

Article

# Motivation and Second Foreign Language Proficiency: The Mediating Role of Foreign Language Enjoyment

Huiyu Zhang <sup>1</sup>, Ying Dai <sup>1</sup>, and Yingchong Wang <sup>2,3,\*</sup>

- <sup>1</sup> Department of Linguistics, School of International Studies, Zhejiang University, Hangzhou 310058, China; zhanghuiyu@zju.edu.cn (H.Z.); daiying97@zju.edu.cn (Y.D.)
- <sup>2</sup> School of English and International Studies, Beijing Foreign Studies University, Beijing 100089, China
- <sup>3</sup> Beijing Cultural Exchange Research Center, Beijing Foreign Studies University, Beijing 100089, China
- \* Correspondence: gracenesta@bfsu.edu.cn; Tel.: +86-13146532629

Received: 10 January 2020; Accepted: 8 February 2020; Published: 11 February 2020



**Abstract:** Inadequate research attention has been paid to the learning of a third language. For this reason, this study explores senior English major students' learning of additional foreign languages in seven universities in Shaanxi Province, China. The study examines the relationship between the participants' motivation and language proficiency through a questionnaire, and the collected data are analyzed using hierarchical linear regression analysis. The results identify that the participants' instrumental and integrative motivations positively influence their second foreign language proficiency is mediated by foreign language enjoyment. These findings form the basis of our suggestions for the sustainable learning and teaching of foreign languages in universities.

**Keywords:** second foreign language; multilingualism; motivation; language proficiency; foreign language enjoyment

# 1. Introduction

Globalization has led to a significant increase in demand for high-level foreign language talent, especially multilingual talent [1–3], and institutions of higher education, as key players in language education, are duty-bound to support this [4]. For example, in Chinese universities all English major students are required to learn a second foreign language (Higher Education Steering Committee of the Ministry of Education. National Standard for Teaching Quality of Undergraduate Majors in General Institutions of Higher Education (Part I); Higher Education Press: Beijing, China, 2018) and universities, teachers, and students have devoted much time and attention to these compulsory courses. However, despite its importance, academic attention to third or multiple language learning is rather limited. While many scholars suggest that third language acquisition (TLA) is the same as second language acquisition (SLA) [5–7], some point out that differences do exist between the two, and maintain that TLA deserves more scholarly attention [8–10].

As a consequence, some scholars have tried to employ different theories (e.g., transfer theory) to analyze the influence of L1 and L2 on TLA [11–13]. While learners are always at the center of language acquisition, attention to the effect of individual characteristics on TLA is still inadequate [14–16]. For instance, while previous SLA studies have repeatedly examined and confirmed the influence of motivation on foreign language proficiency [17–19], the relationship between the two has not been examined in TLA contexts, despite the known motivation differences between SLA and TLA. This study tries to fill this gap by examining the effect of motivation on second foreign language proficiency in a TLA context. In addition, learning emotion, which is quite influential in language learning [20,21], has also been largely neglected in TLA research. In particular, while recent studies in



the field of positive psychology have pointed out the importance of foreign language enjoyment (FLE) in language acquisition [22–24], more work is needed to elaborate the role of FLE in foreign language learning. Considering FLE's connection with mental activity, we assume in this paper that it mediates the relationship between motivation and foreign language proficiency, and we try to examine this mediating effect in the TLA context.

Therefore, the present study uses survey data from seven universities in Shaanxi Province, China, to explore the process of second foreign language acquisition, examining and explicating the relationship between motivation and language proficiency as well as the mediating role of FLE on the focal relationship. Theoretically, this paper enriches our understanding of how motivation influences second foreign language proficiency, facilitates further interest in TLA in terms of individual differences, and highlights the importance of positive psychology in learning a second foreign language. Practically, it suggests important implications for the sustainability of second foreign language teaching and learning.

#### 2. Literature Review and Hypothesis Development

# 2.1. Third Language Acquisition and Second Foreign Language Acquisition

The concept of TLA first appeared in the late 1980s, and has gradually gained increasing attention from linguistic scholars [11–13]. Extant literature on TLA mainly covers the influence of L1 and L2 on TLA [12], the differences between SLA and TLA [8,10], and cross-language interactions in TLA [25–27]. It must be noted that such studies usually focus on the TLA of immigrants [26,28], but the TLA of L2 language majors has been underexplored.

In response to Chinese English majors' commitment to second foreign language learning, some Chinese scholars have tried to explore the teaching and learning process from traditional pedagogical or language acquisition perspectives. Most of them focus on the teaching of a certain language (e.g., Russian, French, Spanish, or Japanese), and discuss the syllabus [29,30] and pedagogical skills [31,32]. A few researchers have recognized the importance of learners' individual characteristics, and have discussed the influence of learning motivation [16,33,34] on second foreign language acquisition. Undoubtedly, such studies have enriched our understanding of Chinese English majors' second foreign language acquisition. However, many critical issues remain to be addressed, and the relationship between motivation, FLE, and second foreign language proficiency is one of them. Moreover, empirical studies with reliable data are also lacking. Therefore, the present study hopes to address the focal relationship from an empirical standpoint.

#### 2.2. Motivational Orientations and Second Foreign Language Proficiency

Motivational orientations are among the most frequently discussed topics in SLA literature, and different theoretical frameworks have been developed to profile L2 learners' motivation [1–37]. These frameworks have included the L2 motivational self-system [38], self-efficacy theory [39], self-determination theory [40], and attribution theory [41]. Among these, we believe that Gardner's socio-educational model [42] provides a feasible approach by which to examine the motivation differences between SLA and TLA among the English major students in the current study.

Since its initial formulation Gardner's framework has been widely accepted and used in the literature [43–45]. In this model, instrumental motivation refers to the factor that drives people to achieve practical benefits, and integrative motivation is defined as the willingness to integrate into a particular language community [46]; in communities where the target language is not commonly used, this can be defined as the desire to associate with speakers of the target language out of interest in their language or culture [47]. In China, many English majors will follow careers that require a high level of English proficiency, and thus they rely on English for career development and even daily workplace communication. In contrast, their pragmatic use of a second foreign language is rather limited, and although a second foreign language is a compulsory part of their English degree, many of

these students will choose the specific language out of interest. This contrast in motivation may be captured by the differences between instrumental and integrative motivation.

Previous studies have confirmed that both instrumental and integrative motivations positively influence SLA [18,48,49], but their effect has not been examined in the TLA context. The present study assumes that they work similarly in the acquisition of a second foreign language. For one thing, as maintained in the SLA literature, instrumental motivation positively influences second foreign language proficiency by strengthening a learner's desire to gain recognition, promote their career development, and satisfy particular needs such as going abroad after graduation. In particular, there is an increasing demand for multilingual talents in today's job market [3], so English major students are motivated to enhance their employability by improving their proficiency in a second foreign language. Hence, instrumental motivation tends to promote the acquisition of another language apart from English.

In addition, integrative motivation positively influences second foreign language proficiency by stimulating a learner's interest in the selected language and its associated culture, as well as their demand for related entertainment. Integrative motivation is derived from people's intrinsic preferences or inner passions [46]. In fact, many English major graduates in China do not seek jobs closely related to their second foreign language [50], which means they are driven by integrative motivations rather than instrumental ones. Such integrative drives do play a critical role in the learning process. Students with interest and passion are naturally more committed to second foreign language learning; also, they will seek opportunities to enhance their second foreign language skills in order to improve their cultural experience, entertain themselves, and achieve integrative purposes. Hence, integrative motivation exerts a positive influence on second foreign language proficiency.

Therefore, we present the following hypotheses:

Hypotheses 1a (H1a). Instrumental motivation positively influences second foreign language proficiency.

Hypotheses 1b (H1b). Integrative motivation positively influences second foreign language proficiency.

#### 2.3. The Mediating Role of Foreign Language Enjoyment

Extant SLA literature shows that the relationship between motivation and language proficiency is also influenced by many other individual factors, such as gender [51] and metacognitive awareness [52]. However, the role of emotional factors, such as FLE, in this relationship has not yet been examined. As mentioned above, instrumental and integrative motivations represent a learner's desire to meet their external and internal needs, which is closely related to their emotional state. Instrumental motivation would drive English majors to improve their second foreign language proficiency to gain career advantage, while integrative motivation would drive them to frequently expose themselves to the target language out of interest. With such positive motivations and goals, learners will be more dedicated to their second foreign language learning, aiming to gain greater enjoyment from the process and thus developing more positive emotions. Thus, we may infer that such positive motivations, whether instrumental or integrative, will improve the level of enjoyment in second foreign language learning.

Furthermore, the positive influence of FLE on language proficiency has been confirmed in the SLA literature [22–24]. Enjoyment encourages learners to explore the language, as it positively affects their long-term resilience and hardiness [53]. Compared with negative emotions, such as foreign language classroom anxiety (FLCA), FLE is more likely to be triggered by teachers [23] and has a more significant influence on foreign language performance [22]. Moreover, some scholars have discussed the correlation between motivation and FLE in language acquisition, and pointed out that students' enjoyment, together with greater motivation, are related to better performance in L2 [54]. In addition to the positive influence of both instrumental and integrative motivations on second foreign language proficiency [18,48,49], we could further conjecture that FLE partially mediates the focal relationships of interest. In other words, instrumental and integrative motivations improve second foreign language proficiency by strengthening learners' FLE in the learning process.

Therefore, we propose the following hypotheses:

**Hypotheses 2a (H2a).** The relationship between instrumental motivation and second foreign language proficiency is partly mediated by foreign language enjoyment.

**Hypotheses 2b (H2b).** *The relationship between integrative motivation and second foreign language proficiency is partly mediated by foreign language enjoyment.* 

## 3. Methods

### 3.1. Data Collection

All 589 senior English majors from the top seven universities in Shaanxi Province in China were invited to participate in the survey. Most of the senior students had just completed their required second foreign language course, which should improve the reliability and validity of the collected data. To find answers to the research questions, we investigated the respondents' demographics, such as gender, academic rank, university, and plans after graduation, and their second foreign language learning, including second foreign language, learning approach, learning motivation, learning enjoyment, and second foreign language proficiency.

Before designing the questionnaire, we consulted the existing literature to develop the scales for our major variables, and we interviewed 12 target respondents about their second foreign language learning. A pilot survey with 35 respondents was carried out, and the questionnaire was further improved based on these results and expert advice.

The formal survey was conducted during November and December 2018, and we sent respondents either printed or online questionnaires according to their preference. The survey was administered in Chinese; the translated English version of the questionnaire is provided in the Supplementary Materials. A final total of 335 valid questionnaires was collected. Basic information about the respondents is shown in Table 1. According to validity and reliability analysis, the Cronbach's Alpha of the data is 0.878, which indicates that the survey data has good reliability. In addition, the Kaiser–Meyer–Olkin Measure of Sampling Adequacy is 0.861, and the result of Bartlett's Test of Sphericity indicates a significance level at 1%, which shows the data is suitable for further analysis.

Variables Items		Ν	%
C l	Male	67	20.00%
Gender	Female	268	80.00%
	Тор 5%	36	10.75%
	5–10%	40	11.94%
Academic rank	10–20%	54	16.12%
Academic rank	20–50%	111	33.13%
	50-80%	53	15.82%
	Bottom 20%	41	12.24%
	Xi'an Jiaotong University	39	11.64%
	Northwestern Polytechnical University	32	9.55%
	Northwest A&F University	57	17.01%
University	Northwest University	82	24.48%
	Xidian University	26	7.76%
	Chang'an University	28	8.36%
	Shaanxi Normal University	71	21.19%
	On-campus courses only	234	69.85%
Learning approach	On-campus plus off-campus face-to-face courses	39	11.64%
	On-campus plus off-campus online courses	62	18.51%

Table 1. Basic information about the respondents.

Variables	Items	Ν	%	
	Postgraduate recommendation	44	13.13%	
Plan after graduation	Postgraduate entrance examination	116	34.63%	
Plan after graduation	Study abroad	60	17.91%	
	Seek a job	115	34.33%	
	French	108	32.24%	
	German	62	18.51%	
	Japanese	127	37.91%	
Second foreign language	Korean	13	3.88%	
	Spanish	12	3.58%	
	Russian	12	3.58%	
	Arabic	1	0.30%	

Table 1. Cont.

### 3.2. Measures

Independent variables, instrumental motivation and integrative motivation. Following Gardner's framework and measurement of motivational orientations [43,46] and based on interviews and expert advice, we produced six statements about Chinese English majors' motivation for learning a second foreign language, and respondents were asked how much they agreed or disagreed with each statement on a 5-point Likert scale: 1 = "strongly disagree", 2 = "disagree", 3 = "neither agree nor disagree", 4 = "agree", and 5 = "strongly agree". As discussed, some items are interrelated with one another. Language and cultural interests have things in common with entertainment demand, and recognition need also has close links to income and wish to go abroad. Considering the overlap and interaction of the six items, we conducted a factor analysis and took the two extracted factors (continuous variables) as proxies of instrumental motivation and integrative motivation. As shown in Table 2, the extracted factors can represent the six items.

Table	2. Rotated component matrix of the independent variable					
	Variables	(1)	(2)	-		

Variables	(1)	(2)
Language interest		0.844
Culture interest		0.894
Entertainment demand		0.531
Recognition need	0.834	
Income demand	0.873	
Wish to go abroad	0.713	

Note: the extraction method is Principal Component Analysis; the rotation method is Varimax with Kaiser Normalization and the rotation converged in three iterations; the Kaiser–Meyer–Olkin Measure of Sampling Adequacy is 0.788; the cumulative % of variance is 70.249; in Bartlett's Test of Sphericity, approx. Chi-Square is 770.247, degree of freedom is 15, and significance level is 0.000.

Dependent variable, second foreign language proficiency. The measurement of second foreign language proficiency was based on the respondents' self-evaluations of how proficient they are in the target language. There is no consensus on the best measure of language proficiency, and self-ratings have received the most scrutiny. However, we believe that despite all their possible deficiencies, self-ratings are valid in assessing language proficiency, especially when objective ratings are not available. Previous scholars have confirmed the validity of self-reported language proficiency by examining the relationship between self-reported and behavioral measures empirically [55], and such self-ratings are commonly used in measuring proficiency in English and other languages [56–58]. In the present study, since data were collected across several sites and there was no unified objective rating available for all the participants, we decided that self-ratings were ecologically valid and could serve the purpose of our research.

Respondents were asked to evaluate their listening, reading, writing, and speaking proficiency in their second foreign language based on a 5-point Likert scale: 1 = "very bad", 2 = "bad", 3 = "neither good nor bad", 4 = "good", and 5 = "very good". To improve the validity of the self-ratings, it was suggested to participants that they should complete the self-ratings by referring to their performance in classes and tests and comparing their own proficiency with that of their classmates. We conducted a further factor analysis on the four self-report items, and took the extracted factor, a continuous variable, as a proxy of all the dependent variables. As shown in Table 3, the extracted factor is capable of representing the four items.

Variables	(1)
Listening proficiency	0.905
Reading proficiency	0.884
Writing proficiency	0.914
Speaking proficiency	0.897

Table 3. Component matrix of the dependent variables.

Note: the extraction method is Principal Component Analysis; the Kaiser–Meyer–Olkin Measure of Sampling Adequacy is 0.835; the cumulative % of variance is 81.003; in Bartlett's Test of Sphericity, approx. Chi-Square is 1003.609, degree of freedom is 6, and significance level is 0.000.

Mediator, foreign language enjoyment. Respondents were asked how much they agreed or disagreed with the statement: "I enjoy learning the second foreign language" on a 5-point Likert scale: 1 = "strongly disagree", 2 = "disagree", 3 = "neither agree nor disagree", 4 = "agree", and 5 = "strongly agree". As all variables needed to be standardized in order to avoid intercept terms irrelevant to the method discussion in the regression equation [59], the mediator was standardized as a continuous variable before being entered into the model.

Control variables. The extant literature shows that the achievement of language proficiency is influenced by gender [60,61]. Thus, we controlled for the impact of this factor in the hierarchical linear regression analyses. Gender was measured with a dummy variable, male coded as 1, female as 0. In addition, a learner's academic rank, university classification, learning approach, and plan after graduation may also influence language proficiency, so we used these as control variables. Academic rank, as an ordinal variable, was measured by taking the learner's ranking in academic performance, with "Bottom 20%" coded as 1, "50–80%" coded as 2, "20–50%" coded as 3, "10–20%" coded as 4, "5–10%" coded as 5, and "Top 5%" coded as 6. The rest of the control variables were all measured with dummy variables: for university classification, "university of Project 985" coded as 1, "university of Project 211" as 0; for learning approach, "on-campus and off-campus learning" coded as 1, "on-campus learning only" as 0; and for plan after graduation, "enrollment" coded as 1, and "employment" as 0.

## 3.3. Data Analysis

We used IBM SPSS 24.0 to conduct the required statistical analyses. We conducted descriptive and correlation analyses for all the variables. According to Baron and Kenny's causal steps approach [62], the mediating effect of FLE in the relationship between motivation and second foreign language proficiency was examined in three steps using hierarchical linear regression analysis. First, we examined the direct influence of instrumental and integrative motivation on second foreign language proficiency (H1a and H1b). Second, we examined the direct influence of the two motivations on FLE, and the influence of FLE on second language proficiency. Third, we examined whether the influence of the two motivations on second language proficiency was weakened when the effect of the mediator was controlled (H2a and H2b).

## 4. Results

#### 4.1. Descriptive Statistics and Correlations

Tables 4 and 5 present the descriptive statistics and correlations for the variables in the research. As shown in Table 5, the dependent variable, second foreign language proficiency, is highly correlated with the independent variables, the mediator, and most of the control variables. Such linkages are further examined in the hierarchical linear regression analyses. While most of the variables are correlated with one another, the highest coefficient is 0.495; this is lower than 0.5, which shows that multicollinearity is not a serious problem in the current research. We further conducted a variance inflation factor (VIF) analysis for all the variables, and the collinearity statistics show that the highest VIF is 1.546, much lower than 10, which also confirms that multicollinearity is not a problem.

Variables	Obs	Min	Max	Mean	Std. Dev.	Skewness	Kurtosis
Gender	335	0	1	0.200	0.401	1.507	0.272
AR	335	1	6	3.319	1.469	0.250	-0.712
UC	335	0	1	0.382	0.487	0.488	-1.773
LA	335	0	1	0.301	0.46	0.869	-1.252
PAG	335	0	1	0.657	0.476	-0.663	-1.570
InsM	335	-2.789	2.318	0	1	0.168	-0.499
IntM	335	-2.926	2.204	0	1	-0.456	0.018
FLE	335	-2.034	1.416	0	1	1.008	0.681
SFLP	335	-0.989	3.138	0	1	-0.417	-0.871

Table 4. Descriptive statistical analysis of major variables.

Note: AR, academic rank; UC, university classification; LA, learning approach; PAG, plan after graduation; InsM, instrumental motivation; IntM, integrative motivation; FLE, foreign language enjoyment; SFLP, second foreign language proficiency.

Table 5.	Pearson	correlation	matrix
Table 5.	rearson	correlation	mann.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) Gender	1								
(2) AR	-0.104	1							
(3) UC	-0.071	-0.083	1						
(4) LA	0.094	0.154 *	0.086	1					
(5) PAG	-0.110 *	0.252 *	0.012	0.119 *	1				
(6) InsM	0.081	0.129 *	-0.056	0.242 *	0.227 *	1			
(7) IntM	-0.007	0.144 *	0.103	0.096	-0.013	0.000	1		
(8) FLE	-0.013	0.207 *	0.059	0.179 *	0.039	0.303 *	0.495 *	1	
(9) SFLP	0.133 *	0.281 *	0.029	0.311 *	0.121 *	0.320 *	0.296 *	0.371 *	1

Note: AR, academic rank; UC, university classification; LA, learning approach; PAG, plan after graduation; InsM, instrumental motivation; IntM, integrative motivation; FLE, foreign language enjoyment; SFLP, second foreign language proficiency; numbers with \* indicate a significance level at 5% or better (two-tailed).

## 4.2. The Effect of Motivational Orientations

Table 6 presents the results of the hierarchical linear regression analysis. Model 1 estimates the influence of control variables, and Model 2 shows the influence of instrumental and integrative motivations. Both models are statistically significant. After the entry of instrumental motivation and integrative motivation,  $R^2$  significantly increases by 0.108 (p < 0.01) in Model 2, and the regression coefficients of the independent variables are 0.239 (p < 0.01) and 0.249 (p < 0.01); these are statistically significant. The result shows that both instrumental and integrative motivations positively influenced self-rated second foreign language proficiency. H1a and H1b are supported.

Variables _		SF	LP		FI	LE
variables -	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Gender	0.356 ***	0.304 **	0.360 ***	0.317 ***	-0.013	-0.078
AR	0.170 ***	0.135 ***	0.131 ***	0.124 ***	0.134 ***	0.073 **
UC	0.078	0.054	0.040	0.044	0.129	0.062
LA	0.546 ***	0.400 ***	0.452 ***	0.382 ***	0.320 ***	0.117
PAG	0.091	0.023	0.109	0.042	-0.061	-0.124
FLE			0.293 ***	0.157 ***		
InsM		0.239 ***		0.193 ***		0.293 ***
IntM		0.249 ***		0.175 ***		0.470 ***
Constant	-0.889 ***	-0.665 ***	-0.729 ***	-0.633 ***	-0.546 ***	-0.204 ***
Observations	335	335	335	335	335	335
R <sup>2</sup>	0.174	0.281	0.254	0.297	0.070	0.353
Adjusted R <sup>2</sup>	0.161	0.266	0.240	0.280	0.055	0.340
R <sup>ź</sup> change	0.174	0.108	0.080	0.044	0.070	0.284
F change	13.818 ***	24.545 ***	35.140 ***	10.179 ***	4.917 ***	71.770 ***

Table 6. Results of hierarchical linear regression.

Note: AR, academic rank; UC, university classification; LA, learning approach; PAG, plan after graduation; InsM, instrumental motivation; IntM, integrative motivation; FLE, foreign language enjoyment; SFLP, second foreign language proficiency; \*\*\*and \*\* represent a significance level at 1% and 5% or better.

As shown in Model 1, the regression coefficients of gender, academic rank, university classification, learning approach, and plan after graduation are respectively 0.356 (p < 0.01), 0.170 (p < 0.01), 0.078 (p = 0.457), 0.546 (p < 0.01) and 0.091 (p = 0.408). Some interesting conclusions can be inferred from these results: (1) male students are more likely to rate themselves at a higher level of proficiency in a second foreign language than female students; (2) students who rank higher academically at university seem to have better self-reported second foreign language proficiency, and (3) students who adopt both on- and off-campus learning approaches in second foreign language learning tend to have higher self-ratings of their second foreign language proficiency. However, the regression coefficients of university classification (0.078, p = 0.457) and plan after graduation (0.091, p = 0.408) are not statistically significant, which shows that self-reported second foreign language proficiency is not significantly related to university classification or to plans after graduation. A possible explanation for this is that although different university classifications indicate the comprehensive ability of students, second foreign language acquisition is relatively independent. Also, whether students decide to further their study as graduate students does not influence their second foreign language proficiency, because both the choices are dependent on their second foreign language competence.

#### 4.3. The Mediating Role of Foreign Language Enjoyment

Table 6 also presents the regression estimates of the mediating role of FLE. Model 2 and Model 3 show the influence of the independent variables and the mediator respectively on self-rated second foreign language proficiency, Model 5 and Model 6 show the influence of control variables and motivations respectively on the mediator, and Model 4 shows the influence of motivations after controlling for the effect of FLE. All the results are statistically significant.

In Model 6, the regression coefficient of instrumental motivation is 0.293 (p < 0.01) and that of integrative motivation is 0.470 (p < 0.01), showing that motivations positively influence FLE. In Model 3, the regression coefficient of the mediator is 0.293 (p < 0.01) and statistically significant, showing that FLE positively and greatly influences one's self-rated second foreign language proficiency. Based on this finding, in Model 4 the effect of the mediator is controlled and the influence of motivations on self-rated proficiency is re-examined for comparison. The regression coefficients of instrumental and integrative motivations in Model 4 are 0.193 (p < 0.01) and 0.175 (p < 0.01) respectively, which are lower compared to those in Model 2. In addition, the regression coefficient of the mediator is 0.157 (p < 0.01)

and statistically significant, showing that the positive influence is partially mediated by FLE. Thus, both H2a and H2b are supported.

#### 5. Discussion

Using survey data from 335 English major students in the top seven universities in Shaanxi Province, China, this paper confirms that both integrative and instrumental motivations positively affect second foreign language proficiency, and that their influence is partially mediated by FLE.

With these findings the current study contributes to the extant literature in three main ways. First, it further confirms the influence of instrumental and integrative motivations on second foreign language proficiency with empirical statistics, and thus expands and generalizes findings from the extant SLA literature [18,48,49]. While almost all previous studies focus on the relationship between motivation and L2 proficiency, this paper takes a step further to consider the acquisition of a third language other than the mother tongue and English, which contributes to the development of TLA. Second, by discussing the mediation of FLE, this paper enhances our understanding of how motivation exerts influence on second foreign language proficiency, thus not only enriching the literature on FLE and positive psychology, but also adding to our understanding of the process of language learning. Finally, while previous TLA studies have generally focused on multilingual immigrants [26,28], the current study has examined the second foreign language learning of English majors in mainland China, thus extending the research context of TLA studies and contributing to research on the English major curriculum as well.

Practically, the present study provides important implications for the sustainability of second foreign language courses and similar multilingualism programs. First, it is important for teachers to stimulate and maintain the students' motivation level, which is not only critical in promoting the output of multilingual education, but also crucial in sustaining their learning efforts after graduation. In particular, such courses are usually compulsory parts of other degree programs, and their influence on these English majors' future development may be limited compared with the influence of their English courses. Thus, elevating and maintaining students' motivational levels in second foreign language courses are complex and intricate issues. Second, since FLE plays a mediating role in the relationship between motivation and second foreign language proficiency, teachers should try to improve students' curriculum experience by improving the classroom atmosphere and integrating teaching with pleasure. As Jiang and Dewaele (2019) [23] point out, FLE is most likely to be triggered by teachers, so we do need to encourage instructors to pay special attention to entertainment in the development of their pedagogical skills. When students really enjoy the process of learning a second foreign language, their willingness to sustain their learning efforts may be maintained more easily. Therefore, the sustainability of such courses and programs could be improved from the perspective of positive psychology.

## 6. Conclusions

Our study has explored how motivation exerts a positive influence on second foreign language proficiency, highlighted the importance of positive psychology (especially FLE) in learning a second foreign language, and thus shed light on the sustainability of multilingual training in higher education. A primary finding of the current study is that FLE is an affective path between motivational orientations and second foreign language proficiency, which calls for further attention to the study of positive psychology in multilingualism. In the future, more detailed research on psychological factors, such as specifying learners' positive emotion types and detecting the mechanisms underlying their interrelationships in multilingual training, should be carried out.

It must be pointed out that there are limitations in the current study. First, in terms of the design of the questionnaire, the measurement of the major variables was based on the respondents' subjective assessment. While the Likert-type scale has been widely shown to be valid and reliable [63,64], an objective evaluation of the key variables would surely improve the validity and reliability of the research. Furthermore, we only

investigated English majors from seven universities in Shaanxi Province, China. A larger sample covering different levels of universities from different regions would enable us to achieve a more comprehensive understanding of the second foreign language learning of English major students in China, and the involvement of other countries and areas would also improve the generalizability of the findings.

## Supplementary Materials: The following are available online at http://www.mdpi.com/2071-1050/12/4/1302/s1.

**Author Contributions:** Three authors contributed equally. H.Z. and Y.D. proposed the main idea; Y.D. collected original data; H.Z. and Y.D. designed the empirical study and wrote the initial draft; H.Z., Y.D., and Y.W. revised the paper; H.Z. and Y.W. acquired financial support for the projects leading to this publication. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research is funded by the National Natural Science Foundation of China (Approval No. 71872165), the Humanities and Social Science Research Foundation of Chinese Ministry of Education (Approval No. 18YJC630241), the Research Foundation of China's Language Commission (Approval No. YB135–95), the National Social Science Fund of China (Approval No. 16CYY007), "Beijing Foreign Studies University Research Project for First-Class Discipline Construction", and a Research Project of the Beijing Cultural Exchange Research Center.

**Conflicts of Interest:** The authors declare no conflict of interest.

# References

- 1. Lonsmann, D.; Kraft, K. Language Policy and Practice in Multilingual Production Workplaces. *Multilingua* **2018**, *37*, 403–427. [CrossRef]
- 2. Sadikoglu, S.; Oktay, S. Learning Strategies of Students Studying Russian as a Second Foreign Language, with Relation to English as Their First Foreign Language. *Qual. Quant.* **2018**, *52*, 2101–2109. [CrossRef]
- 3. Tesseur, W. Institutional Multilingualism in NGOs: Amnesty International's Strategic Understanding of Multilingualism. *Meta* 2014, *59*, 557–577. [CrossRef]
- 4. Ying, K.; Ying, H. *The Intercultural Communication Ability Cultivation in Higher Foreign Language Education under the Belt and Road Initiative;* Zhao, L., Ed.; Science & Research Central Ltd.: Newark, NJ, USA, 2018; pp. 62–69.
- 5. Ellis, R. The Study of Second Language Acquisition; Oxford University Press: Oxford, UK, 1994.
- 6. Larsen-Freeman, D.; Long, M.H. *An Introduction to Second Language Acquisition Research*; Foreign Language Teaching and Research Press: Beijing, China, 2000.
- 7. Sharwood-Smith, M. Second Language Learning: Theoretical Foundations; Longman: London, UK, 1994.
- Alonso, J.G.; Rothman, J.; Berndt, D.; Castro, T.; Westergaard, M. Broad Scope and Narrow Focus: On the Contemporary Linguistic and Psycholinguistic Study of Third Language Acquisition. *Int. J. Biling.* 2017, 21, 639–650. [CrossRef]
- 9. Fan, L. Retrospect and Prospect of Overseas Study of Third Language Acquisition. *Foreign Lang. Res.* **2019**, *36*, 49–54.
- 10. Jaensch, C. Third Language Acquisition: Where are we now? *Linguist Approaches Biling.* **2013**, *3*, 73–93. [CrossRef]
- 11. Bartolotti, J.; Marian, V. Bilinguals' Existing Languages Benefit Vocabulary Learning in a Third Language. *Lang. Learn.* **2017**, *67*, 110–140. [CrossRef]
- Maluch, J.T.; Kempert, S. Bilingual Profiles and Third Language Learning: The Effects of the Manner of Learning, Sequence of Bilingual Acquisition, and Language Use Practices. *Int. J. Biling. Educ. Biling.* 2019, 22, 870–882. [CrossRef]
- 13. Slabakova, R. The Scalpel Model of Third Language Acquisition. Int. J. Biling. 2017, 21, 651–665. [CrossRef]
- 14. Calafato, R.; Tang, F. The Status of Arabic, Superdiversity, and Language Learning Motivation among Non-Arab Expats in the Gulf. *Lingua* **2019**, *219*, 24–38. [CrossRef]
- 15. Huang, H.-T.; Hsu, C.-C.; Chen, S.-W. Identification with Social Role Obligations, Possible Selves, and L2 Motivation in Foreign Language Learning. *System* **2015**, *51*, 28–38. [CrossRef]
- 16. Zhao, J.; Li, S. An Empirical Analysis of College Students' Motivation for Foreign Language Learning and Its Implications-a Case Study of English Majors' Motivation for Second Foreign Language Learning. *Foreign Lang. Res.* **2014**, *2*, 40–45.
- 17. Hessel, G. A New Take on Individual Differences in L2 Proficiency Gain During Study Abroad. *System* **2017**, *66*, 39–55. [CrossRef]

- Smith, S.A.; Briggs, J.G.; Pothier, H. Exploring Variation in Reading Comprehension among Young Adult Spanish-English Bilinguals: The Role of Environmental Language Contact and Attitudes Toward Reading. *Int. J. Biling.* 2018, 22, 695–716. [CrossRef]
- 19. Wong, Y.K. Structural Relationships Between Second-language Future Self-image and the Reading Achievement of Young Chinese Language Learners in Hong Kong. *System* **2018**, *72*, 201–214. [CrossRef]
- 20. Liu, X.; Xu, X.; Wang, H. The Effect of Emotion on Morphosyntactic Learning in Foreign Language Learners. *PLoS ONE* **2018**, *13*. [CrossRef] [PubMed]
- 21. Shao, K.; Pekrun, R.; Nicholson, L.J. Emotions in Classroom Language Learning: What can we Learn from Achievement Emotion Research? *System* **2019**. [CrossRef]
- 22. Dewaele, J.-M.; Alfawzan, M. Does the Effect of Enjoyment Outweigh that of Anxiety in Foreign Language Performance? *Stud. Second Lang. Learn. Teach.* **2018**, *8*, 21–45. [CrossRef]
- 23. Jiang, Y.; Dewaele, J. How Unique is the Foreign Language Classroom Enjoyment and Anxiety of Chinese EFL Learners? *System* 2019, *82*, 13–25. [CrossRef]
- 24. Wei, H.; Gao, K.; Wang, W. Understanding the Relationship Between Grit and Foreign Language Performance Among Middle School Students: The Roles of Foreign Language Enjoyment and Classroom Environment. *Front. Psychol.* **2019**, *10*, 1–8. [CrossRef]
- 25. Westergaard, M.; Mitrofanova, N.; Mykhaylyk, R.; Rodina, Y. Crosslinguistic Influence in the Acquisition of a Third Language: The Linguistic Proximity Model. *Int. J. Biling.* **2017**, *21*, 666–682. [CrossRef]
- Mieszkowska, K.; Luniewska, M.; Kołak, J.; Kacprzak, A.; Wodniecka, Z.; Haman, E. Home Language Will Not Take Care of Itself: Vocabulary Knowledge in Trilingual Children in the United Kingdom. *Front. Psychol.* 2017, *8*, 1358. [CrossRef] [PubMed]
- Hopp, H. Cross-linguistic Influence in the Child Third Language Acquisition of Grammar: Sentence Comprehension and Production among Turkish-German and German Learners of English. *Int. J. Biling.* 2019, 23, 567–583. [CrossRef]
- 28. Edele, A.; Kempert, S.; Schotte, K. Does Competent Bilingualism Entail Advantages for the Third Language Learning of Immigrant Students? *Learn. Instr.* **2018**, *58*, 232–244. [CrossRef]
- 29. Fu, Q. Curriculum Orientation of the Second Foreign Language Major in Colleges and Universities. *Foreign Lang. Lit.* **2012**, *28*, 161–164.
- 30. Meng, X.; Kang, W. Analysis of the Needs of the Second Elective Course in Russian as a Second Foreign Language and Its Curriculum. *Russ. China* **2019**, *38*, 76–81.
- 31. Jia, Q.; Rao, H. An Analysis of Language Transfer Factors in French Teaching for English Majors. *Heilongjiang Res. High. Educ.* 2015, *8*, 163–166.
- 32. Li, Y.; Tang, D.; Cao, B.; Liang, X.; Li, H.; Research Centre of Brain and Cognitive Neuroscience, Liaoning Normal University; Student Affairs Department, Dalian Polytechnic University; School of Education Science, Zunyi Normal College; School of Psychology, Jiangxi Normal University; Research Centre for Brain Function and Psychological Science, Shenzhen University. The Testing Effect in the Process of the Second Foreign Language Vocabulary Learning of College Students. *Psychol. Dev. Educ.* 2016, *32*, 198–204.
- 33. Hou, R. A Survey of College Students' Motivation for French Learning and Strategies to Improve It. *Theory Pract. Educ.* **2015**, *35*, 63–64.
- 34. Zheng, Y.; Lu, X.; Ren, W. Profiling Chinese University Students' Motivation to Learn Multiple Languages. *J. Multiling. Multicult. Develop.* **2019**, *40*, 590–604. [CrossRef]
- 35. de Burgh-Hirabe, R. Motivation to Learn Japanese as a Foreign Language in an English Speaking Country: An Exploratory Case Study in New Zealand. *System* **2019**, *80*, 95–106. [CrossRef]
- 36. King, R.B.; Yeung, S.S.; Cai, Y. Personal Investment Theory: A Multi-faceted Framework to Understand Second and Foreign Language Motivation. *System* **2019**, *86*. [CrossRef]
- 37. Lee, M.; Bong, M. Relevance of Goal Theories to Language Learning Research. System 2019. [CrossRef]
- 38. Dornyei, Z.; Taguchi, T. *Questionnaires in Second Language Research: Construction, Administration, and Processing,* 2nd ed.; Routledge: New York, NY, USA, 2009.
- 39. Bandura, A. Self-efficacy: Toward a Unifying Theory of Behavioral Change. *Psychol. Rev.* **1977**, *84*, 191–215. [CrossRef] [PubMed]
- 40. McEown, M.S.; Oga-Baldwin, W.L.Q. Self-determination for all Language Learners: New Applications for Formal Language Education. *System* **2019**. [CrossRef]

- 41. Weiner, B. Attribution Theory, Achievement Motivation, and the Educational Process. *Rev. Educ. Res.* **1976**, 42, 203–215. [CrossRef]
- 42. Gardner, R. Social Psychology and Second Language Learning: The Role of Attitudes and Motivation; Edward Arnold: London, UK, 1985.
- 43. Acheson, K.; Nelson, M.; Luna, K. Measuring the Impact of Instruction in Intercultural Communication on Secondary Spanish Learners' Attitudes and Motivation. *Foreign Lang. Ann.* **2015**, *48*, 203–217. [CrossRef]
- 44. Hengsadeekul, C.; Koul, R.; Kaewkuekool, S. Motivational Orientation and Preference for English-medium Programs in Thailand. *Int. J. Educ. Res.* **2014**, *66*, 35–44. [CrossRef]
- 45. Tseng, W.; Chang, Y.; Cheng, H.-F. Effects of L2 Learning Orientations and Implementation Intentions on Self-Regulation. *Psychol. Rep.* **2015**, *117*, 319–339. [CrossRef]
- 46. Gardner, R.C. Integrative Motivation and Second Language Acquisition. In *Motivation and Second Language Acquisition*; Dörnyei, Z., Schmidt, R., Eds.; University of Hawai'i, Second Language Teaching and Curriculum Center: Honolulu, HI, USA, 2001; pp. 1–19.
- 47. Gardner, R.C.; Lambert, W.E. *Attitudes and Motivation in Second Language Learning*; Newbury House: Rowley, MA, USA, 1972.
- 48. Cocca, M.; Cocca, A. Affective Variables and Motivation as Predictors of Proficiency in English as a Foreign Language. *J. Effic. Responsib. Educ. Sci.* **2019**, *12*, 75–83. [CrossRef]
- 49. Yu, B. The Predicting Roles of Approaches to Learning, L2 Learning Motivation, L2 Learning Strategies and L2 Proficiency for Learning Outcomes: A Comparison Between Mainland and Hong Kong Chinese Students. *Educ. Stud.* **2019**, *45*, 520–532. [CrossRef]
- 50. Liu, J. Investigation on the Second Foreign Language Learning of College Students in Beijing. *Educ. Teach. Forum* **2018**, *16*, 53–55.
- 51. Fryer, L.K. Predicting Self-concept, Interest and Achievement for First-year Students: The Seeds of Lifelong Learning. *Learn. Individ. Differ.* **2015**, *38*, 107–114. [CrossRef]
- 52. Vandergrift, L. Relationships among Motivation Orientations, Metacognitive Awareness and Proficiency in L2 Listening. *Appl. Linguist* 2005, *26*, 70–89. [CrossRef]
- 53. Dewaele, J.M.; Magdalena, A.F.; Saio, K. The Effect of Perception of Teacher Characteristics on Spanish EFL Learners' Anxiety and Enjoyment. *Mod. Lang. J.* **2019**, *103*, 412–427. [CrossRef]
- 54. Saito, K.; Dewaele, J.; Abe, M.; In'nami, Y. Motivation, Emotion, Learning Experience, and Second Language Comprehensibility Development in Classroom Settings: A Cross-Sectional and Longitudinal Study. *Lang. Learn.* **2018**, *68*, 709–743. [CrossRef]
- Marion, V.; Blumenfeld, H.K.; Kaushanskaya, M. The Language Experience and Proficiency Questionnaire (LEAP-Q): Assessing Language Profiles in Bilinguals and Multilinguals. *J. Speech Lang. Hear. Res.* 2007, 50, 940–967. [CrossRef]
- Paap, K.R.; Mason, L.A.; Zimiga, B.M.; Ayala-Silva, Y.; Frost, M.M.; Gonzalez, M.; Primero, L. Other Language Proficiency Predicts Unique Variance in Verbal Fluency Not Accounted for Directly by Target Language Proficiency: Cross-Language Interference? *Brain Sci.* 2019, *9*, 175. [CrossRef]
- 57. Liu, M. Bilingual/multilingual Learners' Willingness to Communicate in and Anxiety on Speaking Chinese and Their Associations with Self-rated Proficiency in Chinese. *Int. J. Biling. Educ. Biling.* **2018**, 21, 54–69. [CrossRef]
- Schafer, E.C.; Aoyama, K.; Ho, T.; Castillo, P.; Conlin, J.; Jones, J.; Thompson, S. Speech Recognition in Noise in Adults and Children Who Speak English or Chinese as Their First Language. *J. Am. Acad. Audiol.* 2018, 29, 885–897. [CrossRef]
- Wen, Z.; Ye, B. Analyses of Mediating Effects: The Development of Methods and Models. *Adv. Psychol. Sci.* 2014, 22, 731–745. [CrossRef]
- 60. Salahshour, F.; Sharifi, M.; Salahshour, N. The Relationship Between Language Learning Strategy Use, Language Proficiency Level and Learner Gender. *Procedia Soc. Behav. Sci.* **2013**, *70*, 634–643. [CrossRef]
- 61. van der Slik, F.W.P.; van Hout, R.W.N.M.; Schepens, J.J. The Gender Gap in Second Language Acquisition: Gender Differences in the Acquisition of Dutch among Immigrants from 88 Countries with 49 Mother Tongues. *PLoS ONE* **2015**, *10*. [CrossRef] [PubMed]
- 62. Baron, R.M.; Kenny, D.A. The Moderator-mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *J. Pers. Soc. Psychol.* **1986**, *51*, 1173–1182. [CrossRef] [PubMed]

- 63. Matell, M.S.; Jacoby, J. Is There an Optimal Number of Alternatives for Likert-scale Items? Effects of Testing Time and Scale Properties. *J. Appl. Psychol.* **1972**, *56*, 506–509. [CrossRef]
- Maurer, T.J.; Pierce, H.R. A Comparison of Likert Scale and Traditional Measures of Self-efficacy. J. Appl. Psychol. 1998, 83, 324–329. [CrossRef]



© 2020 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (http://creativecommons.org/licenses/by/4.0/).