable, learners may feel overwhelmed and opt for avoidance, thereby increasing avoidance behavior anxiety. Additionally, a clear and strong ideal L2 self can foster motivation and confidence, resulting in lower cognitive anxiety. Nonetheless, if there is a significant gap between the ideal L2 self and reality, learners might worry excessively about their abilities and progress, leading to higher cognitive anxiety in EFL writing.

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Referring to the correlation between ought-to L2 self and writing anxiety in the current study, Table 4.2 shows that excessively high or unrealistic expectations from the ought-to L2 self can increase a learner's stress, leading to higher somatic anxiety. Also, the relationship between ought-to L2 self and avoidance behavior anxiety is shaped by the level of external expectations. High external expectations can make learners feel overwhelmed, leading to increased avoidance behaviors and, consequently, higher avoidance behavior anxiety. In addition, high expectations and external pressures associated with the ought-to L2 self can lead to increased worry and negative thoughts during learning, thus raising cognitive anxiety.

Regarding the correlation between L2 learning experience and writing anxiety in the current study, Table 4.2 also demonstrates the negative correlation between L2 learning experience and writing anxiety. Specifically, behavioral engagement L2 learning experience represents the learner's active participation and effort in EFL writing activities. High levels of behavioral engagement typically imply that learners are actively involved in learning activities, which helps alleviate anxiety. Consequently, learners with high behavioral engagement are likely to experience lower levels of somatic anxiety, avoidance behavior anxiety, and cognitive anxiety. Interactional L2 learning experience reflects the teacher-student and peer interactions during EFL writing activities. Learners with high interactional L2 learning experience often experience joy and satisfaction, which can significantly reduce feelings of anxiety. Therefore, interactional L2 learning experience is significantly associated with lower avoidance behavior anxiety, and cognitive anxiety, but is

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insignificantly correlated with somatic anxiety.

H1g: There are significant correlations between the three L2MSS constructs and syntactic complexity

As regards the correlation between three constructs of L2 motivational self system, and syntactic complexity dimensions in EFL writing, Table 4.2 reports that L2 motivational self system constructs are significantly correlated with six syntactic complexity dimensions. Specifically, ideal L2 self shows the significant positive correlation with the Mean Length of Sentence (MLS) ($r = .403$, $P < 0.01$), Mean Length of Clause (MLC) ($r = .548$, $P < 0.01$), Coordinate Phrases per T-unit (CP/T) ($r = .400$, $P < 0.01$), and Coordinate Phrases per Clause (CP/C) ($r = .429$, $P < 0.01$), suggesting that Chinese EFL learners with higher ideal L2 self in EFL writing will go with longer sentence, and more coordination phrases. Besides, ought-to L2 self is negatively correlated with the Mean Length of Sentence (MLS) ($r = -.314$, $P < 0.01$), Mean Length of Clause (MLC) ($r = -.414$, $P < 0.01$), Coordinate Phrases per T-unit (CP/T) ($r = -.465$, $P < 0.01$), and Coordinate Phrases per Clause (CP/C) ($r = -.501$, $P < 0.01$), suggesting that Chinese EFL learners with higher ought-to L2 self in EFL writing will go with fewer words in single sentence production and fewer coordination phrases in clause. Also, behavioral engagement L2 learning experience is positively correlated with the Mean Length of Sentence (MLS), Mean Length of Clause (MLC), and Coordinate Phrases per Clause (CP/C), while Interactional L2 learning experience is positively correlated with Mean Length of Sentence (MLS), Mean Length of Clause (MLC), Coordinate Phrases per T-unit (CP/T), and

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Coordinate Phrases per Clause (CP/C), indicating that Chinese EFL learners with positive behavioral engagement or interactions in Class activities will join with even more words and complex structures of sentence or T-unit production in EFL writing context.

H1h: There are significant correlations between writing enjoyment, writing anxiety and syntactic complexity

Table 4.2 also reports that foreign language writing emotional variables are significantly correlated with six syntactic complexity dimensions. Specifically, writing enjoyment is positively correlated with Mean Length of Sentence (MLS) ($r = .28$, $P < 0.01$), Mean Length of Clause (MLC) ($r = .417$, $P < 0.01$), Coordinate Phrases per T-unit (CP/T) ($r = .504$, $P < 0.01$), and Coordinate Phrases per Clause (CP/C) ($r = .607$, $P < 0.01$), suggesting that Chinese EFL learners with higher writing enjoyment will go with longer sentence, more coordinated sentence or T-unit production. These measures reflect particular dimensions of syntactic complexity rather than a hierarchy of complexity levels.

While writing anxiety is negatively correlated with six syntactic complexity dimensions. The details in Table 4.2 demonstrated that somatic anxiety is negatively correlated with MLC ($r = -.228$, $P < 0.05$) and CP/C ($r = -.309$, $P < 0.01$), but positively correlated with Complex T-units to total T-units (CT/T) ($r = .231$, $P < 0.05$), and avoidance behavior anxiety is negatively correlated with MLS ($r = -.401$, $P < 0.01$), MLC ($r = -.527$, $P < 0.01$), CP/T ($r = -340$, $P < 0.01$), and CP/C ($r = .472$,

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P < 0.01), but positively correlated with Complex T-units to total T-units (CT/T) (r = .237, P < 0.05) and cognitive anxiety is negatively correlated with MLS (r = -.418, P < 0.01), CP/T (r = -.297, P < 0.01), and CP/C (r = -.330, P < 0.01), but positively correlated with Clauses per T-unit (C/T) (r = .368, P < 0.01) and Complex T-units to total T-units (CT/T) (r = .284, P < 0.01), suggesting that different types of anxiety may be associated with different patterns of syntactic complexity use.

Based on the significant correlations between three constructs of L2 motivational self system, writing enjoyment, writing anxiety, and six syntactic complexity dimensions, the following will demonstrate the results about three constructs of L2 motivational self system as predictors of writing enjoyment and writing anxiety respectively, and all the independent variables as predictors of six syntactic complexity dimensions.

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4.2.3 RQ2: Ideal L2 Self, Ought-to L2 Self, and L2 Learning Experience as Predictors of Writing Enjoyment and Writing Anxiety

Building on the significant correlations among ideal L2 self, ought-to L2 self, L2 learning experience, writing enjoyment, and writing anxiety, we conducted regression analyses to explore the predictive roles of ideal L2 self, ought-to L2 self, and L2 learning experience on writing enjoyment, and writing anxiety. Additionally, considering the potential impact of language proficiency on writing enjoyment, we performed regression analyses with language proficiency controlled for in the models. This approach allowed us to examine the predictive effects of ideal L2 self, ought-to L2 self, and L2 learning experience on writing enjoyment and writing anxiety, accounting for the influence of language proficiency. It has been found that ideal

L2 self, ought-to L2 self, and L2 learning experience can significantly predict writing enjoyment and writing anxiety. The following demonstrates the specific findings about the predictive power of three constructs of L2 motivational self system on writing enjoyment and writing anxiety respectively.

H2a: Ideal L2 self can positively and significantly predict writing enjoyment

Regarding the link between the three constructs of L2 motivational self system and writing enjoyment, Fig. 4.1 demonstrates the multiple regression paths from the constructs of the system to writing enjoyment, when language proficiency level is controlled in this model with the data demonstrated in Table 4.3, among which ideal L2 self is the significant positive predictor of writing enjoyment (Beta = 0.291, P < 0.01), This finding indicated that Chinese EFL learners with higher ideal L2 self will lead to higher writing enjoyment in EFL writing,

H2b: L2 learning experience can positively and significantly predict writing enjoyment

Figure 4.1 demonstrates the multiple regression paths from the constructs of the system to writing enjoyment, when language proficiency level is controlled in this model with the data demonstrated in Table 4.3, among which, interactional L2 learning experience was found to be a positive predictor of writing enjoyment (β = 0.183, p < 0.066). Following the recommendations of Plonsky and Oswald (2014) and supported by the observation of Tahmouresi and Papi (2021) and Halim and Wu (2025), *p*-values below 0.10 can be considered statistically significant in L2 or EFL

research due to the inherently small effect sizes and complex measurement contexts in applied linguistics. The result suggests that Chinese EFL learners with higher interactional L2 learning experience will lead to higher writing enjoyment in EFL writing.

H2c: Ought-to L2 self can negatively and significantly predict writing enjoyment

Ought-to L2 self presents the significant negative predictor of writing enjoyment in EFL writing educational context (Beta = -0.369, P < 0.01). and those with higher ought-to L2 self will generate lower writing enjoyment (Figure 4.1 and Table 4.3).

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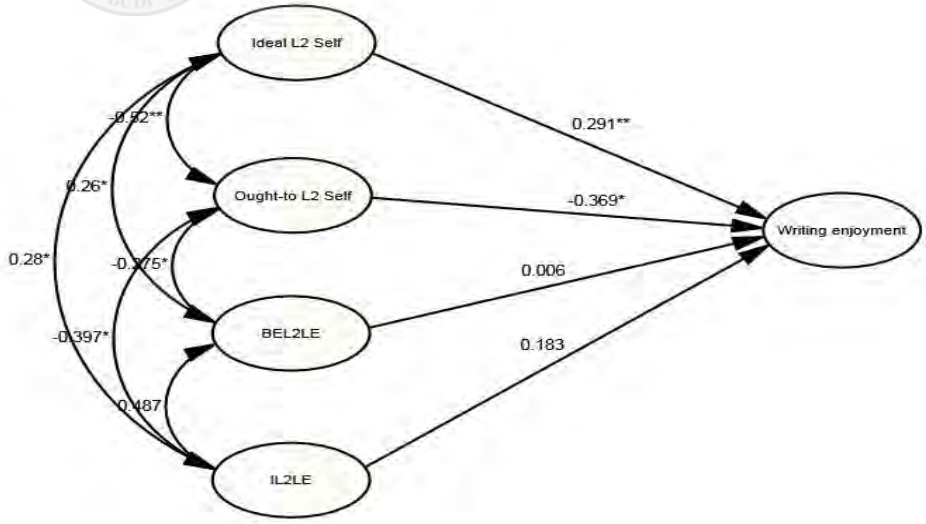


Figure 4.1. The Ideal L2 Self, Ought-to L2 Self, BEL2LE, and IL2LE as Predictors of Writing Enjoyment

Note: BEL2LE = behavioral engagement L2 learning experience; IL2LE = interactional L2 learning experience; * indicates P < 0.05; ** indicates P < 0.01; *** indicates P < 0.001

Table 4.3

Multiple Regression with L2MSS as Predictors of Foreign Language Writing Emotions

Predictors	writing enjoyment				somatic anxiety				avoidance anxiety				cognitive anxiety			
			95% CI				95% CI				95% CI				95% CI	
	B	β	Lower	Upper	*B*	β	Lower	Upper	*B*	β	Lower	Upper	*B*	β	Lower	Upper
Ideal L2 Self	0.285	0.291**	0.075	0.495	0.152	0.126	-0.18	0.48	-0.24	-0.256	-0.46	-0.03	-0.52	-0.452**	-0.796	-0.25
Ought-to L2 Self	-0.303	-0.369**	-0.47	-0.14	0.289	0.287*	0.031	0.546	0.161	0.203	-0.01	0.331	0.181	0.187	-0.033	0.395
BEL2LE	0.006	0.006	-0.18	0.192	-0.18	-0.15	-0.47	0.106	-0.33	-0.34**	-0.52	-0.14	-0.11	-0.091	-0.348	0.134
IL2LE	0.178	0.183	-0.01	0.367	-0.01	-0.01	-0.31	0.284	-0.05	-0.05	-0.24	0.148	-0.01	-0.261	-0.254	0.238
Language Level	-0.02	-0.024	-0.17	0.133	-0.08	-0.08	-0.32	0.159	0.075	0.093	-0.08	0.232	0.105	0.106	-0.093	0.303
R^2/F	.446/13.508***				.104/1.957				.373/9.984***				.333/8.384***			

Note: BEL2LE = behavioral engagement L2 learning experience; IL2LE = interactional L2 learning experience; * indicates P < 0.05; ** indicates P < 0.01; *** indicates P < 0.001

H2d: Ought-to L2 self can positively and significantly predict writing anxiety

With respect to the link between the three constructs of L2 motivational self system and writing anxiety, it has been observed in Figure 4.2 and Figure 4.3 that ought-to L2 self was found to be the positive predictor of avoidance behavior anxiety (Beta = 0.203, P < 0.062) and cognitive anxiety (Beta = 0.187, P < 0.097). According to Tahmouresi and Papi (2021), a p-value below 0.10 is considered statistically significant in the context of L2 research due to the small sample size. These results indicate that Chinese tertiary EFL learners with higher ought-to L2 self in EFL writing may lead to higher avoidance behavior anxiety and cognitive anxiety.

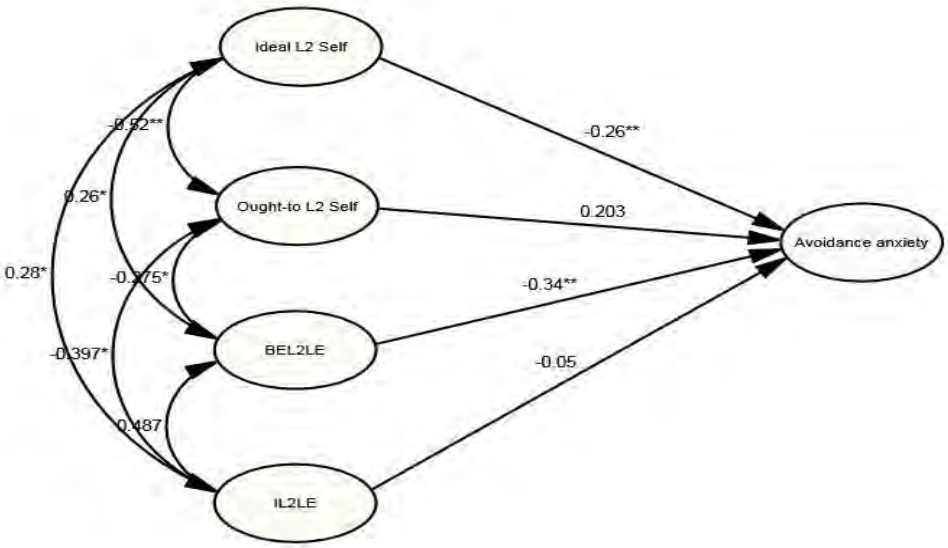


Figure 4.2. The Ideal L2 Self, Ought-to L2 Self, BEL2LE, and IL2LE as Predictors of Avoidance Anxiety

Note: BEL2LE = behavioral engagement L2 learning experience; IL2LE = interactional L2 learning experience; * indicates P < 0.05; ** indicates P < 0.01; *** indicates P < 0.001

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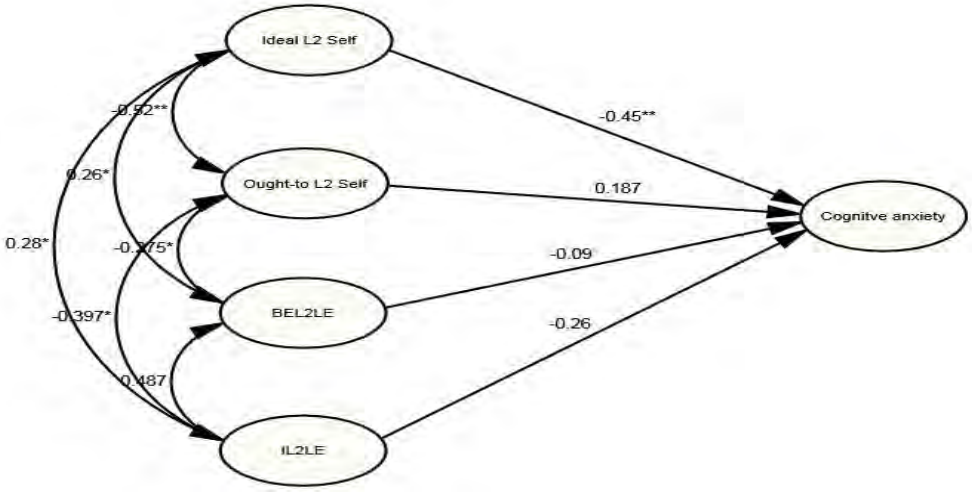


Figure 4.3. The Ideal L2 Self, Ought-to L2 Self, BEL2LE, and IL2LE as Predictors of Cognitive Anxiety

Note: BEL2LE = behavioral engagement L2 learning experience; IL2LE = interactional L2 learning experience; * indicates P < 0.05; ** indicates P < 0.01; *** indicates P < 0.001

H2e: Ideal L2 self and L2 learning experience can negatively and significantly predict writing anxiety

Figure 4.2 demonstrates the four motivational variables as predictors of avoidance behavior anxiety, and Table 4.3 demonstrates that this model can significantly explain 37.3% variance of avoidance anxiety. Specifically, both ideal L2 self and behavior engagement L2 learning experience are all negative predictors of avoidance behavior anxiety (Beta = -0.26, $P < 0.01$; Beta = -0.34, $P < 0.01$), suggesting that Chinese EFL learners with higher ideal L2 self and behavior engagement L2 learning experience in EFL writing tend to alleviate avoidance behavior anxiety in response to EFL writing.

Figure 4.3 shows the result of four motivational variables as predictors of cognitive anxiety, and Table 4.3 indicates that this model can significantly explain 33.3% variance of cognitive anxiety. To be specific, when language proficiency level has been controlled in this model, ideal L2 self can negatively predict the cognitive anxiety (Beta = -0.45, $P < 0.01$), The results indicate that Chinese EFL learners with a stronger ideal L2 self tend to experience lower levels of cognitive anxiety.

It is noted that the four motivational variables cannot significantly predict somatic anxiety with the data indicated in Table 4.3. That is, these four motivational variables cannot explain the variance of this physical or bodily anxiety in response to EFL writing.

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4.2.4 RQ3: Ideal L2 Self, Ought-to L2 Self, and L2 Learning Experience as Predictors of Syntactic Complexity

To investigate the predictive roles of the three constructs of the L2 motivational self system—ideal L2 self, ought-to L2 self, and L2 learning experience—on the Mean Length of Sentence (MLS) and Mean Length of Clause (MLC), we conducted regression analyses. Additionally, we controlled for the potential impact of language proficiency in the models to better isolate the effects of these motivational constructs on MLS and MLC. The findings indicate that ideal L2 self, ought-to L2 self, and L2 learning experience collectively explain 27.4% of the variance in MLS and 48.3% of the variance in MLC, as shown in Table 4.4. Specifically, Figure 4.4 demonstrates the ideal L2 self has a direct and statistically significant positive impact on both MLS (Beta = .244, $p < 0.052$) and MLC (Beta = .297, $p < 0.01$). This suggests that Chinese EFL learners who have a strong vision of their ideal self in EFL writing are more likely to produce more words per sentence and per clause.

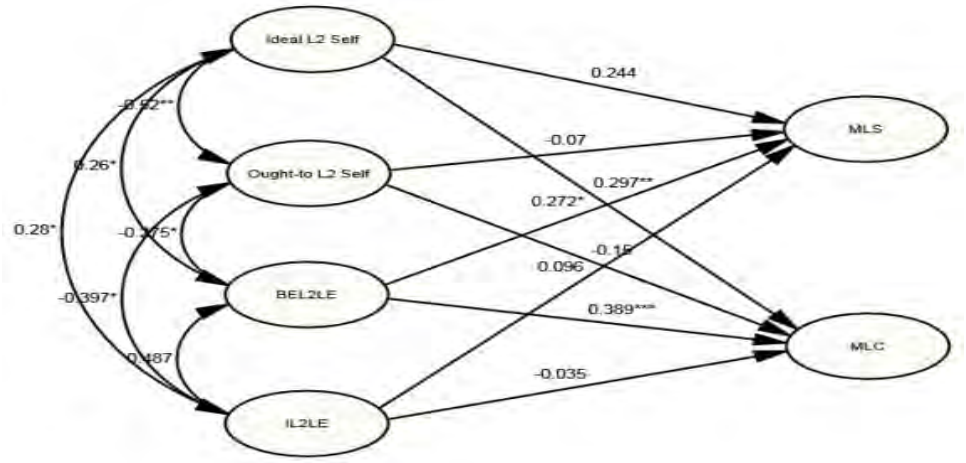


Figure 4.4. The Ideal L2 Self, Ought-to Self, BEL2LE, and IL2LE as Predictors of MLS and MLC

Note: BEL2LE = behavioral engagement L2 learning experience; IL2LE = interactional L2 learning experience; * indicates $P < 0.05$; ** indicates $P < 0.01$; *** indicates $P < 0.001$

Table 4.4

Multiple Regression with L2MSS as Predictors of MLC and MLS

Predictors	MLC				MLS			
			95% CI				95% CI	
	B	***β***	Lower	Upper	***B***	***β***	Lower	Upper
Ideal L2 self	0.48	0.297**	0.145	0.815	1.056	0.244	-0.009	2.121
Ought-to L2 self	-0.203	-0.15	-0.47	0.06	-0.25	-0.07	-0.109	0.582
BEL2LE	0.636	0.389***	0.34	0.932	1.194	0.272*	0.253	2.135
IL2LE	-0.056	-0.035	-0.36	0.246	0.411	0.096	-0.549	1.371
Language Level	0.261	0.189*	0.017	0.504	0.215	0.058	-0.559	0.989
R^2/F	.483/15.678***				.274/6.327***			

Note: BEL2LE = behavioral engagement L2 learning experience; IL2LE = interactional L2 learning experience; * indicates P < 0.05; ** indicates P < 0.01; *** indicates P < 0.001

In contrast, ought-to L2 self, which represents external pressures and obligations, does not significantly predict either MLS (Beta = -0.07, p > 0.10) or MLC (Beta = -.015, p > 0.10). This indicates that external motivations in EFL writing might not be effective in enhancing syntactic complexity in the same way that internal aspirations do.

The L2 learning experience is divided into two factors: Behavioral engagement L2 learning experience and interactional L2 learning experience. The Figure 4.4 also shows that behavioral engagement L2 learning experience has a significant and positive direct effect on MLS (Beta = 0.272, p < 0.05) and MLC (Beta = 0.389, p < 0.001). This indicates that while behavioral engagement in learning enhances overall motivation, it can directly translate to the measures of the length of the sentence or clause. The Findings suggest that if Chinese EFL learners with behavioral

engagement L2 learning experience can enhance their motivation and overall learning experience, and they may significantly impact the production of their mean length of the sentence or clause in a measurable way. However, interactional L2 learning experience as a positive predictor of MLS or MLC has not been found, which suggests that the interactional L2 learning experience is not sensitive to the production of the longer sentence in EFL writing.

To conclude, both the ideal L2 self and behavioral engagement L2 learning experience emerge as crucial predictors of syntactic complexity in EFL writing, with significant impacts on both mean length per sentence and mean length per clause. The ought-to L2 self and the interactional L2 learning experience, while important for motivation, do not have a significant direct influence on the length of sentences or clauses.

With respect to the relationships between the three constructs of L2 motivational self system and coordination dimensions of syntactic complexity, Table 4.5 demonstrates that the four motivational variables as well as language proficiency level can explain 32% variance of Coordinate Phrases per T-unit (CP/T) and 33.6% variance of Coordinate Phrases per Clause (CP/C). Figure 4.5 provides a detailed overview of the relationships among the ideal L2 self, ought-to L2 self, behavioral engagement L2 learning experience, and interactional L2 learning experience as predictors of two dimensions of syntactic complexity in EFL writing: CP/T and CP/C.

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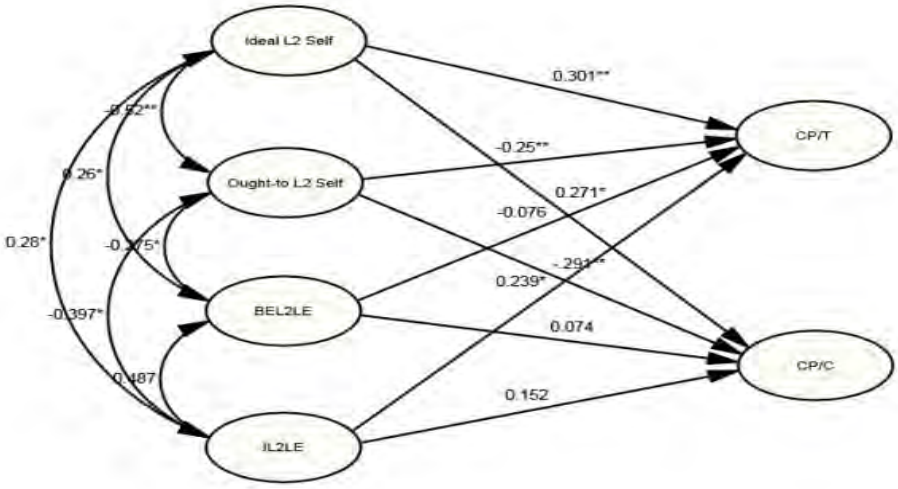


Figure 4.5. The Ideal L2 Self, Ought-to L2 Self, BEL2LE, and IL2LE as Predictors of CP/T and CP/C

Note: BEL2LE = behavioral engagement L2 learning experience; IL2LE = interactional L2 learning experience; * indicates P < 0.05; ** indicates P < 0.01; *** indicates P < 0.001

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Table 4.5

Multiple Regression with L2MSS as Predictors of CP/T and CP/C

Predictors	CP/T				CP/C			
			95% CI				95% CI	
	B	***β***	Lower	Upper	***B***	***β***	Lower	Upper
Ideal L2 self	0.04	0.301**	0.009	0.072	0.033	0.271*	0.004	0.061
Ought-to L2 self	-0.028	-0.25**	-0.053	-0.003	-0.03	-0.291**	-0.052	-0.007
BEL2LE	-0.01	-0.076	-0.038	0.018	0.009	0.074*	-0.016	-0.006
IL2LE	0.032	0.239*	0.003	0.06	0.018	0.152	-0.007	0.044
Language Level	-0.021	-0.181	-0.044	0.002	-0.01	-0.125	-0.034	0.008
R^2/F	.320/7.915***				.336/8.520***			

Note: BEL2LE = behavioral engagement L2 learning experience; IL2LE = interactional L2 learning experience; * indicates P < 0.05; ** indicates P < 0.01; *** indicates P < 0.001

The ideal L2 self has a positive and significant impact on CP/T, with a path coefficient of 0.301. This indicates that Chinese EFL learners with a strong ideal L2 self are more likely to use more coordinate phrases per T-unit in their EFL writing. Also, the path coefficient from ideal L2 self to CP/C is 0.271, suggesting a positive and statistically significant influence on the use of coordinate phrases per clause.

The ought-to L2 self shows a negative relationship with CP/T, with a path coefficient of -0.25. This implies that students with a stronger sense of obligation or external expectations are more likely to use fewer coordinate phrases per T-unit, and the relationship between ought-to L2 self and CP/C is negative, with a path coefficient of -.291, indicating that a stronger ought-to self might reduce the use of coordinate phrases per clause.

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Behavioral engagement L2 learning experience has a positive impact on CP/C, with a significant path coefficient of 0.074. This suggests that students who are behaviorally engaged in their L2 learning are more likely to use coordinate phrases per clause. Also, the path coefficient from interactional L2 learning experience to CP/T is 0.239, showing a positive relationship, indicating that interactional L2 learning experience also contributes to the use of coordinate phrases per T-unit in EFL writing.

In conclusion, the ideal L2 self and two components of L2 learning experience are the significant positive predictors of syntactic complexity, particularly in terms of CP/T and CP/C. The ought-to L2 self shows the negative predictive power on CP/T

and CP/C. Thus, fostering the ideal L2 self and L2 learning experience in EFL writing can lead to greater coordination dimensions of syntactic complexity in EFL writing.

It is important to note that the motivational variables in this study were not identified as significant predictors of the ratios of Clauses to T-units (C/T) and complex T-units to T-units (CT/T). This is because these motivational variables do not fully and significantly account for the variance in C/T and CT/T, as shown in Table 4.6. These findings suggest that the motivational variables examined in the current study are not sensitive to variations in subordination constructions in EFL writing.

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Table 4.6
Multiple Regression with L2MSS as Predictors of C/T and CT/T

Predictors	C/T				CT/T			
			95% CI				95% CI	
	B	***β***	Lower	Upper	***B***	***β***	Lower	Upper
Ideal L2 self	0.006	0.01	-0.151	0.162	0.017	0.084	-0.038	0.072
Ought-to L2 self	0.098	0.208	-0.024	0.221	0.035	0.208	-0.009	0.078
BEL2LE	-0.053	-0.093	-0.192	0.085	0.016	0.079	-0.033	0.064
IL2LE	0.069	0.123	-0.072	0.21	0.027	0.136	-0.023	0.076
Language Level	0.103	0.212	-0.011	0.217	0.028	0.166	-0.012	0.068
R^2/F	.026/1.472				.083/1.513			

Note: BEL2LE = behavioral engagement L2 learning experience; IL2LE = interactional L2 learning experience; * indicates P < 0.05; ** indicates P < 0.01; *** indicates P < 0.001

4.2.5 RQ4: Writing Enjoyment and Writing Anxiety as Predictors of Syntactic Complexity

Based on the significant correlations between writing enjoyment, writing anxiety, and syntactic complexity dimensions, regression analysis has been further conducted to examine the writing enjoyment and writing anxiety as predictors of syntactic complexity dimensions respectively. It has been found that foreign language writing emotions can significantly predict syntactic complexity dimensions, when language proficiency level has been controlled in respective models. The following demonstrates the specific findings about the predictive power of writing enjoyment and writing anxiety on syntactic complexity respectively.

H4a: Writing enjoyment can significantly predict syntactic complexity

With respect to the predictive role of writing enjoyment on syntactic complexity measures, Tables 4.7-4.9 present the relevant data. Specifically, writing enjoyment positively predicts Mean Length of Sentence (MLS) and Mean Length of Clause (MLC); however, the path coefficients are 0.136 and 0.1, respectively, and not statistically significant (Table 4.7), indicating that Chinese EFL learners with higher enjoyment in writing are not necessarily producing longer sentences or clauses. In contrast, writing enjoyment serves as a significant positive predictor of Coordinate Phrases per T-unit (CP/T) and Coordinate Phrases per Clause (CP/C), with path coefficients of 0.503 and 0.561 (Table 4.8), suggesting that learners who experience higher enjoyment in writing tend to produce more coordinated phrases, contributing to greater syntactic complexity in their EFL writing. However, according to Table

4.9, writing enjoyment cannot significantly predict the subordination dimensions of syntactic complexity, namely Clauses per T-unit (C/T) and Clauses per T-unit including embedded clauses (CT/T), indicating that higher writing enjoyment is not associated with greater use of subordination in EFL writing.

H4b: Writing anxiety can significantly predict syntactic complexity

Table 4.7 shows that writing enjoyment, writing anxiety, and language proficiency level together explain 41.7% of the variance in Mean Length of Clause (MLC) and 21.3% of the variance in Mean Length of Sentence (MLS). A multiple regression analysis reveals that avoidance anxiety is a significant negative predictor of both MLC and MLS, indicating that Chinese EFL learners with higher levels of avoidance behavior anxiety tend to produce shorter clauses and sentences in their writing.

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Table 4.7

Multiple Regression with Foreign Language Writing Emotions as Predictors of MLC and MLS

Predictors	MLC				MLS			
			95% CI				95% CI	
	B	**β**	Lower	Upper	***B***	**β**	Lower	Upper
Writing enjoyment	0.165	0.1	-0.21	0.536	0.603	0.136	-0.552	1.758
Somatic anxiety	0.099	0.074	-0.18	0.376	0.554	0.154	-0.31	1.418
Avoidance anxiety	-0.675	-0.396**	-1.02	-0.33	-1.73	-0.378***	-2.805	-0.65
Cognitive anxiety	-0.226	-0.162	-0.56	0.107	0.036	0.01	-1	1.073
Language Level	0.432	0.314***	0.201	0.663	0.609	0.165	-0.111	1.328
R^2/F	.417/12.035***				.213/4.551***			

Note: * indicates P < 0.05; ** indicates P < 0.01; *** indicates P < 0.001

As to the somatic anxiety as a predictor of MLS and MLC respectively, SA has two positive but non-significant path coefficients of 0.154 and 0.074 for predicting MLS and MLC, suggesting a weak and non-significant relationship between somatic anxiety and the length of the sentence or clause.

For the link between cognitive anxiety, MLS, and MLC, cognitive anxiety does not significantly predict either MLS or MLC, with path coefficients of -0.01 and -0.162 respectively, indicating non-significant relationships.

Table 4.8
Multiple Regression with Foreign Language Writing Emotions as Predictors of CP/T and CP/C

Predictors	CP/T				CP/C			
			95% CI				95% CI	
	B	***β***	Lower	Upper	***B***	***β***	Lower	Upper
Writing enjoyment	0.069	0.503***	0.035	0.103	0.07	0.561***	0.042	0.097
Somatic anxiety	0.01	0.093	-0.02	0.036	-0.01	-0.061	-0.027	0.015
Avoidance anxiety	-0.017	-0.122	-0.05	0.015	-0.03	-0.247**	-0.058	-0.01
Cognitive anxiety	0.001	0.009	-0.03	0.032	0.018	0.17	-0.007	0.043
Language Level	-0.012	-0.102	-0.03	0.01	-0.01	-0.051	-0.023	0.012
R^2/F	.279/6.500***				.418/12.075***			

Note: * indicates P < 0.05; ** indicates P < 0.01; *** indicates P < 0.001

Table 4.8 presents the relationship between avoidance behavior anxiety, CP/T, and CP/C, revealing two negative path coefficients of -0.122 and -0.247, respectively, for predicting CP/T and CP/C. Notably, the negative path from avoidance behavior anxiety to CP/C is statistically significant, indicating that higher levels of avoidance behavior anxiety may be linked to a reduced production of coordination phrase in

EFL writing, especially CP/C production. Additionally, we have not found both somatic anxiety and cognitive anxiety as significant predictors of production of coordination phrase in EFL writing, with the data demonstrated in Table 4.8.

Concerning about the link between writing enjoyment, writing anxiety, and subordination dimensions of syntactic complexity, the model can significantly explain 17.7% variance of Clauses per T-unit (C/T), but 8.4% variance of Complex T-units to total T-units (CT/T) insignificantly. Specifically, Table 4.9 demonstrates that cognitive anxiety shows its positive predictive power on C/T, with one significant path coefficient of 0.298, indicating that Chinese EFL learners with higher cognitive anxiety in writing is associated with more production of subordination dimension of syntactic complexity in EFL writing.

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Table 4.9

Multiple Regression with Foreign Language Writing Emotions as Predictors of C/T and CT/T

Predictors	C/T				CT/T			
			95% CI				95% CI	
	B	***β***	Lower	Upper	***B***	***β***	Lower	Upper
Writing enjoyment	-0.002	-0.003	-0.16	0.153	0.017	0.082	-0.041	0.074
Somatic anxiety	-0.008	-0.018	-0.12	0.107	0.016	0.097	-0.027	0.059
Avoidance anxiety	0.081	0.136	-0.06	0.225	-0.01	-0.057	-0.065	0.041
Cognitive anxiety	0.146	0.298*	0.007	0.284	0.035	0.207	-0.016	0.087
Language Level	0.114	0.235*	0.018	0.21	0.036	0.21*	0	0.071
R^2/F	.177/3.611**				.084/1.535			

Note: * indicates P < 0.05; ** indicates P < 0.01; *** indicates P < 0.001

4.2.6 RQ5: The Mediation Effect of Writing Enjoyment and Writing Anxiety between Three Constructs of L2 Motivational Self System and Syntactic Complexity

With respect to the relationships between L2 motivational self system constructs, three components of writing anxiety, writing enjoyment, and syntactic complexity dimensions, the mediation effect of writing anxiety and writing enjoyment between L2 motivational self system constructs and syntactic complexity dimensions have been examined by multiple regression analysis. The following demonstrates the findings of mediation effect of writing anxiety and writing enjoyment from L2 motivational self system constructs to syntactic complexity dimensions.

H5a: Writing anxiety is a mediator between the three constructs of L2MSS and syntactic complexity

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According to the mediation analysis procedure proposed by Baron and Kenny (1986), three essential conditions must be met to establish mediation. First, the independent variable must significantly predict the dependent variable. Second, the independent variable must also significantly predict the mediator. Third, the mediator must significantly predict the dependent variable. Once these three conditions are satisfied, if the significant effect of the mediator on the dependent variable is controlled for, the effect of the independent variable on the dependent variable should either become non-significant or be significantly reduced. This indicates that the mediator explains, either fully or partially, the relationship between the independent and dependent variables.

In the present study, avoidance behavior anxiety emerged as the only variable meeting the criteria to function as a mediator when the Mean Length of Clause (MLC) and Mean Length of Sentence (MLS) were treated as outcome variables. The earlier analyses demonstrated three key findings: (a) both the ideal L2 self and behavioral engagement L2 learning experience significantly predicted MLC and MLS (see Table 4.4); (b) these two variables also significantly predicted avoidance behavior Anxiety (see Table 4.3); and (c) Avoidance behavior anxiety itself was a significant predictor of MLC and MLS (see Table 4.7). In Tables 4.10 and 4.11, step three of the analyses included avoidance behavior anxiety to examine whether its effect mediated the relationships between the ideal L2 self, behavioral engagement L2 learning experience, and MLC/MLS, while accounting for the significant impact of avoidance behavior anxiety on these syntactic complexity measures.

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The results showed that when avoidance behavior anxiety was accounted for, the effect of the ideal L2 self on MLC and MLS lost statistical significance, accompanied by a marked reduction in the standardized Beta value. This outcome suggests that avoidance behavior anxiety fully mediates the negative relationships between the ideal L2 self and MLC, as well as between the ideal L2 self and MLS.

Furthermore, Table 4.10 indicates that while behavioral engagement L2 learning experience remained statistically significant in predicting MLC, there was a notable reduction in its standardized Beta value when the effect of avoidance behavior anxiety was considered. This finding implies that avoidance behavior anxiety

partially mediates the negative relationship between behavioral engagement L2 learning experience and MLC.

Table 4.10

Stepwise Multiple Regression with L2MSS Constructs (Step one), WE (Step two), and Writing Anxiety as predictors, with MLC as the Outcome Variable

Predictors	Step one				Step two				Step three			
			95% CI				95% CI				95% CI	
	B	***β***	Lower	Upper	***B***	***β***	Lower	Upper	***B***	***β***	Lower	Upper
Ideal L2 self	0.48	0.297**	0.145	0.815	0.43	0.27**	0.084	0.783	0.34	0.209	-0.061	0.736
Ought-to L2 self	-0.203	-0.15	-0.465	0.06	-0.15	-0.11	-0.436	0.13	-0.126	-0.093	-0.407	0.155
BEL2LE	0.636	0.389***	0.34	0.932	0.635	0.389***	0.34	0.931	0.508	0.311**	0.194	0.822
IL2LE	-0.056	-0.035	-0.358	0.246	-0.09	-0.053	-0.393	0.223	-0.076	-0.048	-0.382	0.23
Language Level	0.261	0.189*	0.017	0.504	0.264	0.192*	0.02	0.508	0.299	0.217*	0.052	0.546
WE	-	-	-	-	0.163	0.099	-0.18	0.51	0.012	0.007	-0.382	0.406
AA	-	-	-	-	-	-	-	-	-0.369	-0.216*	-0.724	-0.013
CA	-	-	-	-	-	-	-	-	-0.091	-0.066	-0.434	0.251
SA	-	-	-	-	-	-	-	-	0.01	0.008	-0.275	0.296
R^2/F	.483/15.678***				.488/13.194***				.520/9.634***			

Note: BEL2LE = behavioral engagement L2 learning experience; IL2LE = interactional L2 learning experience; WE = writing enjoyment; AA = avoidance behavior anxiety; CA = cognitive anxiety; SA = somatic anxiety; * indicates P < 0.05; ** indicates P < 0.01; *** indicates P < 0.001

Similarly, Table 4.11 reveals that when avoidance behavior anxiety was included in the model, the previously significant effect of behavioral engagement in L2 learning experience on MLS became non-significant, and the standardized Beta value showed a considerable decline. This finding suggests that avoidance behavior anxiety fully mediates the negative relationship between behavioral engagement in L2 learning experience and MLS.

Table 4.11

Stepwise Multiple Regression with L2MSS Constructs (Step one), WE (Step two), and Writing Anxiety as Predictors, with MLS as the Outcome Variable

Predictors	Step one				Step two				Step three			
			95% CI				95% CI				95% CI	
	B	***β***	Lower	Upper	***B***	***β***	Lower	Upper	***B***	***β***	Lower	Upper
Ideal L2 self	1.056	0.244	-0.009	2.121	0.108	0.249	-0.036	2.197	0.986	0.227	-0.301	2.272
Ought-to L2 self	-0.253	-0.07	-0.109	0.582	-0.28	-0.077	-1.183	0.625	-0.237	-0.065	-1.144	0.67
BEL2LE	1.194	0.272*	0.253	2.135	1.194	0.272*	0.248	2.141	0.968	0.221	-0.045	1.982
IL2LE	0.411	0.096	-0.549	1.371	0.426	0.099	-0.559	1.412	0.367	0.086	-0.619	1.354
Language Level	0.215	0.058	-0.559	0.989	0.213	0.058	-0.566	0.992	0.266	0.072	-0.53	1.063
WE	-	-	-	-	-0.09	-0.02	-0.192	1.018	0.021	0.005	-1.249	1.291
AA	-	-	-	-	-	-	-	-	-0.966	-0.211*	-0.724	-0.013
CA	-	-	-	-	-	-	-	-	0.399	0.107	-0.707	1.506
SA	-	-	-	-	-	-	-	-	0.257	0.071	-0.663	1.177
R^2/F	.274/6.327***				.274/5.215***				.306/3.916***			

Note: BEL2LE = behavioral engagement L2 learning experience; IL2LE = interactional L2 learning experience; WE = writing enjoyment; AA = avoidance behavior anxiety; CA = cognitive anxiety; SA = somatic anxiety; * indicates P < 0.05; ** indicates P < 0.01; *** indicates P < 0.001

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Overall, these results highlight the crucial mediating role of avoidance behavior anxiety in the relationship between motivational and engagement variables (i.e., ideal L2 self and behavioral engagement in L2 learning experience) and syntactic complexity measures (MLC and MLS) in EFL writing.

H5b: Writing enjoyment is a mediator between the three constructs of L2MSS and syntactic complexity

Based on the mediation analysis procedure proposed by Baron and Kenny (1986), writing enjoyment is the variable which has met the requirement to be the mediator between L2 motivational self system constructs and syntactic complexity dimensions. The earlier analyses demonstrated three key findings: (a) the ideal L2 self, ought-to

L2 self, and interactional L2 learning experience are the positive predictors of Coordinate Phrases per T-unit (CP/T) and Coordinate Phrases per Clause (CP/C) (see Table 4.5); (b) these three variables also significantly predicted writing enjoyment (see Table 4.3); and (c) writing enjoyment itself was a significant predictor of CP/T and CP/C (see Table 4.8).

Table 4.12 shows that in Step Two, when writing enjoyment is added to the regression model, writing enjoyment become a significant positive predictor of CP/T ($\beta = 0.26$, $p < 0.05$). At the same time, the previously significant effects of ideal L2 self, ought-to L2 self, and interactional L2 learning experience on CP/T become non-significant, indicating that the inclusion of writing enjoyment reduces the impact of these L2 motivational self system constructs on predicting syntactic complexity in EFL writing. Specifically, ideal L2 self and interactional L2 learning experience positively predict CP/T, but their effects are fully mediated by writing enjoyment. Conversely, ought-to L2 self negatively predicts CP/T, and this relationship is also fully mediated by writing enjoyment.

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Table 4.12

Stepwise Multiple Regression with L2MSS Constructs (Step one), WE (Step two), and Writing Anxiety as Predictors, with CP/T as the Outcome Variable

Predictors	Step one				Step two				Step three			
			95% CI				95% CI				95% CI	
	B	***β***	Lower	Upper	***B***	***β***	Lower	Upper	***B***	***β***	Lower	Upper
Ideal L2 self	0.04	0.301**	0.009	0.072	0.03	0.226	-0.02	0.063	0.036	0.268	-0.002	0.074
Ought-to L2 self	-0.028	-0.25**	-0.053	-0.003	-0.02	-0.154	-0.044	0.009	-0.017	-0.149	-0.043	0.01
BEL2LE	-0.01	-0.076	-0.038	0.018	-0.11	-0.078	-0.038	0.017	-0.012	-0.089	-0.042	0.018
IL2LE	0.032	0.239*	0.003	0.06	0.025	0.191	-0.003	0.054	0.024	0.184	-0.619	1.354
Language Level	-0.021	-0.181	-0.044	0.002	-0.02	-0.175	-0.043	0.003	-0.021	-0.185	-0.045	0.002
WE	-	-	-	-	0.036	0.26*	0.003	0.068	0.039	0.288*	0.002	0.077
AA	-	-	-	-	-	-	-	-	-0.008	-0.056	-0.042	0.026
CA	-	-	-	-	-	-	-	-	0.016	0.135	-0.017	0.048
SA	-	-	-	-	-	-	-	-	-0.003	-0.031	-0.031	0.024
R^2/F	.320/7.915***				.358/7.705***				.366/5.135***			

Note: BEL2LE = behavioral engagement L2 learning experience; IL2LE = interactional L2 learning experience; WE = writing enjoyment; AA = avoidance behavior anxiety; CA = cognitive anxiety; SA = somatic anxiety; * indicates P < 0.05; ** indicates P < 0.01; *** indicates P < 0.001

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Based on Table 4.13, in Step Two, when writing enjoyment is introduced into the regression model, it becomes a significant positive predictor of CP/C ($\beta = 0.409$, $p < 0.001$). The addition of writing enjoyment changes the dynamics of the model, as the previously significant predictors—ideal L2 self, ought-to L2 self, and interactional L2 learning experience—no longer have significant effects on CP/C. This indicates that writing enjoyment acts as a mediator between these L2 motivational self system constructs and syntactic complexity in EFL writing. Specifically, ideal L2 self ($\beta = 0.271$, $p < 0.05$) and interactional L2 learning experience ($\beta = 0.152$, $p < 0.10$) initially positively predict CP/C, but their effects become non-significant when writing enjoyment is included, suggesting full mediation. Similarly, ought-to L2 self ($\beta = -0.291$, $p < 0.01$) initially shows a negative effect on CP/C, but this effect is also

fully mediated by writing enjoyment. Thus, writing enjoyment effectively mediates the influence of ideal L2 self, ought-to L2 self, and interactional L2 learning experience on CP/C, underscoring its critical role in predicting syntactic complexity.

Table 4.13

Stepwise Multiple Regression with L2MSS Constructs (Step one), WE (Step two), and Writing Anxiety as Predictors, with CP/C as the Outcome Variable

Predictors	Step one				Step two				Step three			
			95% CI				95% CI				95% CI	
	B	***β***	Lower	Upper	***B***	***β***	Lower	Upper	***B***	***β***	Lower	Upper
Ideal L2 self	0.033	0.271*	0.004	0.061	0.018	0.152	-0.009	0.046	0.033	0.268*	0.001	0.064
Ought-to L2 self	-0.03	-0.291**	-0.052	-0.007	-0.01	-0.139	-0.037	0.008	-0.012	-0.115	-0.034	0.01
BEL2LE	0.009	0.074*	-0.016	-0.006	0.009	0.071	-0.015	0.032	0.002	0.017	-0.023	0.027
IL2LE	0.018	0.152	-0.007	0.044	0.009	0.077	-0.015	0.034	0.009	0.071	-0.016	0.033
Language Level	-0.013	-0.125	-0.034	0.008	-0.01	-0.115	-0.031	0.007	-0.015	-0.145	-0.034	0.004
WE	-	-	-	-	0.051	0.409***	0.023	0.078	0.05	0.402**	0.019	0.081
AA	-	-	-	-	-	-	-	-	-0.021	-0.163	-0.049	0.007
CA	-	-	-	-	-	-	-	-	0.031	0.296*	0.004	0.058
SA	-	-	-	-	-	-	-	-	-0.017	0.171	-0.04	0.005
R^2/F	.320/7.915***				.429/10.411***				.476/8.065***			

Note: BEL2LE = behavioral engagement L2 learning experience; IL2LE = interactional L2 learning experience; WE = writing enjoyment; AA = avoidance behavior anxiety; CA = cognitive anxiety; SA = somatic anxiety; * indicates P < 0.05; ** indicates P < 0.01; *** indicates P < 0.001

Table 4.13 highlights that, in Step Three, the inclusion of the three subcomponents of writing anxiety in the model reveals a noteworthy finding: Cognitive anxiety, which initially had a non-significant effect on CP/C, now shows a positive and significant impact ($\beta = 0.296$, $p < 0.05$). Given the significant influence of the ideal L2 self on cognitive anxiety, it is plausible to suggest that the ideal L2 self might moderate the relationship between cognitive anxiety and CP/C.

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In order to complement the quantitative findings, the qualitative analysis of students' reflective journals further illustrates how motivational variables influence syntactic complexity production through the mediating roles of writing enjoyment and writing anxiety. The reflective journals were originally written in Chinese and are translated into English for presentation here.

Consistent with the content analysis presented in Appendix C, both writing enjoyment and writing anxiety emerged as important mediating factors linking the constructs of the L2 Motivational Self System to syntactic complexity production.

Regarding the Ideal L2 Self, students with strong academic aspirations demonstrated a clear intention to employ complex syntactic structures as a means of approximating their envisioned future selves. For example, Student 3 (intermediate level) stated: "My goal is to become a scholar who can conduct in-depth analysis and express ideas in English. I believe that using complex sentences is an important step toward achieving this goal." (translated from Chinese) Similarly, Student 6 (high level) wrote: "My goal is to become an English writer who can express myself freely in an international academic environment. In writing, I often use complex sentence structures to explore issues in depth and demonstrate my English proficiency." (translated from Chinese)

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These excerpts indicate that learners' future-oriented self-guides motivate deliberate attempts to employ subordinate clauses, participial constructions, and embedded structures in order to project academic competence.

However, qualitative evidence also reveals that external pressures associated with the Ought-to L2 Self often trigger writing anxiety, which may constrain syntactic experimentation. For instance, Student 1 (low level) reported: "Every time I try to use subordinate or complex sentences, I worry about making mistakes… External pressure, such as expectations from teachers and parents, makes me feel nervous and uneasy in writing." (translated from Chinese)

Student 2 similarly described exam-related anxiety: "The pressure of having to pass English writing exams often makes me very anxious. I always worry that my grammar is inaccurate and that my sentence structures are not complex enough." (translated from Chinese)

Such anxiety sometimes led to avoidance behaviors that limited syntactic complexity. As Student 1 explicitly admitted: "Because I am afraid of making mistakes, I tend to use simple sentences to avoid errors." (translated from Chinese)

This avoidance-oriented anxiety acts as a psychological barrier to syntactic complexity production.

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Nevertheless, the journals also demonstrate that classroom engagement and teacher feedback can gradually transform anxiety into writing enjoyment, thereby facilitating more confident use of complex structures. Student 5 (high level) expressed clear enjoyment: “I enjoy using complex sentence structures in my essays, especially in argumentative writing, because they allow me to show logical depth and sophistication.” (translated from Chinese)

Likewise, Student 4 noted that collaborative revision activities enhanced confidence: “When we worked in groups to transform simple sentences into complex ones, I learned how to integrate ideas into logically coherent complex sentences, which increased my confidence in trying similar structures in my own writing.” (translated from Chinese)

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These accounts suggest that positive classroom experiences and active engagement may alleviate anxiety and promote writing enjoyment, thereby enabling learners to experiment more confidently with syntactic complexity.

Thus, writing enjoyment fosters a more positive engagement with complex syntax, while writing anxiety hinders it by creating a fear of failure. In the context of the L2 motivational self system, students with a well-defined ideal L2 self and positive interactional and behavioral engagement in Learning experience eventually find ways to overcome anxiety through classroom interactions, feedback, and personal goals, leading to improved syntactic complexity. Therefore, both writing enjoyment

and writing anxiety act as mediators, influencing how motivation impacts students' use of syntactic complexity in EFL writing.

Overall, the findings from the analyses based on the mediation procedure proposed by Baron and Kenny (1986) demonstrate that writing enjoyment serves as a significant mediator between L2 motivational self system constructs—ideal L2 self, ought-to L2 self, and interactional L2 learning experience—and syntactic complexity dimensions (CP/T and CP/C) in EFL writing. The results highlight three main points: (a) Ideal L2 self, ought-to L2 self, and interactional L2 learning experience initially act as positive predictors of CP/T and CP/C; (b) these three L2 motivational self system constructs also significantly predict writing enjoyment; and (c) Writing enjoyment itself is a significant positive predictor of both CP/T and CP/C. The introduction of writing enjoyment into the regression models in Tables 4.12 and 4.13 reveals that it not only becomes a significant predictor of syntactic complexity but also diminishes the previously significant effects of ideal L2 self, ought-to L2 self, and interactional L2 learning experience on CP/T and CP/C. This indicates that writing enjoyment fully mediates the relationships between these L2 motivational self system constructs and syntactic complexity, whether it is CP/T or CP/C. Therefore, the findings underscore the crucial role of writing enjoyment in understanding how motivational and emotional factors influence syntactic complexity in EFL writing.

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4.3 Discussion of the Findings

The discussion of the findings is structured around the key findings of the present study. It covers several aspects: the correlations among the L2 motivational self system constructs, writing enjoyment, writing anxiety, and syntactic complexity; the predictive power of L2 motivational self system constructs on writing enjoyment and anxiety; the influence of these constructs on syntactic complexity; the impact of writing enjoyment and anxiety on syntactic complexity; and the mediating effects of writing enjoyment and anxiety between L2 motivational self system constructs and syntactic complexity. The key findings are presented in Table 4.14.

Table 4.14
Research Questions, Hypotheses, and Key Findings

Research Questions (RQs)	Hypotheses (H)	Key findings
RQ1: How do the three constructs of the L2MSS (Ideal L2 Self, Ought-to L2 Self, and L2 Learning Experience), writing enjoyment, writing anxiety, and syntactic complexity production correlate among Chinese tertiary-level EFL students?	**H1a:** There is significant correlations between ideal L2 self and L2 learning experience within L2MSS.	ideal L2 self is positively correlated with behavioral engagement L2 learning experience and interactional L2 learning experience
	H1b: There is significant correlation between ideal L2 self and ought-to L2 self within L2MSS.	ideal L2 self is negatively correlated with ought-to L2 self
	H1c: There is significant correlation between ought-to L2 self and L2 learning experience within L2MSS.	ought-to L2 self is negatively correlated with behavioral engagement L2 learning experience and interactional L2 learning experience
	H1d: There are significant	writing enjoyment is

	correlations between writing enjoyment and writing anxiety.	negatively correlated with the three subcomponents of writing anxiety.
	H1e: There are significant correlations between the three L2MSS constructs and writing enjoyment.	ideal L2 self and L2 learning experience are positively correlated with writing enjoyment. However, ought-to L2 self is negatively correlated with writing enjoyment
	H1f: There are significant correlations between the three L2MSS constructs and writing anxiety.	ideal L2 self and L2 learning experience are negatively correlated with writing anxiety. However, ought-to L2 self is positively correlated with writing anxiety
	H1g: There are significant correlations between the three L2MSS constructs and syntactic complexity.	L2 motivational self system constructs are significantly correlated with four syntactic complexity dimensions (MLC, MLS, CP/T and CP/C).
	H1h: There are significant correlations between writing enjoyment, writing anxiety and syntactic complexity.	writing anxiety and writing enjoyment are correlated with six syntactic complexity dimensions (MLC, MLS, CP/T, CP/C, C/T, and CT/T)
RQ2: To what extent do the three L2MSS constructs (Ideal L2 Self, Ought-to L2 Self, and L2 Learning Experience) predict writing enjoyment and writing anxiety among Chinese tertiary-level EFL students?	**H2a:** Ideal L2 self can positively and significantly predict writing enjoyment	Ideal L2 self is the significant positive predictor of writing enjoyment;
	H2b: L2 learning experience can positively and significantly predict writing enjoyment	Interactional L2 learning experience is the significant positive predictor of writing enjoyment;

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	H2c: Ought-to L2 self can negatively and significantly predict writing enjoyment	Ought-to L2 self presents the significant negative predictor of writing enjoyment.
	H2d: Ought-to L2 self can positively and significantly predict writing anxiety	Ought-to L2 self can positively predict avoidance behavior anxiety.
	H2e: Ideal L2 self and L2 learning experience can negatively and significantly predict writing anxiety	Ideal L2 self can negatively predict avoidance behavior anxiety and cognitive anxiety; behavioral engagement L2 learning experience can negatively predict avoidance behavior anxiety;
RQ3: To what extent do the three L2MSS constructs (Ideal L2 Self, Ought-to L2 Self, and L2 Learning Experience) predict syntactic complexity production in EFL writing among Chinese tertiary-level EFL students?		ideal L2 self and two components of L2 learning can positively predict syntactic complexity (CP/T and CP/C); ought-to L2 self can negatively predict CP/T and CP/C.
RQ4: To what extent do writing enjoyment and writing anxiety individually predict syntactic complexity production in EFL writing among Chinese tertiary-level EFL students?	**H4a:** Writing enjoyment can significantly predict syntactic complexity.	writing enjoyment can positively predict syntactic complexity (CP/T and CP/C)
	H4b: Writing anxiety can significantly predict syntactic complexity.	avoidance behavior anxiety can negatively predict syntactic complexity dimensions (MLS, MLC, and CP/C); cognitive anxiety can

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		positively predict C/T.
RQ5: Do writing enjoyment and writing anxiety mediate the relationships between the three L2MSS constructs (Ideal L2 Self, Ought-to L2 Self, and L2 Learning Experience) and syntactic complexity production among Chinese tertiary-level EFL students?	**H5a:** Writing anxiety is a mediator between the three constructs of L2MSS and syntactic complexity.	avoidance behavior anxiety fully mediates the negative relationships between the ideal L2 self and syntactic complexity (MLS and MLC), and partially or fully mediates the negative relationship between behavioral engagement L2 learning experience and MLC/MLS.
	H5b: Writing enjoyment is a mediator between the three constructs of L2MSS and syntactic complexity.	writing enjoyment is a mediator between ideal L2 self and syntactic complexity (CP/C and CP/T), and between international L2 learning experience and syntactic complexity (CP/C and CP/T); writing enjoyment can also negatively fully mediate the relationship between ought-to L2 self and syntactic complexity (CP/C and CP/T).

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4.3.1 The Discussion about Correlations between L2 Motivational Self System Constructs, Writing Enjoyment, Writing Anxiety, and Syntactic Complexity

The study delved into how the constructs of the L2 motivational self system (ideal L2 self, ought-to L2 self, and L2 learning experience) interact with writing enjoyment, various components of writing anxiety (somatic, avoidance, cognitive), and dimensions of syntactic complexity. The following demonstrates the details about the discussions of the relationships between L2 motivational self system constructs, writing enjoyment, writing anxiety, and syntactic complexity.

H1a: There is significant correlation between ideal L2 self and L2 learning experience within L2MSS

The significant positive correlation between the ideal L2 self and L2 learning experience in EFL writing context, particularly with behavioral engagement ($r = .260$, $P < 0.05$) and interactional L2 learning experience ($r = .28$, $P < 0.05$), indicates that Chinese university EFL learners who envision a strong, positive future self as proficient in English writing are more likely to engage actively and positively in their learning activities engagement, and more interactions with teachers and peers in EFL writing.

This aligned with the previous studies (Lamb, 2012; Papi & Abdollahzadeh, 2012; Zhu et al., 2023). For example, Papi and Abdollahzadeh (2012) found that learners who had a vivid and elaborate ideal L2 self experienced higher levels of positive interactions with their teachers in their language learning activities. This interaction is essential because it initiates a positive feedback loop. That is, when learners find joy in their learning experiences, they are more inclined to persist and exert effort, resulting in improved language outcomes. Also, Lamb (2012) also reported the idea that a strong ideal L2 self is associated with higher levels of behavioral engagement, demonstrating that learners with a strong ideal L2 self were more likely to participate actively in class, complete homework assignments, and seek out additional learning opportunities outside of the classroom. Additionally, Zhu et al. (2023) has found the significant predictive power of ideal L2 self on learning engagement directly in the reading context.

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In the current study, L2 learning experience in EFL writing has been conceptualized by Dörnyei's (2019) as the quality of learners' writing engagement influenced by their interactions with teachers, participation in learning activities, and relationships with peers. Thus, L2 learning experience has the characteristics of engagement. The positive relationship between ideal L2 self and L2 learning experience in EFL writing context can also be attested in L2 motivational self system proposed by Dörnyei's (2009), which emphasizes the role of the ideal L2 self in motivating learners to positively interact and engage with the language learning process. The positive relationship between ideal L2 self and L2 learning experience still exists in EFL writing context. According to the L2 motivational self system proposed by Dörnyei's (2009), the concept of the ideal L2 self is a central component of L2 motivational self system, and it represents a future-oriented self-image that learners aspire to achieve, which in turn fuels their interaction and engagement in language writing activities.

Based on the illustrations of the positive relationships between the ideal L2 self and L2 learning experience in the context of EFL writing, the significant positive correlation, particularly with interactional learning experience and behavioral engagement, highlights the crucial role of a strong, positive future self-image in motivating Chinese university EFL learners. This envisioned that ideal L2 self propels learners to interact and engage more deeply and positively with their EFL writing activities, ultimately leading to improved outcomes. By understanding and leveraging the power of the ideal L2 self, educators can design more interacting and

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engaging learning environments that enhance both interactional learning and behavioral engagement. This approach not only fosters a deeper connection with the material but also promotes sustained interest and effort in EFL writing, contributing to the overall success of the learners.

H1b: There is significant correlation between ideal L2 self and ought-to L2 self within L2MSS

The unexpected negative correlation between the ideal L2 self and the ought-to L2 self ($r = -.52$, $P < 0.01$) indicates that students with a stronger personal aspiration to learn English writing tend to report lower levels of perceived obligation or external pressures. This could imply that when Chinese EFL learners have a robust intrinsic motivation, the extrinsic pressures or duties become less significant. This finding resonates with previous studies indicating that intrinsic motivation often leads to better learning outcomes compared to extrinsic motivation (Deci & Ryan, 1985).

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The unexpected negative correlation between the ideal L2 self and the ought-to L2 self in second language acquisition has been discussed in several studies. Generally, the ideal L2 self refers to the learner's aspirations and positive future self-image related to the target language, while the ought-to L2 self pertains to the attributes that a learner believes they should possess to meet expectations or avoid negative outcomes imposed by others.

Empirical research has shown varying relationships between these two constructs. In many contexts, a significant positive correlation is observed, indicating that learners who have a strong ideal L2 self also tend to have a strong ought-to L2 self. However, there are contexts where a negative correlation appears, suggesting that when learners are highly driven by their personal aspirations (ideal L2 self), they may feel less pressured by external expectations (ought-to L2 self), and vice versa.

For example, a study by Jang and Lee (2019) found that the influence of the ought-to L2 self on learning motivation can be relatively low or even negative, especially when compared to the ideal L2 self, which generally has a stronger motivational impact on learners' intended efforts and behavior. Similarly, research by Kormos et al. (2011) and Csizér and Lukács (2010) also highlights the complex interplay between these motivational components, with some studies showing that the ideal L2 self has a more substantial effect on learners' motivation than the ought-to L2 self, which can sometimes exert an insignificant or negative influence.

These findings suggest that while both the ideal and ought-to selves are crucial in understanding L2 motivation, their impact can vary significantly depending on the learner's context and the specific pressures they face. The negative correlation might arise in EFL writing situations where external expectations conflict with personal aspirations, leading to their different effects on the Chinese EFL learner.

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H1c: There is significant correlation between ought-to L2 self and L2 learning experience within L2MSS

The negative correlation between the ought-to L2 self and both behavioral engagement ($r = -.275$, $P < 0.01$) and interactional L2 learning experience ($r = -.397$, $P < 0.01$) further highlights the potential drawbacks of extrinsic motivation towards the engagement and interactions in EFL writing. Learners who feel compelled to learn to write in English out of a sense of duty or obligation might engage less behaviorally and even fewer interactions in EFL writing, possibly due to the lack of personal interest or enjoyment. This finding is consistent with the self-determination theory proposed by Ryan and Deci (2000), who posits that external pressures can undermine intrinsic motivation and negatively impact engagement and performance. Additionally, the present finding is consistent with the research by Moskovsky et al. (2016), who has demonstrated that students motivated by the ought-to L2 self often experience higher levels of anxiety, which negatively affects their willingness to engage in communication and writing tasks. This anxiety can stem from a fear of not meeting external expectations, leading to a less positive L2 learning experience and, consequently, poorer performance in writing.

These findings suggest that while external motivations encapsulated in the ought-to L2 self can initiate L2 learning efforts, they might not sustain the kind of deep, intrinsically motivated engagement necessary for excelling in complex language skills such as writing. Enhancing the learning experience by aligning more closely with students' ideal L2 self—where motivation is driven by personal goals and

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enjoyment—might yield better outcomes in EFL writing proficiency.

H1d: There are significant correlations between writing enjoyment and writing anxiety

Writing enjoyment is negatively correlated with all subcomponents of writing anxiety, showing significant relationships with somatic anxiety ($r = -.466$, $P < 0.01$), avoidance behavior anxiety ($r = -.523$, $P < 0.01$), and cognitive anxiety ($r = -.616$, $P < 0.01$). This correlation suggests that higher levels of positive emotional experience in writing are associated with lower levels of anxiety. For instance, when students enjoy writing, they are likely to experience less somatic anxiety, which is characterized by physical symptoms of anxiety. Similarly, increased writing enjoyment correlates with lower levels of avoidance behavior anxiety, indicating that students are less likely to avoid writing tasks. Additionally, a positive writing experience is associated with a reduction in cognitive anxiety, which involves worry and negative thoughts about writing. These findings are consistent with the previous studies (Cheng, 2002; Jin et al., 2021), and they highlighted promoting enjoyable writing activities could be a key strategy in reducing anxiety and improving overall writing performance.

H1e: There are significant correlations between the three L2MSS constructs and writing enjoyment

The positive correlation between ideal L2 self and writing enjoyment ($r = .525$, $P < 0.01$) underscores the importance of aligning learners' future self-images with their

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current learning experiences to enhance enjoyment. Additionally, the positive correlations of both interactional L2 learning experience ($r = .414$, $P < 0.01$) and behavioral engagement L2 learning experience ($r = .270$, $P < 0.05$) with writing enjoyment suggest that active participation investment and interactions learning experience in learning activities are critical for creating a positive and enjoyable writing experience. This aligns with Pekrun's (2006) control-value theory of achievement emotions, which highlights that positive interactional and behavior engagement learning experience, due to its positive relation with the value of writing activities, enhance writing enjoyment.

H1f: There are significant correlations between the three L2MSS constructs and writing enjoyment

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Recent research literature from the past five years provides a comprehensive understanding of the relationship between the ideal L2 self, the ought-to L2 self, L2 learning experience, and writing anxiety, which supports and extends the findings of this study.

Firstly, the negative correlation between the ideal L2 self and writing anxiety has been supported by recent studies. For instance, Teimouri et al. (2019) found that learners with high and clear expectations for their L2 writing abilities tend to exhibit increased confidence, thereby reducing somatic anxiety. This aligns with the current study's conclusion that a strong ideal L2 self enhances confidence and reduces physical manifestations of anxiety.

Conversely, Fathi and Mohammaddokht (2021) highlighted that when learners perceive their ideal L2 self as difficult to achieve, it can lead to increased anxiety levels. This supports the current study's findings that an unattainable ideal L2 self can overwhelm learners, increasing both avoidance behavior anxiety and cognitive anxiety. These findings underscore the importance of setting achievable goals to prevent feelings of frustration and anxiety among learners.

Regarding the ought-to L2 self, recent research has also indicated its positive impact on writing anxiety. Dörnyei and Al-Hoorie (2017) found that excessively high or unrealistic external expectations can increase learners' stress and somatic anxiety. This is consistent with the current study's conclusion that high external expectations linked to the ought-to L2 self can overwhelm learners, raising avoidance and cognitive anxiety.

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However, Teimouri (2017) suggested that some level of external pressure can be beneficial for language learning, as it may motivate learners to push their limits and achieve higher proficiency. This contrasts with the current study and can be explained by considering individual differences in coping mechanisms. For some learners, moderate external pressure acts as a motivator, while for others, it becomes a source of debilitating anxiety. This highlights the need for educators to tailor external expectations based on individual learner profiles to ensure they are motivating rather than overwhelming.

The role of L2 learning experience in mitigating writing anxiety has also been supported by recent studies. Mercer and Dörnyei (2020) demonstrated that higher behavioral engagement L2 learning experience correlates with lower anxiety levels. Active participation and effort in L2 writing can reduce somatic, avoidance, and cognitive anxiety by fostering a sense of competence and achievement. This is in line with the current study's findings, emphasizing the importance of behavioral engagement in reducing writing anxiety.

Similarly, Fredrickson (2016) highlighted the positive effects of interactional L2 learning experience on reducing anxiety. Her broaden-and-build theory of positive emotions posits that positive emotional experiences expand individuals' thought-action repertoires and build personal resources, including resilience to anxiety. The current study's finding that high emotional interactional involvement leads to lower levels of all three types of anxiety aligns with this theory, underscoring the importance of creating interactional learning environments.

H1g: There are significant correlations between the three L2MSS constructs and syntactic complexity

Recent research over the past five years continues to support the findings regarding the relationships between the L2 motivational self system constructs and syntactic complexity dimensions. Studies highlight the positive correlation between the ideal L2 self and various syntactic complexity metrics. For example, Papi and Hiver (2020) found that learners with a strong ideal L2 self demonstrate increased syntactic

complexity, evidenced by metrics such as the Mean Length of Sentence (MLS), Mean Length of Clause (MLC), and Coordinate Phrases per T-unit (CP/T). This aligns with the observed correlations (MLS: r = .403, MLC: r = .548, CP/T: r = .400, $P < 0.01$) in the recent study.

Similarly, the research by Jang and Lee (2019) supports its positive relationships with syntactic complexity, indicating that a higher ideal L2 self contributes to the production of more varied and intricate sentence structures.

Conversely, the negative correlations between the ought-to L2 self and syntactic complexity dimensions, such as MLC (r = -.414, $P < 0.01$) and Coordinate Phrases per Clause (CP/C) (r = -.501, $P < 0.01$), are also consistent with recent studies. Jang and Lee (2019) report that external pressures often lead to simpler constructions due to the associated anxiety and stress, which hampers cognitive processing capabilities. This supports the finding that a higher ought-to L2 self is linked to less complex syntactic constructions.

However, some discrepancies arise in the literature. For instance, a study by Cheng (2021) suggests that the negative impact of the ought-to L2 self on syntactic complexity can be moderated by individual differences in resilience and support systems. Learners with strong support networks and effective coping strategies may not experience the same degree of negative impact, leading to more complex syntactic output despite high ought-to L2 self scores.

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Regarding the positive correlation between engagement and syntactic complexity, recent studies confirm that behavioral engagement significantly contribute to more sophisticated linguistic output. For example, Wang and Zhan (2020) found that students who are actively involved in learning activities (behavioral engagement) and who experience positive emotions towards learning (emotional engagement) produce more complex sentence structures (MLS, MLC, CP/T, and CP/C). This aligns with the current study's findings and emphasizes the importance of fostering an engaging learning environment to enhance linguistic complexity.

H1h: There are significant correlations between writing enjoyment, writing anxiety and syntactic complexity

Several studies have explored the impact of writing emotions on writing performance, particularly focusing on how writing enjoyment and writing anxiety influence syntactic complexity. Mellado Martínez, M. D. (2024) found that writing enjoyment positively correlates with writing quality, especially in terms of grammatical complexity. Their study showed that students who enjoy writing tend to use more complex sentence structures. This finding is consistent with the idea that positive emotions can enhance cognitive engagement and linguistic creativity.

On the other hand, Li et al. (2023) highlighted the detrimental effects of writing anxiety on students' writing performance, particularly regarding syntactic complexity. Cheng's research indicated that higher levels of writing anxiety led students to prefer simpler, shorter sentences, which reduces the overall syntactic complexity of their

writing. This negative impact of anxiety can be explained by its interference with cognitive resources, making it harder for students to construct complex sentences.

4.3.2 The Discussion about Predictive Power of the Constructs of L2 Motivational Self System on Writing Anxiety and Writing Enjoyment

The findings of this study highlight the predictive power of the constructs of the L2 motivational self system on writing anxiety and writing enjoyment within the Chinese EFL writing educational context. By regression analysis, this research provides valuable insights that can be explained and analyzed through the lenses of recent literature and the frameworks of self-determination theory and control-value theory.

H2a: Ideal L2 self can positively and significantly predict writing enjoyment

The positive prediction of writing enjoyment by the ideal L2 self (Beta = 0.291, $P < 0.01$) aligns with recent findings in L2 motivation research, which emphasize the role of a learner's aspirations and goals in enhancing their enjoyment in learning activities. For example, Dörnyei and Chan (2013) found that a strong ideal L2 self is associated with higher levels of intrinsic motivation and greater overall enjoyment in language learning. The ideal L2 self, representing a learner's vision of their future proficiency and success in the target language, can generate intrinsic motivation. According to self-determination theory, intrinsic motivation arises when activities are aligned with one's personal interests and goals, leading to greater enjoyment and satisfaction (Deci & Ryan, 2000). This intrinsic motivation is crucial in developing a positive attitude towards writing, making learners more likely to enjoy the process and outcomes of

their writing activities.

H2b: L2 learning experience can positively and significantly predict writing enjoyment

Interactional L2 learning experience significantly predict writing enjoyment (Beta = 0.183). This finding is supported by the control-value theory, which posits that learners' enjoyment is influenced by their perceptions of control over the learning process and the value they place on the activities (Pekrun, 2006). Positive interactional experiences in the classroom, such as the interactions with teachers in EFL writing process, enhance learners' sense of control and value, thereby increasing their enjoyment (Frenzel et al., 2007). However, the findings reveal that behavioral engagement in L2 learning experiences does not have a significant effect on writing enjoyment. One possible explanation is that interactional L2 learning experience accounts for a larger proportion of variance in writing enjoyment when both variables are included in the model. This suggests a relative difference in predictive contribution rather than a direct suppression effect. This result appears to contradict the findings of Skinner and Pitzer (2012), who identified behavioral engagement as a significant predictor of enjoyment. However, the current study specifically focuses on the role of interactional L2 learning experience in the context of EFL writing. In this context, interactional L2 learning experience, which involves the interactions between teachers and students during writing activities, may have a more substantial impact on writing enjoyment. Moreover, Han and Xu (2020), in a qualitative study, investigated the effect of feedback on writing enjoyment and found that positive

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feedback serves as a strong predictor of enjoyment in EFL writing. These findings suggest that the nature of interactional experiences, including teacher-student dynamics and feedback, plays a critical role in fostering writing enjoyment in the EFL writing classroom.

H2c: Ought-to L2 self can negatively and significantly predict writing enjoyment

The lack of a significant positive prediction of writing enjoyment by the ought-to L2 self (Beta = -0.369) indicates that external pressures and obligations may not contribute to enjoyment. This finding is consistent with self-determination theory, which differentiates between autonomous motivation (driven by personal interest and internal goals) and controlled motivation (driven by external pressures and obligations) (Deci & Ryan, 2000). The ought-to L2 self, reflecting external expectations and obligations, may induce controlled motivation, which can diminish enjoyment and lead to a more stressful and less satisfying learning experience (Papi, 2010).

H2d: Ought-to L2 self can positively and significantly predict writing anxiety

The positive prediction of somatic anxiety (Beta = 0.287, $P < 0.05$) by the ought-to L2 self suggests that external pressures and obligations increase physical anxiety. This can be explained by control-value theory, which links high levels of perceived pressure and low control to increased anxiety (Pekrun, 2006). When learners feel compelled to meet external standards and obligations, they may experience higher

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levels of stress and anxiety, particularly in evaluative contexts like writing (Horwitz, 2001).

H2e: Ideal L2 self and L2 learning experience can negatively and significantly predict writing anxiety

The negative trends observed in the relationship between the ideal L2 self, L2 learning experience, and various forms of writing anxiety suggest that these factors help mitigate anxiety. Learners who have a clear, self-determined vision of their future language use and who engage positively with the learning process are likely to feel more in control and less threatened by writing tasks. This aligns with both self-determination theory and control-value theory, which emphasize the importance of autonomous motivation and positive learning experiences in reducing anxiety and fostering a supportive learning environment (Dörnyei, 2009; Pekrun et al., 2002).

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To sum up, the findings of this study underscore the importance of developing an ideal L2 self and promoting positive L2 learning experiences to enhance writing enjoyment and mitigate anxiety in the EFL writing context. These insights are consistent with the principles of self-determination theory and control-value theory, which highlight the benefits of intrinsic motivation and positive interactional and behavioral engagement in EFL writing. Educators and curriculum designers should focus on strategies that support learners' personal goals and provide enriching, supportive and interactive learning environments to improve both enjoyment and performance in EFL writing.

4.3.3 The Discussion about the Constructs of L2 Motivational Self System as Predictors of Syntactic Complexity

The L2 motivational self system has gained significant attention in research exploring the predictors of syntactic complexity in EFL writing. Our findings align with several studies that emphasize the crucial role of the ideal L2 self in enhancing learners' EFL learning achievement. For instance, studies by Al-Hoorie (2018) and Dörnyei and Ushioda (2020) indicate that learners with a strong vision of their future self as proficient L2 users are better at EFL learning achievement.

Compared with the above studies, the studies by Al-Hoorie (2018) and Dörnyei and Ushioda (2020) indirectly support our finding that the ideal L2 self significantly predicts syntactic complexity in EFL writing. While these studies primarily focus on the ideal L2 self as a predictor of overall EFL learning achievement, their findings can be extrapolated to suggest a link between the ideal L2 self and specific linguistic outcomes, such as syntactic complexity.

Dörnyei and Ushioda (2021) emphasize that learners with a strong vision of their future selves as proficient L2 users exhibit higher levels of motivation and engagement in language learning. This heightened motivation likely translates into more extensive language practice and exposure, which, in turn, can contribute to the development of syntactic complexity in writing, especially for the development of the long sentences and coordination phrases productions. Similarly, Al-Hoorie (2018) highlights the importance of the ideal L2 self in driving sustained effort and

investment in language learning endeavors. This prolonged engagement with the language may foster the acquisition of more sophisticated linguistic structures, leading to enhanced mean length of the sentences and clauses (MLC and MLS), and even the coordination phrases (CP/T and CP/C).

Moreover, while these studies focus on overall language achievement, research on the relationship between syntactic complexity and EFL learning achievement further supports our findings. For instance, studies by Housen and Kuiken (2009) and Norris and Ortega (2009) suggest that syntactic complexity is a robust predictor of language proficiency and academic success in EFL contexts. Therefore, the significant predictive power of the ideal L2 self on measures of syntactic complexity observed in our study aligns with the broader literature linking language complexity to EFL learning achievement.

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Most importantly, our research also provides an insightful understanding of how ideal L2 self influences different aspects of syntactic complexity. While ideal L2 self positively impacts MLC, MLS, CP/T, and CP/C, suggesting its role in creating more mean length of the clauses and sentences, and coordinate phrases, it does not significantly affect Clauses per T-unit (C/T) and Complex T-units per T-unit (CT/T). This finding is consistent with the work of Zalbidea (2024), who found that internally motivated learners tend to demonstrate variability across syntactic complexity dimensions. While that study focused on production patterns rather than

correlations, it supports the view that motivation–complexity relationships can be dimension-specific.

Our study further extends this understanding by showing that ideal L2 self also positively influences the use of coordinate phrases per T-unit and per clause, highlighting its broader impact on syntactic variety.

The findings related to the ought-to L2 self offer a distinct perspective on its role in influencing syntactic complexity. Consistent with the research by Papi and Teimouri (2014), our study indicates that external pressures and obligations associated with the ought-to L2 self do not significantly promote syntactic complexity. In fact, they have a negative impact on the production of syntactic complexity. Papi et al. (2019) further suggest that the ought-to L2 self often triggers anxiety and encourages surface-level learning strategies, which may account for its significant negative effects on measures such as Mean Length of Sentence (MLS), Mean Length of Clause (MLC), Coordinate Phrases per T-unit (CP/T), and Coordinate Phrases per Clause (CP/C) in our study. These findings highlight the limitations of relying on external motivators to enhance language complexity in EFL writing.

The significant impact of behavioral engagement L2 learning experience and interactional L2 learning experience on most syntactic complexity measures in our study echoes findings by Lamb (2017). Lamb's research emphasizes the importance of positive learning experiences in fostering overall motivation. These experiences

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may also have a significant direct impact on the production of complex syntax, suggesting that behavioral engagement and interactions within the L2 learning environment can promote the use of more varied syntactic structures, as well as greater sentence and clause length.

Our findings can be further contextualized within the framework of self-determination theory. It posits that motivation quality, driven by autonomy, competence, and relatedness, is crucial for optimal learning outcomes (Deci & Ryan, 2000). The significant impact of ideal L2 self and L2 learning experience on syntactic complexity aligns with the notion of intrinsic motivation and autonomous regulation in self-determination theory. Learners with a strong ideal L2 self are likely to engage more deeply and autonomously with the learning process, resulting in higher syntactic complexity.

Conversely, the negatively significant effects of ought-to L2 self suggest that motivation driven by external pressures (i.e., controlled regulation) does not foster the same level of engagement or complexity. This is consistent with self-determination theory's emphasis on the superiority of autonomous motivation over controlled motivation for achieving high-level learning outcomes (Ryan & Deci, 2017).

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4.3.4 The Discussion about Writing Enjoyment and Writing Anxiety as Predictors of Syntactic Complexity

H4a: Writing enjoyment can significantly predict syntactic complexity

The findings of this study can be indirectly attested by several recent pieces of research that emphasize the impact of writing enjoyment on writing achievement. For instance, Yao et al. (2024) found that Chinese EFL learners who report higher levels of writing enjoyment tend to be better at writing performance. Similarly, the writing enjoyment as a significant predictor of writing achievement has been confirmed by Tahmouresi and Papi (2021) and Wang and Xu (2023).

Compared to the above studies, our research has additionally identified writing enjoyment as a predictor of syntactic complexity (CP/T and CP/C) in EFL writing. Given that above dimensions of syntactic complexity are the significant predictors of writing quality (Housen & Kuiken, 2009; Lu, 2010; Norris & Ortega, 2009), this finding further elucidates the mediating effect of syntactic complexity in the relationship between writing enjoyment and writing achievement.

Additionally, the finding can still be explained by control-value theory (Pekrun, 2006) as a framework. According to the theory, students' emotions are influenced by their perceived control over writing tasks and the value they assign to these tasks. High writing enjoyment can be seen as a result of high perceived control and intrinsic value placed on writing, which motivates students to engage more deeply with complex syntactic structures.

H4b: Writing anxiety can significantly predict syntactic complexity

When writing enjoyment and three subcomponents of writing anxiety are simultaneously regressed on syntactic complexity dimensions, we have found avoidance behavior anxiety as a significant negative predictor of syntactic complexity (MLC, MLS, and CP/C). These findings are consistent with Rahimi and Zhang (2019), who investigated the effect of three components of writing anxiety on syntactic complexity dimensions and found that avoidance behavior anxiety is the only writing anxiety to negatively predict the syntactic complexity. Compared with their studies, our study simultaneously considered the effect of positive emotions and negative emotions on syntactic complexity. Due to the effect of foreign language enjoyment on foreign language achievement than that of foreign language anxiety (Dewaele, J. M., & Alfawzan, M., 2018), the predictive power of writing anxiety on syntactic complexity has thus been buffered by writing enjoyment. However, the current study highlights both writing enjoyment and writing anxiety may present different roles in syntactic complexity productions. For example, writing enjoyment is very sensitive to the coordinate phrases production such as CP/T and CP/C, while avoidance anxiety is sensitive to mean length of sentences and clauses (MLC and MLS).

Additionally, we have unexpectedly found that the cognitive anxiety as a positive predictor of the subordination constructions of syntactic complexity (C/T). Cognitive anxiety generally involves worries about performance and potential negative outcomes, which could lead to different effects depending on the context and

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individual responses.

In many cases, cognitive anxiety can have a negative impact on language performance due to its association with self-doubt and a fear of making mistakes, leading to a reduction in syntactic complexity. However, it can sometimes be a positive predictor of certain linguistic features, such as Clauses per T-unit (C/T), depending on how it affects a learner's approach to writing.

Papi et al. (2019) pointed out that individuals often experience anxiety related to fulfilling certain responsibilities and obligations, driven by the desire to avoid negative outcomes. This feeling of anxiety can serve as a momentum, prompting them to take steps to eliminate the source of discomfort. For example, students might feel anxious about producing syntactically complex sentences in EFL writing, even if they do not find the task particularly engaging. Nonetheless, this anxiety can encourage them to adopt specific learning behaviors to improve their EFL writing skills. Moreover, Papi and Khajavy (2021) observed that L2 anxiety can act as a motivator for learners who are driven by duties and obligations, pushing them to stay attentive in class and use the L2 when necessary. Tahmouresi and Papi (2021) further identified a positive relationship between L2 anxiety and motivation among students whose motivation stems from their ought-to L2 self, which reflects their sense of obligation. Therefore, cognitive anxiety may spur learners into action, leading them to focus on mastering the construction of syntactically complex sentences in writing. However, it is important to note that this relationship is not always straightforward.

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Cognitive anxiety can also lead to oversimplification and avoidance of complex structures in other contexts. Thus, the positive prediction of C/T by cognitive anxiety could be influenced by various factors, including the learner's level of proficiency, their coping strategies, and the specific demands of the writing task.

A significant contribution of this study is its focus on the differential impacts of writing enjoyment and various types of writing anxiety on syntactic complexity dimensions, rather than overall writing performance. Most previous research has primarily examined how writing emotions influence overall writing scores or performance (Pekrun et al., 2017). By specifically analyzing syntactic complexity, this study provides more insights into how affective factors shape linguistic outcomes in EFL writing.

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Similarly, the finding can still be explained by control-value theory (Pekrun, 2006) as a framework. Writing anxiety, which stems from low perceived control and potentially low task value, negatively and significantly impact syntactic complexity, possibly because anxious students might avoid risk-taking in language use.

4.3.5 The Discussion about the Mediating Effect of L2 Motivational Self System through Writing Enjoyment and Writing Anxiety

The findings of this study, which explore the mediation effects of writing anxiety and writing enjoyment between the constructs of the L2 motivational self system and syntactic complexity in EFL writing, align with and diverge from various strands of recent literature. This discussion will delineate these relationships, drawing on

previous studies, and subsequently integrate the results within the frameworks of self-determination theory and the control-value theory.

H5a: Writing anxiety is a mediator between the three constructs of L2MSS and syntactic complexity

Avoidance behavior anxiety significantly mediating the effect of the ideal L2 self on Mean Length per Clause and Sentence (MLC and MLS) echoes the results from Rahimi and Zhang (2019) and Tahmouresi and Papi (2021), who highlighted the foreign language anxiety as a mediator between ideal L2 self and L2 writing achievement. For example, Tahmouresi and Papi (2021) has found the writing anxiety as a mediated predictor between ideal L2 self and writing achievement. Furthermore, Rahimi and Zhang (2019) emphasized that anxiety, particularly avoidance behavior anxiety, can hinder syntactic complexity by creating a psychological barrier to language production. Above two studies can explain the avoidance behavior anxiety as a mediated variable between ideal L2 self and syntactic complexity. Additionally, the mediation effect of avoidance behavior anxiety from ideal L2 self to syntactic complexity production in Chinese EFL writing context can be explained by self-determination theory and control-value theory.

According to self-determination theory proposed by Deci and Ryan (2000), when learners' motivation is driven by internal motivation (ideal L2 self) in EFL writing context, they may experience lower levels of writing anxiety. While based on control-value theory (Pekrun, 2006), this anxiety could be reduced because their

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sense of control over writing tasks is increased, and the perceived stakes of writing performance are decreased. Consequently, the decreased anxiety positively impacts their writing achievement, as anxiety can impair cognitive processes involved in syntactic complexity production of EFL writing, such as MLC and MLS.

We have also found the avoidance behavior anxiety mediates the relationship between behavioral engagement L2 learning experience and syntactic complexity (MLS). This result can be explained within the framework of Tsang and Dewaele (2023).

The L2 learning experience, as defined by Dörnyei (2019) through the lens of engagement, has been conceptualized into behavioral engagement L2 learning experience and interactional L2 learning experience. Previous research has established the relationship between foreign language enjoyment, engagement, and EFL learning outcomes (Tsang & Dewaele, 2023), highlighting the role of anxiety in EFL learning engagement and pointing out that behavioral engagement in learning experience can alleviate the anxiety level to achieve language learning. The finding in previous study even extends to behavioral engagement, writing anxiety, and syntactic complexity production (MLS). As stated earlier in the current study, behavioral engagement learning experience refers to the active participation in learning activities, such as putting effort into writing tasks, paying attention, and persisting in practicing writing. Higher behavioral engagement usually leads to better learning outcomes because students are more committed to the learning process.

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Additionally, avoidance behavior anxiety is a type of anxiety where learners avoid challenging tasks due to fear of failure or negative feedback. In the context of EFL writing, high avoidance behavior anxiety might lead students to avoid using complex sentence structures, while low avoidance behavior anxiety allows more experimentation and complexity in writing. Mean Length of Sentence (MLS) is a measure of syntactic complexity that indicates the average length of sentences in writing. Higher MLS typically reflects more complex and varied sentence construction. Behavioral engagement positively affects MLS only when it reduces avoidance behavior anxiety, which then facilitates the use of more complex sentence structures. This fully mediated relationship emphasizes the importance of addressing avoidance anxiety in EFL writing instruction. Reducing avoidance behavior anxiety through active engagement strategies can create an environment where students feel more confident to explore syntactically complex sentences, leading to an increase in MLS.

H5b: Writing enjoyment is a mediator between the three constructs of L2MSS and syntactic complexity

The significant mediating role of writing enjoyment aligns well with the studies by Guan et al. (2023) and Tahmouresi and Papi (2021). They found that the ideal L2 self can significantly predict EFL writing achievement through writing enjoyment in a tertiary education context. Similarly, Yao et al. (2024) demonstrated that writing enjoyment mediates the relationship between the ideal L2 self and EFL writing performance even in high school education. Their study indicates that writing

enjoyment fosters a conducive learning environment, enhancing writing achievement.

Most importantly, the findings of the present study are supported by recent research conducted by Wu and Halim (2024). They found that writing enjoyment can directly predict syntactic complexity dimensions in two different writing tasks. Given the direct relationships between the ideal L2 self and writing enjoyment, and between writing enjoyment and syntactic complexity in EFL writing contexts, the current study further extends the existing literature. It explores writing enjoyment as a mediator not only between the ideal L2 self and writing achievement but also between the ideal L2 self and linguistic measures such as CP/T, and CP/C.

Additionally, Wang and Xu (2023) found a positive relationship between L2 learning experience and foreign language enjoyment in the context of EFL learning in China. Building upon their findings, the current study reveals that writing enjoyment mediates the relationship between interactional L2 learning experience and the production of coordinate phrases, such as CP/T and CP/C. Interactions between students and teachers, as well as among peers, play a crucial role in EFL writing. Positive interactions and constructive feedback from both teachers and peers can serve as catalysts for generating enjoyment in EFL writing, which in turn can influence writing achievement (Han & Xu, 2020). This suggests that in the EFL writing process, interactional L2 learning experience is more likely than behavioral engagement experiences to stimulate enjoyment, highlighting the importance of social and interactive elements in promoting writing success.

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Moreover, the current study can also be explained using self-determination theory and control-value theory. Self-determination theory, developed by Deci and Ryan (2000), emphasizes the role of intrinsic and extrinsic motivation in achieving optimal functioning and well-being. Interactional L2 learning experience refers to the interactions between students and teachers, and between peers that learners experience when engaging with foreign language learning. It is related to internal motivation, and self-determination theory posits that internal motivation is crucial for optimal learning and well-being. Consequently, both positive interactional learning experiences can foster foreign language enjoyment even in the context of EFL writing.

Additionally, control-value theory (Pekrun, 2006), which posits that emotions influence learning through their impact on control and value appraisals, complements self-determination theory by explaining how writing enjoyment affects writing performance. Based on these two theories, when Chinese EFL learners have higher positive interactions or behavioral engagement in their EFL writing experience, they develop competence and confidence in EFL writing. This, in turn, nurtures writing enjoyment and extends to more production of syntactic complexity in EFL writing, such as CP/T and CP/C.

The current study has also found the mediation effect of writing enjoyment between ought-to L2 self and syntactic complexity production. That is, ought-to L2 self can negative predict the syntactic complexity (CP/T) fully mediated by writing

enjoyment. The findings of this study appear to be inconsistent with those of Tahmouresi and Papi (2021), who did not find that writing enjoyment negatively mediates the relationship between the ought-to L2 self and writing achievement. One key difference between the two studies is the type of objective measures used. While our study employed syntactic complexity dimensions as indicators of writing performance, Tahmouresi and Papi (2021) used L2 writing scores as their objective measure. Although syntactic complexity dimensions are known predictors of writing achievement, they are not the only ones, and the choice of objective measures can influence the outcomes.

However, our findings can still be understood within the framework provided by Tahmouresi and Papi (2021). Their study found that writing enjoyment negatively mediates the relationship between the ought-to L2 self and L2 motivated behavior. Given the positive relationship between motivated behavior and learning outcomes (Hong, 2018; Moskovsky et al., 2016), it is possible that motivated behavior also influences syntactic complexity in writing. Therefore, the ought-to L2 self may negatively predict writing enjoyment, leading to weaker motivated behavior and, consequently, lower syntactic complexity in EFL writing.

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4.4 Summary of the Chapter

Chapter four is mainly to present the findings of the current study. Five research questions are addressed in this chapter. Research Question One explores the correlations between ideal L2 self, ought-to L2 self, L2 learning experience, writing enjoyment, writing anxiety, and syntactic complexity dimensions among the Chinese EFL learners in EFL writing context. Research Question Two examines how the ideal L2 self, ought-to L2 self, and L2 learning experience serve as predictors of writing enjoyment and writing anxiety. Research Question Three investigates the ideal L2 self, ought-to L2 self, and L2 learning experience as predictors of syntactic complexity. Research Question Four assesses how the writing enjoyment and writing anxiety predict syntactic complexity. Research Question Five analyzes the mediation effect of writing enjoyment and writing anxiety between L2 motivational self system constructs and syntactic complexity among Chinese EFL learners in EFL writing context. The discussions of the present findings are also presented.

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CHAPTER FIVE
CONCLUSION, IMPLICATIONS, LIMITATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

5.1 Introduction

Chapter five provides an overview of the entire study and research findings. It also underscores the contributions of this study to the current body of literature, and the implications for teaching and learning. Additionally, it outlines the limitations of the study and offers recommendations for future research.

5.2 Major Findings and Interpretations

This study explored the relationships among the constructs of the L2 Motivational Self System (ideal L2 self, ought-to L2 self, and L2 learning experience), writing emotions (writing enjoyment and writing anxiety), and syntactic complexity dimensions in Chinese university EFL learners' writing. The findings, based on both quantitative and qualitative data, offer important insights into how motivation and emotion shape syntactic complexity in EFL writing. The major findings and their interpretations are summarized below according to the five research objectives.

Research Objective One is mainly to examine the internal correlations among the constructs of the L2 motivational self system, writing enjoyment, various components of writing anxiety, and dimensions of syntactic complexity.

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It has been found that significant correlations were identified between motivational and emotional variables and syntactic complexity dimensions. Specifically, Ideal L2 self was positively correlated with writing enjoyment, behavioral engagement and interactional L2 learning experiences, as well as with all four key syntactic complexity measures—Mean Length of Sentence (MLS), Mean Length of Clause (MLC), Coordinate Phrases per T-unit (CP/T), and per Clause (CP/C). Conversely, Ought-to L2 self was negatively correlated with behavioral engagement L2 learning experience, writing enjoyment, and syntactic complexity, while it was positively correlated with all three dimensions of writing anxiety: somatic, avoidance behavior, and cognitive anxiety.

Furthermore, writing enjoyment was negatively correlated with all types of writing anxiety and positively correlated with MLS, MLC, CP/T, and CP/C. Writing anxiety, especially avoidance behavior and cognitive anxiety, exhibited negative associations with syntactic complexity. However, cognitive anxiety showed a surprising positive correlation with clauses per T-unit (C/T), suggesting that it may, at times, promote more subordinate structures.

Taken together, these findings indicate that learners with a strong Ideal L2 self and positive learning experiences tend to enjoy writing more and experience less anxiety, which in turn leads to greater syntactic complexity. In contrast, those with a strong Ought-to L2 self tend to experience greater pressure and anxiety, resulting in the production of simpler syntactic structures.

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Research Objective Two is to examine predictive power of the constructs of L2 motivational self system on writing anxiety and writing enjoyment in Chinese EFL writing educational context. The key findings are presented as follows.

Regression analyses showed that Ideal L2 self and interactional L2 learning experience positively predicted writing enjoyment, while Ought-to L2 self significantly and negatively predicted it. Moreover, Ought-to L2 self positively predicted both somatic and avoidance behavior anxiety. Ideal L2 self negatively predicted cognitive anxiety, whereas behavioral engagement L2 learning experience negatively predicted avoidance behavior anxiety.

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These results align with Self-Determination Theory, in which intrinsic motivation (Ideal L2 self) fosters enjoyment and reduces anxiety, while extrinsic motivation (Ought-to L2 self) contributes to negative emotional experiences.

Research Objective Three is to assess the predictive power of the constructs of L2 motivational self system on syntactic complexity production of EFL writing in Chinese EFL writing educational context. The key findings are indicated as follows.

The three motivational variables differentially predicted syntactic complexity dimensions. Ideal L2 self significantly predicted Mean Length of Sentence (MLS), Mean Length of Clause (MLC), Coordinate Phrases per T-unit (CP/T), and Coordinate Phrases per Clause (CP/C). Ought-to L2 self negatively predicted CP/T

and CP/C. Behavioral engagement L2 learning experience significantly predicted MLS, MLC, and CP/C. Interactional L2 learning experience significantly predicted CP/T and CP/C, but not MLS or MLC. Additionally, none of the motivational constructs predicted Clauses per T-unit (C/T) or Complex T-units Complex T-units per T-unit (CT/T).

These findings demonstrate that intrinsic motivation and positive learning experience are conducive to the development of longer and more coordinate syntactic structures, whereas external pressure (Ought-to L2 self) may suppress syntactic elaboration.

The Objective Four is to examine the writing enjoyment and different writing anxiety as predictors of syntactic complexity dimensions in EFL writing. The key findings can be summarized as follows.

When syntactic complexity dimensions are regressed on writing enjoyment and writing anxiety, regression analysis reveals that writing enjoyment significantly predicts Coordinate Phrases per T-unit (CP/T) and Coordinate Phrases per Clause (CP/C) with path coefficients of 0.503 and 0.561, respectively, indicating that higher writing enjoyment is associated with more syntactic complexity production in terms of coordination phrase. Also, it was found that writing anxiety positively predicts Mean Length of Sentence (MLS), Mean Length of Clause (MLC), and Clauses per T-unit (C/T). Specifically, avoidance behavior anxiety negatively predicts the MLC, MLS, and CP/C strongly, indicating that the avoidance behavior anxiety is a

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significant factor to impact the production of sentence and clause length, and coordination phrases. For subordination dimensions, cognitive anxiety has been unexpectedly found to be positive predictor of clauses per T-unit (C/T), with the positive path coefficients (Beta = 0.298), suggesting that cognitive anxiety is related with the production of subordination complexity. Additionally, we have not found the somatic anxiety as a predictor of syntactic complexity production.

Based on the findings, it can be concluded that writing enjoyment and different types of writing anxiety have distinct impacts on the syntactic complexity dimensions in EFL writing. writing enjoyment emerges as a significant positive predictor of coordinated phrase complexity (CP/T and CP/C), suggesting that when learners enjoy writing, they tend to produce more syntactically complex structures through coordination. Conversely, writing anxiety influences syntactic complexity in varied ways. Avoidance behavior anxiety is shown to negatively impact both Mean Length of Sentence (MLS), Mean Length of Clause (MLC), and coordination phrase complexity (CP/C), indicating that this type of anxiety hinders the use of longer and more coordinated syntactic structures. In contrast, cognitive anxiety surprisingly serves as a positive predictor of subordination complexity, specifically clauses per T-unit (C/T), implying that some level of cognitive stress might facilitate more complex subordinated constructions. Interestingly, somatic anxiety does not appear to significantly affect any syntactic complexity dimensions, highlighting the differentiated roles of anxiety types in shaping EFL writing complexity. These findings underscore the importance of considering both positive emotions and

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various forms of anxiety when exploring factors that influence syntactic complexity in second language writing, providing the insights for future pedagogical interventions aimed at enhancing writing performance among EFL learners.

The Objective Five is to examine the predictive power of the constructs of L2 motivational self system on syntactic complexity production of EFL writing mediated by writing anxiety and writing enjoyment. Below are the essential findings.

The study investigates the mediation effects of writing anxiety and writing enjoyment between the constructs of the L2 motivational self system and syntactic complexity dimensions in EFL writing. The findings reveal complex relationships where writing enjoyment and different types of writing anxiety significantly mediate these relationships, with specific patterns observed across various syntactic complexity measures.

Firstly, both the ideal L2 self and behavioral engagement L2 learning experience significantly correlates with avoidance behavior anxiety and several syntactic complexity measures, including Mean Length of Sentence (MLS), Mean Length of Clause (MLC).

The mediation analysis reveals that avoidance behavior anxiety serves as a significant and full mediator in the relationship between the ideal L2 self and both Mean Length of Clause (MLC) and Mean Length of Sentence (MLS). Furthermore,

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avoidance behavior anxiety partially mediates the relationship between behavioral engagement L2 learning experience and MLC and MLS. These findings suggest that avoidance behavior anxiety plays a crucial role in shaping how the ideal L2 self and L2 learning engagement impact syntactic complexity in terms of clause and sentence length.

Furthermore, the mediation effects reveal that writing enjoyment significantly and fully mediates the effect of ideal L2 self and interactional L2 learning experience on Coordinated Phrases per T-unit (CP/T). Ought-to L2 self can negatively and fully predict Coordinated Phrases per Clause (CP/C) mediated by writing enjoyment. Additionally, we also found that ideal L2 self can moderate the relationship between cognitive anxiety and Clauses per T-units (C/T).

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In conclusion, the study underscores the crucial role of writing enjoyment and avoidance behavior anxiety in mediating the relationships between L2 motivational constructs and syntactic complexity dimensions in EFL writing. Enhancing writing enjoyment and managing avoidance behavior anxiety emerge as effective strategies for improving syntactic complexity in EFL learners' writing.

To sum up, the present study investigated the relationships between the constructs of the L2 learning experience, ideal L2 self, ought-to L2 self, writing enjoyment, writing anxiety, and syntactic complexity dimensions in an EFL writing context. Our correlational analysis revealed significant connections among these variables.

Specifically, the ideal L2 self and two components of the L2 learning experience are significantly correlated with writing enjoyment, writing anxiety and syntactic complexity. Conversely, the ought-to L2 self is significantly correlated with writing enjoyment, writing anxiety and syntactic complexity dimensions. These findings can be explained through the self-determination theory proposed by Deci and Ryan (2000) and the control-value theory developed by Pekrun (2006).

Additionally, our study identified the constructs of the L2 motivational self system as predictors of writing enjoyment and writing anxiety in the EFL writing context. Multiple regression analysis showed that the ideal L2 self and L2 learning experience significantly predicted writing enjoyment, while the ought-to L2 self significantly predicted writing anxiety. The cause-and-effect relationship between motivations and emotions has been confirmed by previous studies (see Guan et al., 2023; Papi, 2010; Tahmouresi & Papi, 2021; Wang & Xu, 2023; Yao et al., 2024), and can also be explained by the self-determination theory proposed by Deci and Ryan (2000).

Furthermore, our study examined the relationship between the constructs of the L2 motivational self system and syntactic complexity in the EFL writing context, revealing these constructs as predictors of syntactic complexity dimensions. Notably, the ideal L2 self, ought-to L2 self, and L2 learning experience significantly and directly predict syntactic complexity dimensions. This finding is indirectly supported by a study by Zalbidea (2024) and illustrated by the self-determination theory posited by Deci and Ryan (2000).

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Moreover, the study demonstrated that both writing enjoyment and writing anxiety predict syntactic complexity dimensions in the EFL writing context. Multiple regression analysis indicated that writing enjoyment, avoidance behavior anxiety, and cognitive anxiety significantly predict syntactic complexity dimensions. This suggests that both writing enjoyment and writing anxiety has an impact on syntactic complexity in EFL writing. These findings have been discussed in previous studies (Rahimi & Zhang, 2019; Tsang & Dewaele, 2023; Wu & Halim, 2024).

Most importantly, our study finds that the constructs of the L2 motivational self system could predict syntactic complexity production through writing enjoyment and writing anxiety. Specifically, the ideal L2 self, ought-to L2 self and interactional L2 learning experience significantly predict syntactic complexity production (CP/T and CP/C) through writing enjoyment, while the ideal L2 self and behavioral engagement L2 learning experience significantly predict syntactic complexity production (MLC and MLS) through avoidance behavior anxiety. These findings align with previous studies (Guan et al., 2023; Papi, 2010; Tahmouresi & Papi, 2021; Yao et al., 2024) and are further explained by the self-determination theory proposed by Deci and Ryan (2000) and the control-value theory developed by Pekrun (2006).

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5.3 Implications of the Study

This study makes significant contributions to the existing literature on second language (L2) acquisition by extending the scope of previous research, which has primarily focused on the predictive role of motivational constructs on overall

language learning achievement. Our research broadens this perspective by highlighting the specific impact of the L2 motivational self system and related emotions on syntactic complexity, an essential aspect of language proficiency. Previous studies have not adequately addressed how these motivational constructs, particularly the ideal L2 self, the ought-to L2 self, and newly conceptualized L2 learning experience, influence specific linguistic outcomes such as syntactic complexity in writing. By demonstrating that writing enjoyment and writing anxiety serve as mediators in this relationship, our findings enrich the theoretical understanding of the L2 motivational self system and its practical implications. The identified mediation effects underscore the ways in which motivation and emotion interplay to affect language learning outcomes, offering new insights into the complexity of language acquisition processes.

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The findings of this study have several important implications for university-level English writing education. Firstly, educators should recognize the critical role of students' ideal L2 self and their overall L2 learning experience in fostering writing enjoyment, which in turn enhances syntactic complexity in their writing. This suggests that teaching strategies should not only focus on language instruction but also on nurturing students' IS through goal setting and envisioning future L2 use. Creating a positive and engaging learning environment that enhances students' L2 learning experience can also contribute to greater writing enjoyment and improved syntactic complexity.

Secondly, the significant correlation between the ought-to L2 self and writing anxiety indicates that pressure and obligations perceived by students can negatively affect their writing performance. Educators should be mindful of the sources of anxiety and seek to reduce undue pressure, possibly by providing more supportive and less evaluative feedback. Interventions designed to manage and alleviate writing anxiety, such as stress reduction techniques and positive reinforcement, can help mitigate its negative impact on syntactic complexity.

Finally, the study underscores the importance of addressing both motivational and emotional factors in language teaching. By integrating motivational strategies with emotional support, educators can foster a more holistic approach to language education. For instance, incorporating activities that boost writing enjoyment, such as creative writing exercises and peer collaboration, can lead to more complex syntactic production. Recognizing and addressing the emotional aspects of writing can therefore play a crucial role in enhancing students' writing skills and overall language proficiency.

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5.4 Strength of the Study

One of the primary strengths of this study lies in its comprehensive examination of multiple constructs within the L2 motivational self system—namely, the ideal L2 self, the ought-to L2 self, and the L2 learning experience. By exploring these constructs in conjunction with writing enjoyment, writing anxiety, and syntactic complexity, the study provides a holistic understanding of the interplay between motivation, emotion,

and linguistic outcomes in an EFL writing context. This multifaceted approach allows for a deeper insight into the specific mechanisms through which motivational factors influence language learning, thus filling a critical gap in the literature.

The methodological rigor of the study is another notable strength. The use of both correlational and multiple regression analyses enhances the reliability and validity of the findings. Correlational analysis identified significant connections between the constructs, while regression analysis clarified the predictive relationships among them. This dual analytical approach ensures that the study's conclusions are robust and grounded in solid empirical evidence, offering clear and actionable insights into the factors that drive syntactic complexity in EFL writing.

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Another significant strength of the study is its incorporation of mediation analysis to explore the indirect effects of the L2 motivational self system on syntactic complexity through writing enjoyment and writing anxiety. This analysis provides a sophisticated understanding of how emotional factors mediate the relationship between motivation and linguistic outcomes. By identifying the mediating role of writing enjoyment and anxiety, the study highlights the complex pathways through which motivation influences language proficiency, offering a more detailed and layered perspective on language learning dynamics.

The study’s integration of theoretical frameworks such as the self-determination theory by Deci and Ryan (2000) and the control-value theory by Pekrun (2006)

further strengthens its contribution to the field. By grounding the findings in established theoretical models, the study not only validates its results but also advances these theories by applying them to the specific context of EFL writing. This theoretical integration enriches the study's conclusions and enhances their relevance and applicability to broader educational settings.

Finally, the practical implications drawn from the study provide valuable guidance for educators and curriculum designers. By demonstrating how motivational and emotional factors can be leveraged to improve syntactic complexity in writing, the study offers concrete strategies for enhancing EFL writing instruction. These practical recommendations are informed by rigorous empirical analysis and are directly applicable to real-world educational contexts, making the study highly relevant and useful for practitioners in the field of language education.

Overall, the study's comprehensive approach, methodological rigor, theoretical integration, and practical relevance collectively contribute to its strength, making it a valuable addition to the literature on L2 motivation and language learning.

5.5 Limitations of the Study

One limitation of the present study is the sample size and its generalizability. While the study provides valuable insights, the sample may not be large or diverse enough to represent the broader population of EFL learners. This limitation restricts the extent to which the findings can be generalized to other contexts, such as different

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age groups, educational settings, or cultural backgrounds. Future research should aim to include a larger and more diverse sample to enhance the generalizability of the findings.

Also, the study employs a cross-sectional design, which limits the ability to draw causal inferences about the relationships among the L2 motivational self system, writing enjoyment, writing anxiety, and syntactic complexity. While significant correlations and predictive relationships were identified, the cross-sectional nature of the study does not allow for conclusions about the directionality or causality of these relationships. Longitudinal studies are needed to establish causal links and to understand how these constructs interact over time.

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The study specifically focuses on syntactic complexity as the linguistic outcome of interest. While this is an important aspect of writing proficiency, it is only one dimension of language ability. Other aspects, such as lexical diversity, coherence, and overall writing quality, were not examined. Future studies should consider exploring a broader range of linguistic outcomes to provide a more comprehensive understanding of the impact of motivational and emotional factors on language proficiency.

5.6 Recommendations for Further Study

Future research should aim to include more diverse and larger samples to enhance the generalizability of the findings. By including participants from various cultural, educational, and linguistic backgrounds, researchers can better understand how these constructs operate across different contexts and populations. This would also help identify any potential cultural or contextual factors that may influence the relationships under study.

Incorporating objective measures of writing performance and motivational constructs in future research would provide a more accurate and comprehensive assessment of the relationships among these variables. Performance-based assessments, observational data, and other objective indicators can complement self-reported data and help validate the findings.

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Expanding the scope of linguistic outcomes to include other dimensions of writing proficiency, such as lexical diversity, coherence, and overall writing quality, would provide a more holistic view of how motivational and emotional factors impact language learning. Future studies should explore these additional outcomes to offer a more detailed and comprehensive understanding of the effects of the L2 motivational self system on language proficiency.

Finally, interventional studies designed to enhance the ideal L2 self, improve the L2 learning experience, and reduce writing anxiety could provide valuable insights into

effective strategies for improving EFL writing proficiency. By experimentally manipulating these variables, researchers can identify specific interventions that are most effective in enhancing enjoyment in EFL writing and syntactic complexity, thereby offering practical recommendations for educators and curriculum designers.

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Appendix A
英语学习者问卷调查
English Writing Learner Questionnaire

我们诚挚的邀请您参加一项关于大学英语学习的调查研究。本调查不是考试，所以答题无对错之分。 我们非常想了解您对问卷中相关内容的看法。本调查结果主要用于研究，对于您的个人信息和调查内容我们将严格保密， 所以请热心支持。非常感谢您的帮助。

We would like to ask you to help us by participating in a survey to better understand the thoughts and beliefs of learners of writing English in China. This questionnaire is not a test so there are no "right" or "wrong" answers. We are interested in your personal opinion. The results of this survey will be used only for research purpose so please give your answers sincerely to ensure the success of this project. Thank you very much.

第一部分：个人情况

Part I: Personal Information

请就以下问题打勾以便我们能够更好的使用您所提供的信息

Please provide the following information by ticking (√) in the box or writing the answers in the space so that we can interpret your following answers

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- ❑男 Male ❑女 Female
- 年龄 (age in years): _____
- 专业 (Major)：❑人文社科专业 humanities and social science ❑ 理工相关专业 natural science and engineering ❑ 医学相关专业 medicine

第二部分

Part II

请根据以下问题选择相应的数字代表你同意或不同意的程度，请不要漏选。

In this part, we would like you to tell us how much you agree or disagree with the following statements by simply circling a number from 1 to 5. Please do not leave out any items.

强烈不同意	不同意	不确定	同意	强烈同意
1	2	3	4	5
Strongly Disagree	Disagree	Neither agree or disagree	Agree	Strongly agree

例如：要是你强烈不同意以下陈述，就如以下方式打勾。

For example, if you strongly disagree with the following statement, then tick the number.

我非常喜欢打篮球　　1　2　3　4　5

I like playing basketball very much.

1	我可以想象自己能够容易地用英语进行写作 I can imagine myself one day that I can write emails easily	1	2	3	4	5
2	我在英语写作课上会认真听讲，并积极参与课堂写作活动 I am actively involved in English writing class	1	2	3	4	5
3	英语写作课上，我努力学习新的知识 I try hard to learn new knowledge in English writing class	1	2	3	4	5
4	我可以想象有一天能够流利并准确的用英文写作 I can imagine one day that I can write in English fluently and accurately	1	2	3	4	5
5	我可以想象和国外朋友或同事用英语写作交流 I can imagine myself write English to communicate with international friends or colleagues	1	2	3	4	5
6	我学习英语写作主要是为了通过四六级 I must learn in English because I want to pass the English Band 4 or Band 6 test	1	2	3	4	5
7	学习英语写作很重要，完全是为了获得一份好工作 Learning to write in English in order to get the graduation diplomatic degree	1	2	3	4	5
8	我学习英语写作是为了能顺利拿到学位证与毕业证 I learn to write in English in order to get the graduation diplomatic degree	1	2	3	4	5
9	我不得不学习英语写作是因为不想挂科 I have to learn to write in English because I don't want to fail the exam	1	2	3	4	5
10	我必须学习英语写作，否则，我在今后的学习教育过程中会遇到很多困难 I have to learn to write in English, otherwise, I will face difficulties in my education	1	2	3	4	5
11	英语写作课上，我注意力很集中 I stay focused in the English writing class	1	2	3	4	5
12	当我学习英语写作的时候能获得老师的帮助 I received help and support from my teachers, while studying English writing	1	2	3	4	5
13	我可以想象有一天我能像英语为母语的人那样能用英语写下自己的想法 I can imagine myself one day that I can write down my thoughts and ideas as English-native speakers	1	2	3	4	5
14	无论将来的职业是什么，我可以想象这些职业会要求用英语写作 I want to do the things that require me to write English in the future	1	2	3	4	5
15	老师对我们的英语写作学习持鼓励态度 The teacher is encouraging in our English writing learning process	1	2	3	4	5
16	因为我和英语写作老师关系很融洽，所以学习很有动力 The positive teacher-student interaction is motivating in learning English writing	1	2	3	4	5
17	在限制时间内写英语作文，我心跳会加速 I feel my heart pounding when I write English compositions under time constraint	1	2	3	4	5
18	每当开始写英语作文时，我大脑会一片空白 My mind often goes blank when I start to work on an English composition	1	2	3	4	5
19	每当写英语作文时，我会感觉到全身僵硬和紧张 I usually feel my whole body rigid and tense when I write English compositions	1	2	3	4	5
20	有时间限制写英语作文时，我会紧张发抖或者冒汗 I tremble or prespire when I write English compositions under time pressure	1	2	3	4	5
21	有时间限制写英语作文时，我的思维变得很混乱 My thoughts become jumbled when I write English compositions under time constraint	1	2	3	4	5
22	有时间限制写英语作文时，我会感到恐慌 I often feel panic when I write English compositions under time constraint	1	2	3	4	5

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Continued

23	当被突然要求写英语作文时，我会感觉不知所措 I freeze up when unexpectedly asked to write English compositions	1	2	3	4	5
24	我通常选择用英语写下我的想法 I often choose to write down my thoughts in English	1	2	3	4	5
25	我对我的英语写作水平感觉满意 I feel satisfied in English writing	1	2	3	4	5
26	老师自身的耳语写作学习经验（如留学）给我留下深刻的印象 Teacher's English writing history (overseas experience) leaves me a deep impression	1	2	3	4	5
27	英语写作时，我脸上会挂着笑容 I have a smile on face in English writing	1	2	3	4	5
28	英语写作时，我写作灵感就出现了 My inspiration keeps emerging in English writing	1	2	3	4	5
29	我通常避免用英语写作 I usually do my best to avoid writing English compositions	1	2	3	4	5
30	我尽最大的能力避开用英语写作的情景 I do my best to avoid situations in which I have to write in English	1	2	3	4	5
31	除非别无选择，否则我是不会用英语写作的 Unless I have no choice, I would not use English to write compositions	1	2	3	4	5
32	如果被要求写英语作文，我会尽力为自己辩解 I would do my best to excuse myself if asked to write English compositions	1	2	3	4	5
33	在课外，我会通常寻找各种机会用英语写作 I usually seek every possible chance to write English compositions outside of class	1	2	3	4	5
34	只要有可能，我都会用英语写作 Whenever possible, I would use English to write compositions	1	2	3	4	5
35	英语写作时，我一点儿也不紧张 While writing in English, I am not nervous at all	1	2	3	4	5
36	如果我事先知道英语作文要评改，写作时我就会感到紧张与不安 While writing English compositions, I feel worried and uneasy if I know they will be evaluated	1	2	3	4	5
37	我觉得英语写作很轻松 I feel relaxed in English writing	1	2	3	4	5
38	我一点儿也不担心我的英语作文比其他同学的英语作文差 I don't worry that my English compositions are a lot worse than others'	1	2	3	4	5
39	如果我的英语作文要评改，我会担心作文成绩不理想 If my English composition is to be evaluated, I would worry about getting a very poor grade	1	2	3	4	5
40	英语写作时，我觉得很快乐 I feel happy in English writing	1	2	3	4	5
41	英语写作时，我觉得很兴奋 I feel excited in English writing	1	2	3	4	5
42	我害怕其他同学看到我的英语作文后嘲笑我 I am afraid that the other students would deride my English composition if they read it	1	2	3	4	5
43	我一点也不担心其他人如何评价我的英语作文 I don't worry at all about what other people would think of my English compositions	1	2	3	4	5
44	我害怕我的作文在班上作为范例来讨论 I am afraid of my English composition being chosen as a sample for discussion in class	1	2	3	4	5
45	我一点也不害怕我的英语作文被评为很差 I am not afraid at all that my English compositions would be rated as very poor	1	2	3	4	5
46	我觉得英语写作很流畅 I think smoothly in English writing	1	2	3	4	5
47	我想继续用英语写作 I want to continue in English writing	1	2	3	4	5
48	英语写作时，我会感觉到成就感 I feel a sense of accomplishment in English writing	1	2	3	4	5

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Appendix B: Original Writing Material

Bed and Breakfast in Italy
You are planning to go on holiday with an Italian friend and want to spend two weeks together in May or June. You have decided to go to a Bed and Breakfast. Your friend has already surfed the internet and made a first selection. He/she picked five places, in Umbria, Rome, Rimini, Campania, and the Veneto region, and is now asking for your advice. The guesthouse or apartment you choose, however, has to satisfy a number of conditions. These criteria are:

presence of a garden;
a quiet location;
located in (or in the vicinity of) the center; the possibility of doing physical exercise;
swimming facilities;
breakfast included.

None of the five addresses your friend sent you meets all of the criteria. A carefully considered choice has to be made, however. Read the five descriptions carefully, then write a letter of at least 150 words in which you explain which Bed and Breakfast you think is most suitable and fits the conditions best. Keep in mind that your text does not have to reflect your personal preferences. Write a letter in which you try to convince your friend that your choice is right, and support it with arguments. You have 40 minutes to write the text. Use of a dictionary is permitted.

1. Casa Lory
Location: Umbria, province of Foligno. Situated 15 km from Foligno.
Description: Quiet location, in rural setting. Bedroom in classical style, large terrace with view, garden. Grand old house, completely restored in 1998. Swimming pool 2 km away. Breakfast: Extensive breakfast included in the price: home-made pies, fresh eggs, a variety of local cheeses, and assorted cold meats.

2. Europe B and B
Location: Lazio, Rome. Situated in the old center of the city.
Description: In the dynamic heart of the Old City of Rome, 10 minutes distance from the Coliseum. Apartment, four rooms, two bathrooms, fitness-room, private garden, garage. Special discounts for theatre and concert tickets. Cable television, safe, air conditioning. Breakfast: No breakfasts served.

3. Bed and Breakfast Hotel Migani Spiaggia
Location: Emilia Romagna, Rimini, at a considerable distance from the city center, but situated directly next to the boulevard and sea front, with a lot of activity, even at night. Description: Attractively priced, young and dynamic, open day and night, free parking, fitness, beach activities, bicycles available for guests, reduced entrance fees and shuttle bus to and from the clubs, special discounts for young guests and groups.

Breakfast: Comprehensive breakfast buffet, American style, between 8.30 and 11.00.

4. Dimora Carlo III di Borbone
Location: Campania, Vietri Sul Mare, province of Salerno, Amalfi coast.
Description: Situated on the boardwalk, in the old city center, apartment in historical block (18th century). Ideally located for those seeking to spend a quiet holiday on the beach or to go hiking in the mountains, but with shops, bars and restaurants conveniently located in close proximity.
Breakfast: Breakfast service during high season, between mid-July and mid-August.

5. Baffelan B and B
Location: Veneto, Valli del Pasubio, province of Vicenza, 800 m from the village, situated at the foot of the Monte Pasubio.
Description: For those looking for peace and mountain aficionados. Fully restored farmhouse with garden in tranquil region which has not been discovered by mass-tourism yet. We have two rooms for our guests on the top floor, with a total of 4/5 beds. The bathroom is shared between both bedrooms. Mountain bikes available upon request, mountain walks, horse-back riding.
Breakfast: Guests can prepare their own breakfast; not included.

Adapted writing material
Task writing

Letter Name: Student number:

This activity is about writing a letter to a friend called David. Read the information below and then write a letter based on the situation and the following instructions.

Situation

1. Your friend David is coming to China to spend vocation for five days and there are two restaurants and three hotels for him to choose.
2. There is only time to go to one restaurant. As a result, you help him to choose one restaurant.
3. There is only one chance to choose one hotel to live in for 5 days, you help him to choose an appropriate hotel out of 3 hotels.
4. Neither of the restaurants is perfect for David and none of the hotels is perfect for him either.

Instructions

1. Look at David's requirements in List A.
2. Read the restaurant information in List B and the hotel information in list C
3. Consider about your friend's preference
4. Using the information in List A, List B and list C write to David by telling him which restaurant and which hotel you have chosen and why you choose it.
5. Start the letter below

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Dear David

Supplementary information list A, list B and list C
List A: Information about David

1. He is arriving on Monday morning and leaving on Friday afternoon.
2. Seafood and beef are his favorite food.
3. He doesn't particularly like sweet food, but enjoys desserts sometimes
4. He likes to drink a glass of wine with dinner.
5. He speaks English only.
6. He prefers to live in the hotel with breakfast.
7. He doesn't like to live in the hotel with noisy environment.
8. He likes to listen to music and has the habit of doing physical exercises in the evening.
9. Transportation should be convenient for him.

List B: Information about restaurants
Restaurant 1:
Opening time: 8am to 8pm Monday to Sunday.
Prices: Main courses cost about 120RMB.
Availability: the restaurant is busy, and reserving a table is necessary.
Critic's review of food quality:
The seafood selection (what is available) is good, and is considered very high quality. The beef is average quality. The pork is average quality. There are no desserts (ice cream etc.) at this restaurant.
Drink: The beer and wine are expensive. There is no BYO (bring your own drinks).
Staff: Some staff speak English, and some staff only speak Chinese.
Service: The service is efficient, and the members of staff are helpful.
Entertainment: There are some entertainments supplied by the restaurant.
Location: In Wuhan's central city.
Parking: Restaurant supplies no parking for customers.

Restaurant 2:
Opening times: 6:00am to 9:00 pm Tuesday to Sunday.
Prices: Main courses cost around 100.
Availability: Quiet during the week, sometimes busy on the weekend. No

booking is necessary.

Critic's review of food quality:

The seafood selection is good and the quality is good. The pork is good quality. The beef is high quality. The desserts are very high quality. The chicken is average quality.

Drink: Beer and wine are very expensive, however, you can BYO.

Staff: Some staff members speak English, and some staff members speak Chinese.

Service: The service is efficient, and the members of staff are helpful.

Entertainment: There is no entertainment supplied by the restaurant.

Location: In Wuhan's central city.

Parking: Restaurant supplies a small amount of parking for customers, though. much less than the restaurant requires

List C: Information about hotels

Hotel 1:

Opening times: it is available for 24 hours from Monday to Sunday.

Prices: cost around 400RMB per day.

Availability: Quiet during the week, sometimes noisy on the weekend. Booking is necessary.

Environment: Environment is good and air is fresh

Entertainment: you can listen to the music in the morning on the weekend.

Staff: Some staff members speak English, and some staff members speak Chinese.

Service: The service is efficient, and the members of staff are helpful.

Location: In Wuhan's central city.

Parking: Restaurant supplies a small amount of parking for customers.

Transportation: it is convenient.

Hotel 2:

Opening times: it is available for 24 hours from Monday to Sunday.

Prices: cost around 350 RMB per day.

Availability: Quiet during the evening, sometimes noisy in the daytime. Booking is necessary.

Environment: Environment is good and air is fresh

Entertainment: you can listen to the music in the morning during the week.

Staff: No staff members can speak English.

Service: The service is efficient, and the members of staff are helpful.

Location: In Wuhan's central city.

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Parking: Restaurant supplies a small amount of parking for customers.
Transportation: it is convenient.

Hotel 3:
Opening times: it is available for 24 hours from Monday to Sunday.
Prices: cost around 450 RMB per day with breakfast.
Availability: Quiet during the evening, sometimes noisy in the daytime. Booking is necessary.
Environment: Environment is good and air is fresh
Entertainment: you can listen to the romantic music in the morning during the week.
Staff: Some staff members can speak English.
Service: The service is efficient, and the members of staff are helpful.
Location: In Wuhan's central city.
Parking: No parking lot are supplied.
Transportation: it is convenient.

Hotel 4:
Opening times: it is available for 24 hours from Monday to Sunday.
Prices: cost around 500 RMB per day, including access to the gym.
Availability: Quiet during the weekend, sometimes noisy in the evenings.
Booking is necessary.
Environment: Environment is excellent, with lush gardens and a pond.
Entertainment: Live jazz music performances are available in the evening on weekends.
Staff: Some staff members speak English.
Service: The service is exceptional, with staff known for their professionalism and. friendliness.
Location: Located in the outskirts of Wuhan, near a scenic lake.
Parking: A large parking lot is available for customers.
Transportation: Shuttle services are available to major attractions in Wuhan.

Appendix C: Thematic Category and Examples

Themes	Categories	Examples
Future Self-Guides in English Writing Development	No clear vision	学生1：不追求复杂句写作，认为人工智能可代替，放弃了学习复杂句的目标。 Student 1: Does not pursue complex sentence writing, believes AI can replace it, and gives up on the goal of learning complex sentences.
	vague vision	学生2：希望能用英语自如表达，但实际写作中感到力不从心，难以达到愿景。 Student 2: Hopes to express fluently in English but feels incapable of achieving this in writing, struggling to meet their vision.
	Pursuit of high-level writing	学生3：目标是成为能够用英语进行深度分析的学者，认为使用复杂句是实现这一目标的重要一步。 Student 3: Aims to become a scholar who can conduct deep analysis in English, seeing complex sentences as a crucial step in achieving this goal.
	High expectations	学生4：对自己写作有高期待，期望能够在写作中自如使用复杂句。 Student 4: Has high expectations for their writing and hopes to use complex sentences fluently.
	Strong pursuit of complex sentences	学生5：渴望写出高水平学术文章，认为使用复杂句能够展示逻辑和思维深度。 Student 5: Desires to write high-level academic articles, believing complex sentences demonstrate logic and depth of thought.
	International academic goals	学生6：目标是成为能够在国际学术环境中自如表达的写作者，擅长使用复杂句来表达多层次观点。 Student 6: Aspires to become a writer who can express themselves in an international academic setting, proficient at using complex sentences.

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Continued

External Expectations Influencing Writing Behavior	Pressure from external expectations	学生1：受到老师和家长的期望，导致写作中不安，避免使用复杂句。 Student 1: Feels anxious in writing due to the expectations of teachers and parents, avoiding complex sentence use.
	Exam pressure	学生2：英语考试压力使其在写作时感到焦虑，担心语法不准确、句子结构不够复杂。 Student 2: Feels stressed during writing due to English exam pressure, worrying about grammar accuracy and sentence structure complexity.
	Academic and task pressure	学生3：学术要求和写作任务多时会感到焦虑，担心无法达成要求。 Student 3: Feels anxiety when faced with academic demands and writing tasks, worrying about meeting the requirements.
	Pressure from parents and teachers	学生4：父母和老师的评价使其在尝试新句型时感到害怕，批评时感到挫败。 Student 4: Experiences fear when trying new sentence patterns due to criticism from parents and teachers, feeling frustrated when criticized.
	Exam pressure leading to anxiety	学生5：期末考试带来压力，担心不能充分展示复杂句型。 Student 5: Feels pressure during final exams, worrying about the inability to showcase complex sentence patterns.
	Pressure from assessments and competitions	学生6：比赛和考核要求带来紧张感，但通过课堂互动来缓解这种压力。 Student 6: Experiences tension from assessments and competitions but alleviates this pressure through classroom interaction.

Continued

	Low participation, occasional sense of achievement	学生1：课堂上不敢主动参与讨论，但通过老师指导后，尝试使用复杂句，并感受到成就感。 Student 1: Hesitant to participate in class discussions but feels a sense of accomplishment after trying complex sentences with teacher guidance.
	Reliant on teacher feedback	学生2：老师的反馈对写作有帮助，但与同学讨论时缺乏自信，难以充分参与课堂活动。 Student 2: Teacher feedback is helpful for writing, but lacks confidence when discussing with classmates, struggling to participate fully in class.
	Imitating teacher sentence patterns	学生3：课堂上的复杂句子写作示范对其帮助很大，模仿老师教授的定语从句并在写作中使用，获得了正面反馈。 Student 3: Finds classroom demonstrations of complex sentences helpful, imitating relative clauses taught by the teacher and receiving positive feedback.
Classroom Participation and Teacher-Student Interaction	Group collaboration enhances abilities	学生4：通过小组合作活动学习如何将简单句改写成复杂句，课堂参与提升了写作信心。 Student 4: Learns to transform simple sentences into complex ones through group activities, boosting confidence in writing.
	Active class discussions and application	学生5：积极参与课堂小组讨论，学会了使用复杂句来增强论证的说服力，课堂互动帮助提升写作水平。 Student 5: Actively participates in group discussions, learning to use complex sentences to enhance argumentation, and classroom interaction helps improve writing.
	Group discussions enhance sentence understanding	学生6：通过小组讨论分析学术文章的句型和结构，学会如何平衡复杂句和文章的流畅性。 Student 6: Learns to balance complex sentences with flow through group discussions analyzing academic articles' sentence patterns and structures.

Continued

Positive Emotional Experiences in Writing and Anxiety and Tension in Writing Tasks	Anxiety and unease	学生1：不安导致不敢尝试复杂句，担心使用从句时犯错，但在老师的指导下体验到了进步的可能性。 Student 1: Anxiety leads to avoidance of complex sentences, fearing mistakes with subordinate clauses, but teacher guidance shows potential progress.
	Complex sentences trigger anxiet	学生2：因考试压力和复杂句型导致写作焦虑，尝试使用复合句失败后在老师指导下逐渐理解句型构建。 Student 2: Experiences writing anxiety due to exam pressure and complex sentence patterns, but teacher guidance gradually helps them understand sentence construction.
	Sense of achievement in classroo practice	学生3：在课堂练习复杂句后获得成就感，虽然有焦虑，但通过反复练习逐步缓解了这种情绪。 Student 3: Feels a sense of achievement after practicing complex sentences in class, initially anxious but gradually eases through repeated practice.
	Criticism brings frustration and anxiety	学生4：老师的批评导致挫败感，但通过小组合作和讨论活动获得成就感，提升了写作信心。 Student 4: Teacher criticism causes frustration, but group collaboration and discussion activities help rebuild confidence in writing.
	Balancing exam pressure with a sense of achievement	学生5：尽管有考试压力，但写作中的复杂句使用让其感到成就感，课堂参与帮助缓解压力。 Student 5: Despite exam pressure, feels a sense of achievement using complex sentences, and classroom participation helps alleviate stress.
	Overcoming tension and gaining confidence	学生6：面对比赛和考核的外部压力，通过课堂讨论活动获得了更多信心，对复杂句使用感到满意。 Student 6: Gains more confidence in using complex sentences through classroom discussions, feeling satisfied under external pressure from competitions and assessments.

Continued

Learners' Use of Complex Syntactic Structures	Avoids complex sentence use	学生1：在写作中避免使用复杂句，担心使用从句时会犯错，但通过老师的指导逐渐感受到进步的可能性。 Student 1: Avoids complex sentences in writing, fearing mistakes with subordinate clauses, but teacher guidance shows potential for improvement.
	Failed attempts at complex sentences	学生2：尝试在写作开头使用复杂句，但失败后通过老师的逐步指导理解了复杂句的构建步骤。 Student 2: Attempts to use complex sentences in the introduction but fails, eventually learning construction steps through teacher guidance.
	Values complex sentence use	学生3：认为复杂句有助于表达复杂思想，在写作中主动尝试使用定语从句和复合句。 Student 3: Believes complex sentences help express complex ideas and actively tries using relative clauses and compound sentences in writing.
	Learns complex sentences through group collaboration	学生4：通过小组讨论和改写活动学习如何使用复杂句，逐步在写作中尝试新的句型。 Student 4: Learns to use complex sentences through group discussions and rewriting activities, gradually trying new patterns in writing.
	Frequent use of complex sentenc	学生5：写作中频繁使用复杂句，认为复杂句能够增强文章的逻辑和说服力。 Student 5: Frequently uses complex sentences in writing, believing that complex structures enhance logic and persuasiveness in the article.
	Multilayered expression with complex sentences	学生6：擅长使用复杂句来表达多层次思想，通过课堂学习，学会将不同的语法结构结合在一起以提高写作质量。 Student 6: Skilled in using complex sentences to express multilayered ideas, learning to combine different grammatical structures to enhance writing through classroom learning.

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Appendix D

反思日志（Reflective Journal)

请撰写一篇约 400 字的简短反思性文章，围绕以下具体主题进行探讨：
Write a short essay of approximately 400 words, addressing the specific topics outlined below:

1. 你在英语写作方面的未来目标
请思考你将自己塑造为一名熟练英语写作者的个人愿景。反思这一愿景如何激励你在写作过程中尝试使用更为复杂的句法结构。请结合具体的写作经历加以说明，阐释你的目标如何影响你在句法层面的选择与运用。
1. Your future goals in English Writing
Consider your personal vision of becoming a skilled English writer. Reflect on how this vision motivates you to experiment with complex syntactic structures in your writing. Include specific examples from your writing experiences that illustrate how your goals influence your syntactic choices.

2. 来自他人的期待
请思考你所面临的外部期待或责任，例如学业要求或社会压力，并分析这些因素如何影响你的写作过程。讨论这些压力如何影响你的写作焦虑水平，以及你在使用复杂句式时的意愿程度。请结合具体实例，对你的反思进行有理有据的说明。
2. Expectations from others
Think about the external expectations or obligations you face, such as academic or social pressures, and how they influence your writing process. Discuss how these pressures affect your levels of writing anxiety and your willingness to use complex sentence structures. Provide concrete examples from your experiences to support your reflections.

3. 你过去与当前的英语写作经历
请回顾你在英语写作学习过程中的过往与当下经历，思考这些经历如何塑造了你在写作中的动机、愉悦感或焦虑感。请描述具体情境，分析这些情境如何影响你的情绪反应以及你在句法层面的决策与表达方式。
3. Your past and present English writing experiences
Examine your past and current experiences with learning to write in English. Consider how these experiences have shaped your motivation, enjoyment, or anxiety when writing. Describe specific situations that have influenced your emotional responses and syntactic decisions in your writing.

4. 你的未来目标、学习经历与情感如何协同作用
请探讨你的未来目标、学习经历与情感体验在英语写作过程中如何相互作用、彼此影响。阐明这些因素如何共同塑造你的句式选择与整体写作风格。请结合实例加以说明，以增强论述的具体性与解释力。
4. How your future goals, experiences, and feelings work together
Discuss how your goals, learning experiences, and feelings influence each other when you write in English. Explain how they affect your sentence choices and writing style. Use examples to make your ideas clear.

5. 使用具体实例
请务必结合你自身真实的写作或学习经历，提供具体且具有情境细节的例证，以支持你的观点与分析。
5. Use specific examples
Support your ideas with real examples from your own writing or learning experiences.

Students' Original Reflective Journals

低水平组学生（2 位）

学生 1（低水平组）：
在学习英语写作的过程中，我并不是希望自己能成为一个能流畅表达自己观点的写作者。随着人工智能的发展， 人工智能能够帮助我进行简单的英文写作，加上我一直觉得我的英语水平不好， 这打消了学习英语的积极性，平时英语写作中，我并没有想象自己有一天能够像那些英语母语者一样，轻松地写出复杂的句子结构。因为我觉得这很难实现。我在课堂上时常会因为不敢尝试使用更复杂的句子结构而感到困惑。每次尝试使用从句或复合句时，我都会担心犯错，老师也经常提醒我，写作需要清晰和准确。外部的压力，比如老师和家长的期望，让我在写作中感到有些紧张和不安。
在课堂上，老师鼓励我们多与同学讨论和分享写作经验，但我发现自己很难主动参与，因为我总是担心自己的表达不够好。这种不安让我在写作时更倾向于使用简单句，以避免出错。记得有一次，我在老师的指导下，尝试将一个简单的句子扩展为一个复合句，当时感觉挺有成就感的。这让我意识到，虽然写作复杂句对我来说有挑战，但只要多练习，并与老师和同学多互动，我也能逐步提高。

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Student 1 (Low Level)

In the process of learning English writing, I do not hope that I can become a writer who can fluently express my own ideas. With the development of artificial intelligence, artificial intelligence can help me complete simple English writing. In addition, I have always felt that my English level is not good, which has reduced my motivation to learn English. In daily English writing, I have not imagined that one day I could, like native English speakers, easily write complex sentence structures, because I feel that this is very difficult to achieve.

In class, I often feel confused because I do not dare to try using more complex sentence structures. Every time I try to use subordinate or complex sentences, I worry about making mistakes. The teacher often reminds me that writing needs to be clear and accurate. External pressure, such as expectations from teachers and parents, makes me feel nervous and uneasy in writing.

In class, the teacher encourages us to discuss and share writing experiences with classmates, but I find it difficult to participate actively because I am always worried that my expression is not good enough. This kind of anxiety makes me more inclined to use simple sentences in writing to avoid making mistakes. Because I am afraid of making mistakes, I tend to use simple sentences to avoid errors. I remember once, under the teacher's guidance, I tried to expand a simple sentence into a complex sentence, and at that time I felt quite a sense of achievement. This made me realize that although writing complex sentences is challenging for me, as long as I practice more and interact more with teachers and classmates, I can gradually improve. **(Translated from Chinese)**

学生 2（低水平组）：
我一直希望自己能够成为一个能够用英语自如表达思想的学生，但在实际的写作中，我经常感到力不从心。外部的压力，比如需要通过英语写作考试，往往会让我在写作中感到非常焦虑。我总是担心自己的语法不够准确，句子结构不够复杂。记得在课堂上，老师要求我们写一篇关于“如何应对压力”的文章，我试图在开头使用一个复杂的复合句来引入主题，但结果弄得很复杂，老师在课堂上和我单独讨论了这个句子，并建议我一步一步地构建句子。
在课堂上，我感觉老师的指导和反馈非常重要。每次老师给我讲解如何构建更复杂的句子时，我都会有所收获。但是，我在与同学讨论时，总感觉自己不如他们表达得流畅，这让我有些退缩。我知道，如果我能更主动地参与课堂讨论

和写作练习，或许能更快地提升自己的写作能力。

Student 2 (Low Level)

I have always hoped that I could become a student who can express ideas freely in English, but in actual writing, I often feel powerless. The pressure of having to pass English writing exams often makes me very anxious. I always worry that my grammar is inaccurate and that my sentence structures are not complex enough.

I remember in class, the teacher asked us to write an essay about "how to cope with pressure." I tried to use a complex compound sentence at the beginning to introduce the topic, but it became very complicated. The teacher discussed this sentence with me individually in class and suggested that I build the sentence step by step.

In class, I feel that the teacher's guidance and feedback are very important. Every time the teacher explains to me how to construct more complex sentences, I gain something. However, when discussing with classmates, I always feel that I am not as fluent in expression as they are, which makes me somewhat withdraw. I know that if I could participate more actively in classroom discussions and writing practice, I might improve my writing ability more quickly. **(Translated from Chinese)**

中水平组学生（2 位）
学生 3（中水平组）：
我的目标是成为一个能够用英语进行深度分析和表达的学者。我认为，使用复杂句子是实现这一目标的重要一步。因此，我在写作时会努力尝试使用不同的从句和复合句结构。不过，在写作过程中，外部压力，如学术和考试要求，有时会让我感到焦虑，担心不能达成要求，尤其是写作任务多时。
课堂参与和与老师的互动对我提升写作能力帮助很大。每当老师在课堂上进行复杂句子的写作示范，我都会认真观察，并在自己的写作中尝试模仿。例如，老师教我们如何使用定语从句来扩展句子时，我在一次关于“社会公平”的作文中尝试了这种方法，并得到了不错的反馈。通过课堂上的学习和练习，我逐渐认识到，使用复杂句子不仅仅是为了展示语言能力，更是为了表达更复杂的思想。

Student 3 (Intermediate Level)

My goal is to become a scholar who can conduct in-depth analysis and express ideas in English. I believe that using complex sentences is an important step toward achieving this goal.

Therefore, when writing, I try to use different types of clauses and compound sentence structures. However, during the writing process, external pressure, such as academic and examination requirements, sometimes makes me feel anxious, worrying that I cannot meet the requirements, especially when there are many writing tasks.

Class participation and interaction with the teacher help me a lot in improving my writing ability. Whenever the teacher demonstrates how to write complex sentences in class, I observe carefully and try to imitate them in my own writing. For example, when the teacher taught us how to use attributive clauses to expand sentences, I tried this method in an essay about "social justice" and received good feedback. Through classroom learning and practice, I gradually realized that using complex sentences is not only to show language ability, but also to express more complex ideas. **(Translated from Chinese)**

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学生 4（中水平组）：
我对自己的英语写作有很高的期待，希望自己能够在文章中自如地使用复杂句式来表达观点。但在实际写作中，外部的期望，比如老师和父母的评价压力，有时会让我在尝试新句型时感到害怕。尤其是在课堂上老师批评我的句子不够连贯时，我会感到挫败。
不过，课堂参与对我提升写作信心起到了重要作用。我发现，当我积极参与课堂讨论，与老师和同学一起分析范文中的复杂句型时，我的理解和应用能力都会有所提升。记得有一次，老师在课堂上要求我们小组合作修改一篇写作样本，我们每个同学都尝试改写其中的简单句为复杂句。这个活动让我学会了如何将简单句子整合成一个逻辑清晰的复杂句，并让我更有信心在自己的写作中尝试类似的句型。

Student 4 (Intermediate Level)

I have high expectations for my English writing and hope that I can freely use complex sentence patterns in my essays to express my viewpoints. However, in actual writing, external expectations, such as evaluation pressure from teachers and parents, sometimes make me feel afraid when trying new sentence patterns.

Especially when the teacher criticizes my sentences for lacking coherence in class, I feel frustrated.

However, classroom participation has played an important role in improving my confidence in writing. When we worked in groups to transform simple sentences into complex ones, I learned how to integrate ideas into logically coherent complex sentences, which increased my confidence in trying similar structures in my own writing. **(Translated from Chinese)**

高水平组学生（2 位）

学生 5（高水平组）：
我一直渴望成为一个能够用英语写出高水平学术文章的人。我喜欢在文章中使用复杂的句型来展现逻辑和深度，特别是在议论文中。我认为，复杂句的使用能够更好地展示我的思维深度和写作水平。在课堂上，我非常享受老师对句型结构的分析和讲解，每次老师分享一些学术写作中的句型时，我都会记下来并在自己的写作中尝试应用。
当然，外部的期望也有时会给我带来压力，尤其是在准备期末写作考试时。我会担心自己没法充分展示所学的复杂句型。然而，在课堂上，我会积极参与老师安排的小组讨论和写作练习，通过与同学交流，我学会了如何更有效地使用复杂句子来增强论证的说服力。这些课堂体验帮助我更好地平衡了学习愿景与实际写作中的挑战。

Student 5 (High Level)

I enjoy using complex sentence structures in my essays, especially in argumentative writing, because they allow me to show logical depth and sophistication. I believe that the use of complex sentences can better demonstrate my depth of thinking and writing level. In class, I very much enjoy the teacher's analysis and explanation of sentence structures. Every time the teacher shares some sentence patterns from academic writing, I write them down and try to apply them in my own writing.

Of course, external expectations sometimes bring me pressure, especially when preparing for the final writing examination. However, I actively participate in group discussions and writing practice arranged by the teacher. Through communicating with classmates, I have learned how to use complex sentences more effectively to strengthen the persuasiveness of arguments. **(Translated from Chinese)**

学生 6（高水平组）：

我的目标是成为一个在国际学术环境中也能自如表达的英语写作者。在写作时，我经常使用复杂句型来深入探讨问题，并展示我的英语水平。我喜欢将不同的语法结构结合使用，来表达多层次的观点和逻辑关系。在课堂上，老师的指导和反馈对我非常有帮助。尤其是在学习如何运用分词结构和嵌套从句时，老师提供的例子让我受益匪浅。
虽然我有很高的目标，但有时外部的压力，如比赛和考核的要求，还是会让我感到紧张。为了应对这些压力，我积极参与课堂上的各种讨论和写作练习，通过与老师和同学互动，获得更深的写作见解。例如，在一次小组讨论中，我们分析了一篇学术文章的句型和结构，我学到了如何有效地平衡复杂句与文章的整体流畅性。这样的课堂参与和互动让我在写作时更有策略，也更有信心去尝试新的表达方式。

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Student 6 (High Level)

My goal is to become an English writer who can express myself freely in an international academic environment. In writing, I often use complex sentence structures to explore issues in depth and demonstrate my English proficiency.

I like to combine different grammatical structures to express multi-layered viewpoints and logical relationships. In class, the teacher’s guidance and feedback are very helpful to me, especially when learning how to use participial structures and embedded clauses.

Although external pressures, such as competition and assessment requirements, sometimes make me feel nervous, I actively participate in classroom discussions and writing practice. Through interaction with teachers and classmates, I gain deeper insights into writing. For example, in one group discussion, we analyzed an academic article and learned how to balance complex sentences with overall fluency. **(Translated from Chinese)**

Appendix E: 知情同意书 PARTICIPANTS' CONSENT FORM

本研究旨在探讨第二语言动机自我系统、写作愉悦感与写作焦虑之间的相互关系，以及它们对中国大学生英语写作中句法复杂性的影响。
The purpose of this research is to explore the interplay between the second language motivational self system, writing enjoyment, and writing anxiety, and their impact on syntactic complexity in English as a Foreign Language (EFL) writing among Chinese university students.

o 我已收到并理解了关于本研究的说明。
o I have been given and have understood an explanation of this research.

o 我有机会提出问题，并已获得令我满意的答复。
o I have had an opportunity to ask questions and have them answered to my satisfaction.

o 我理解我所提供的数据不会被用于其他用途，除非是用于撰写会议或期刊论文的基础资料。
o I understand that the data I provide will not be used for any other purposes except perhaps forming the basis of papers written for conferences or journals.

o 本同意书仅适用于本研究目的，任何个人信息在未经我书面同意的情况下不会对外公开。
o This consent is for no other purposes, and the personal information will not be released to others without my written consent.

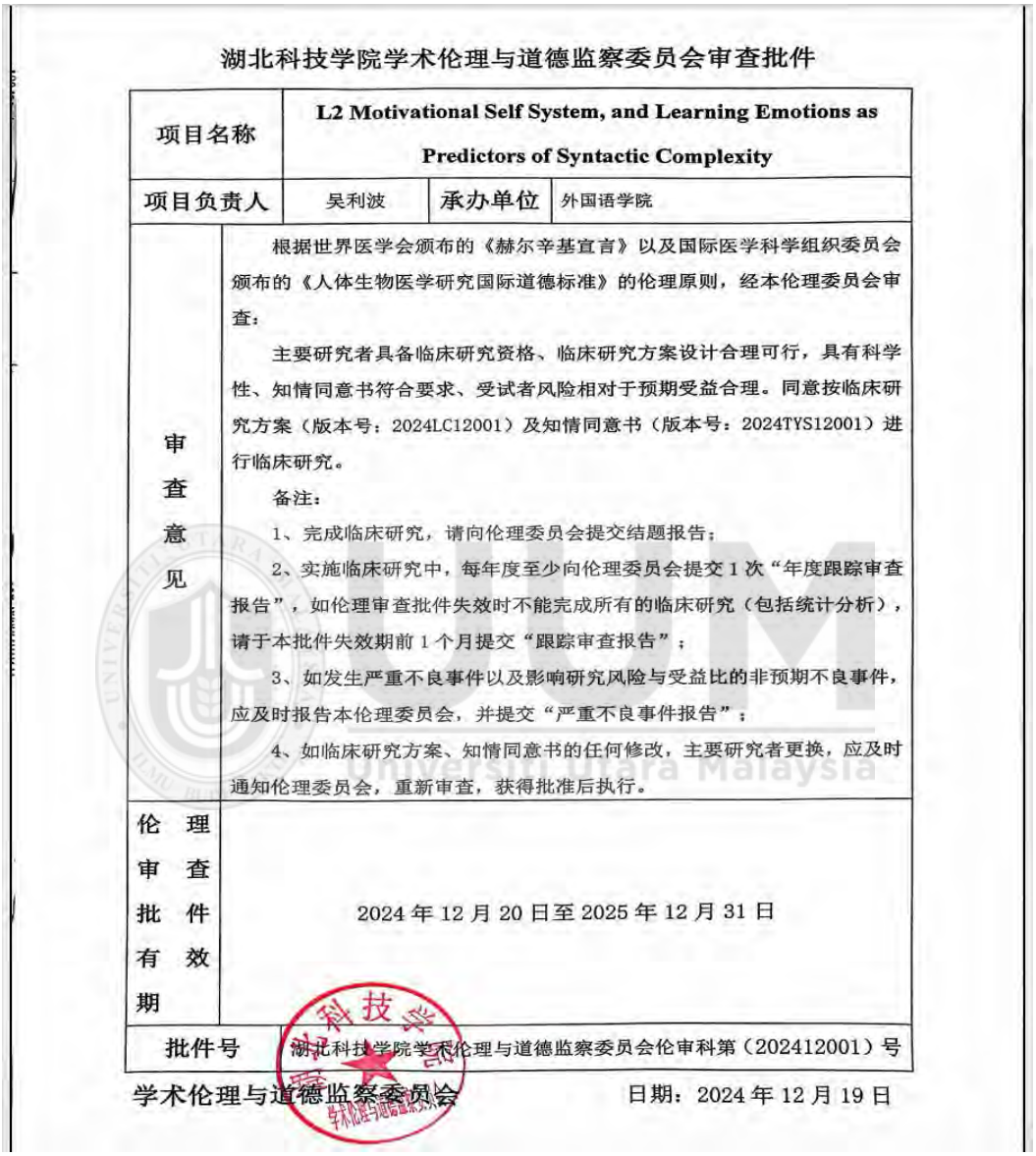
o 我希望在研究结束后收到该研究的结论摘要。
o I would like to receive a summary of the conclusions of this study when it is completed.

o 我同意参与本项研究。
o I agree to take part in this study.

姓名 Name:
签名 Signature:
电子邮箱 Email:

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Appendix F



湖北科技学院学术伦理与道德监察委员会审查批件

项目名称	L2 Motivational Self System, and Learning Emotions as Predictors of Syntactic Complexity		
项目负责人	吴利波	承办单位	外国语学院
审查意见	根据世界医学会颁布的《赫尔辛基宣言》以及国际医学科学组织委员会颁布的《人体生物医学研究国际道德标准》的伦理原则，经本伦理委员会审查： 主要研究者具备临床研究资格、临床研究方案设计合理可行，具有科学性、知情同意书符合要求、受试者风险相对于预期受益合理。同意按临床研究方案（版本号：2024LC12001）及知情同意书（版本号：2024TYS12001）进行临床研究。 备注： 1、完成临床研究，请向伦理委员会提交结题报告； 2、实施临床研究中，每年度至少向伦理委员会提交 1 次“年度跟踪审查报告”，如伦理审查批件失效时不能完成所有的临床研究（包括统计分析），请于本批件失效期前 1 个月提交“跟踪审查报告”； 3、如发生严重不良事件以及影响研究风险与受益比的非预期不良事件，应及时报告本伦理委员会，并提交“严重不良事件报告”； 4、如临床研究方案、知情同意书的任何修改，主要研究者更换，应及时通知伦理委员会，重新审查，获得批准后执行。		
伦理审查批件有效期	2024 年 12 月 20 日至 2025 年 12 月 31 日		
批件号	湖北科技学院学术伦理与道德监察委员会伦审科第（202412001）号		

学术伦理与道德监察委员会　　日期：2024 年 12 月 19 日

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