

# 英语学习者个体差异 动态系统研究

柳鑫淼◎著

学术之光文库 XUESHUZHIGUANGWENKU



## 英语学习者个体差异 动态系统研究

柳鑫淼◎著



#### 图书在版编目 (CIP) 数据

英语学习者个体差异动态系统研究 / 柳鑫森著. --北京: 光明日报出版社, 2014.9

ISBN 978 - 7 - 5112 - 7185 - 3

I. ①英… Ⅱ. ①柳… Ⅲ. ①英语—语言学习—研究 Ⅳ. ①H319. 3

中国版本图书馆 CIP 数据核字 (2014) 第 198987 号

#### 英语学习者个体差异动态系统研究

著 者: 柳鑫森

责任编辑:赵锐

责任校对:张明明

封面设计: 中联学林

责任印制:曹净

出版发行: 光明日报出版社

地 址:北京市东城区珠市口东大街5号,100062

电 话: 010-67078248 (咨询), 67078870 (发行), 67078235 (邮购)

传 真: 010-67078227, 67078255

网 址: http://book.gmw.cn

E - mail: gmcbs@ gmw. cn zhaorui@ gmw. cn

法律顾问: 北京天驰洪范律师事务所徐波律师

印 刷:北京彩虹伟业印刷有限公司

装 订:北京彩虹伟业印刷有限公司

本书如有破损、缺页、装订错误,请与本社联系调换

开 本: 710×1000 毫米 1/16

字 数: 236 千字

印 张: 15

版 次: 2014年9月第1版

印 次: 2014年9月第1次印刷

书 号: ISBN 978-7-5112-7185-3

定 价: 68.00元

版权所有 翻印必究

柳鑫森 1982年生,2005年毕业于北京外国语大学,获文学学士学位。2007年毕业于北京外国语大学,获外国语言学及应用语言学硕士学位。2014年毕业于清华大学外文系,获英语语言文学博士学位。现就职于中国劳动关系学院,近五年发表论文10余篇,主编教材3部,参与国家级课题2项。

从 20 世纪 70 年代开始,学习者个体差异的研究受到了语言研究者的广泛关注,成为二语习得研究的重要课题。从总体来看,学习者个体差异的研究在经历了单变量研究和多变量研究两个阶段之后,近年来学者们开始将动态系统理论引入学习者个体差异的研究中,使之发展到以多变量整合为特征的综合性研究新阶段。动态系统理论倡导的动态性、综合性和互动性思想为开展综合性个体差异研究提供了重要的理论基础和指导原则。

本研究选取了学习策略、学习观念、学习风格、学能、动机等八个主要的个体差异因素,从动态系统理论的视角,运用调查问卷、测试、学习日记和访谈等数据采集方式对来自于北京高校的非英语专业学生开展了为期一学年的跟踪研究,全面考察了八个变量的动态变化以及对学习成就的影响,研究了它们之间的互动关系,并尝试建立一个动态系统理论视角下的学习者个体差异模型。研究发现:1)根据个体差异与语言水平之间的层级关系,个体差异可分为直接变量,中间变量和内隐变量。根据个体差异的变化速度差异,可以将其划分成稳定变量,相对稳定变量和易动变量;2)对于直接变量而言,认知学习策略的使用和努力程度呈现显著增加,学习观念、学习风格、焦虑、动机、努力程度和环境因素是导致认知策略的使用发生变化的重要因素,焦虑和动机引起努力程度发生变动;3)作为中间变量,学习观念、学习风格、焦虑和动机引起努力程度发生变动;6)作为中间变量发生变化的因素为语言水平,环境因素和学习经历。性格和学能对中间变量的形成具有重要影响;4)在三类变量中,内隐变量是影响语言水平的最重要潜在因素。语言

学能是所有变量中对语言水平影响最大的因素,性格通过中间变量和直接变量的中介作用间接影响语言水平。在中间变量中,外语焦虑直接影响语言水平,学习观念、学习风格和动机通过直接变量的中介作用间接影响语言水平。在直接变量中,学习策略直接影响语言水平,努力程度对语言水平没有显著影响;5)语言水平反向作用于学习动机、焦虑和学习观念,形成双向互动关系。

本研究对学习者个体差异动态系统的互动规律进行了初步的探讨,对我们运用动态系统理论的思想研究个体差异问题具有一定的借鉴和启发意义,有助于拓宽个体差异的研究思路,也为在这一领域继续开展深入研究奠定了一定的基础。

这部专著是教育部人文社科基金项目"动态系统理论视角下的英语学习者个体差异研究"的中期研究成果,也是在作者的博士论文基础上修改而成的。在研究设计、数据采集和分析过程中,研究工作得到了清华大学崔刚教授、杨莉老师及多位专家的大力支持,在此表示衷心的感谢。由于作者水平有限,研究中还存在很多疏漏和不足。所有这些不足之处都欢迎各位专家和学者批评指正,我们将在未来的研究中继续完善。

#### List of Abbreviations

AMTB	Attitude/Motivation Test Battery
ANX	Anxiety
APT	Aptitude '
AST	Affective Strategy
ATT	Attitudes towards Learning Situations
AUD	Audio Style
BALLI	Beliefs about Language Learning Inventory
BD	Beliefs about the Difficulty of Foreign Language Learning
BEL	Belief
BLA	Beliefs about Language Aptitude
BLS	Beliefs about Learning Strategy
BNL	Beliefs about the Nature of Foreign Language Learning
CA	Communication Apprehension
CST	Cognitive Strategy
DST	Dynamic Systems Theory
DV	Direct Variable
EFF	Effort
EFL	English as a Foreign Language
EPI	Eysenck Personality Inventory
EV	Environmental Variable
EXT	Extroversion
FLCAS	Foreign Language Classroom Anxiety Scale
FNE	Fear of Negative Evaluation
GS	Grammatical Sensitivity
IELTS	International English Language Testing System

ISM	Instrumental Motivation
ITM	Integrative Motivation
IV	Innate Variable
KIN	Kinesthetic Style
LP	Listening Proficiency
MLAT	Modern Language Aptitude Test
MST	Meta-cognitive Strategy
MOT	Motivation
MV	Mediating Variable
NEU	Neuroticism
PER	Personality
PL-SPQ	Perceptual Learning-Style Preference Questionnaire
PRO	Proficiency
PC .	Phonemic Coding
RP	Reading Proficiency
RLA	Rote Learning Ability
SP	Speaking Proficiency
SEB	Self-efficacy Belief
SILL	Strategy Inventory of Language Learning
SLA	Second Language Acquisition
SST	Social Strategy
STR	Strategy
STY	Learning Style
Т	Time
TAC	Tactile Style
TAN	Test Anxiety
VIS	Visual Style
WP	Writing Proficiency
WTC	Willingness To Communicate

### 目 录 CONTENTS

Chapter	1 Introduction 1
	1.1 Research background 1
	1.2 Research questions 4
	1.3 Significance of the study 5
	1.4 An overview of chapters 6
Chapter	2 Literature Review
	2.1 Individual difference variables in SLA 9
	2.2 Development of studies on individual differences 23
	2.3 Dynamic Systems Theory and individual differences 32
	2.4 Summary 40
Chapter	3 Research Methodology 42
	3.1 General design 42
	3.2 Research design for the quantitative part of the study 44
	3.3 Research design for the qualitative part of the study 55
	3.4 Summary 58

Chapter 4 A Hypothesized Model of Learners' Individual Differences		
59		
4.1 Components of the individual difference system 59		
4.2 Interrelationships of learners' individual differences 63		
4.3 A dynamic system of learners' individual differences 71		
4.4 Summary 74		
Chapter 5 Dynamic Interactions Between Direct Variables and		
Other Variables 76		
5.1 Variation of direct variables 76		
5.2 Interrelationships between direct variables and EFL proficiency 93		
5.3 Summary 111		
Chapter 6 Dynamic Interactions Between Mediating Variables,		
Innate Variables and Other Factors		
6.1 Variation of mediating variables and innate variables 113		
6.2 Interrelationships between mediating variables and EFL		
proficiency 137		
6.3 Interrelationships between innate variables and EFL proficiency 149		
6.4 Summary 158		
Chapter 7 A DST-based Model of EFL Learners' Individual Differences		
7.1 The baseline model of learners' individual differences 160		
7.2 The development model of learners' individual differences 172		
7.3 The comprehensive model 174		
7.4 Discussion 175		

Chapter 8 Conclusion	181
8.1 Findings of the study 181	
8.2 Implications for theory and practice 183	
8.3 Limitations of the study 186	
8.4 Suggestions for future research 187	
Appendix A Eysenck Personality Inventory	214
Appendix B Individual Difference Questionnaires	218
Appendix C Guidelines for Diary Keeping	224
Appendix D Key Questions Asked in the Interview	226
Appendix E Results of Causal Modeling	228

#### **Chapter 1 Introduction**

#### 1.1 Research background

As the focus of studies on foreign language learning and teaching shifted from language teaching to language learners in the 1970s, the research on individual differences began to receive increasing attention. From then on the studies of individual differences have undergone three stages (Cui & Liu, 2013). The first stage was initiated by the uni-variate studies which focused on the characteristics that made some learners more successful than others (e.g. Rubin, 1975; Stern, 1975; Naiman et al., 1978). The good language learner studies can make us better understand the behavioral and mental features of successful learners. However, later on, critics pointed out that the studies on good learners alone cannot justify that the characteristics identified are exclusive for good learners and no sufficient attention was given to poor learners who might also share those features (Purpura, 1999). As a result, researchers started to compare successful learners with unsuccessful ones in terms of their learning strategies, beliefs, learning styles and foreign language anxiety (e. g. Huang & Van Naerssen, 1987; Andersen, 1991). A multitude of comparative studies were conducted from 1980s to early 1990s, but the majority of them focused on a single variable and produced rather inconsistent and sometimes contradictory results. The discrepant findings might be attributed in part

to different methodologies, definitions and classifications of the same factor or different samples. However, the most important reason lies in the assumed linear relationship between individual differences and learning outcome. Most studies have considered individual difference variables to be isolated from each other with little attention to the interactions among them(Ellis,1994). In the late 1990s, scholars began to realize that it is the interaction of learning strategy, attitude, motivation and other variables that accounts for learners' differential success(e. g. Gardner et al.,1997) and they started to include more variables in their studies(e. g. Wen & Johnson, 1997). As the focus of research shifted from a single factor to multiple factors, the studies of individual differences entered the second stage.

The second stage was characterized by multi-variate studies which accounted for learners' differential success from an interactive perspective. This stage lasted from the 1990s to the beginning of the 21st century although a small number of uni-variate studies were still performed during this period. Some scholars focused on the interaction of two variables (e.g. Wen, 1995; Lee, 1999; Albert, 2006) and others incorporated more than two variables in their studies (e.g. Wen & Johnson, 1997; Gardner et al., 1997; Ghavamnia et al., 2011; Sioson, 2011). The studies that can be considered the most comprehensive in this stage were conducted by Wen and Johnson (1997) who incorporated learning strategy, learner belief, effort and learning purpose in their research and Gardner et al. (1997) who studied seven variables simultaneously among the same sample group. Gardner et al. (1997) developed a second language acquisition model which describes the interaction of language aptitude, learning strategy, anxiety, motivation, learning style, attitude and self-confidence. The research was carried out among American students learning French as their second language. Learners from different cultural backgrounds differ in their foreign language learning. As a result, we are not sure whether the model can be generalized to the Chinese EFL context. In addition, the study considers individual differences as a state at a particular point in time, ignoring their dynamic and developmental nature. The studies at this stage mostly focused on how two or more than two variables operate in concert to contribute to EFL achievement. However, they ignored the fact that different learner factors constitute an inseparable system and need to be integrated to account for differential success among EFL learners. Such integrated studies require a more comprehensive theoretical framework. Conveniently, there has already been such a theoretical paradigm available that can be used to describe individual differences as an integrated, dynamic and nonlinear system. It is Dynamic Systems Theory (DST). With the introduction of DST into the studies of individual differences in the late twentieth century, the research in this area moved into the third stage.

The third stage was featured with comprehensive studies which examined individual differences from a dynamic system perspective. Dynamic Systems Theory, also referred to as complex dynamics or complex systems theory, originated from the theory of dynamics proposed by Newton in the seventeenth century and the nonlinearity principle in mathematics. DST emphasizes complete interconnectedness, sensitivity to the initial conditions, variability and nonlinearity of system behaviors. According to the theory, the components of a system are interdependent, inseparable and the behavior of a system is the result of interaction of all its components. As Dörnyei (2010) pointed out, individual differences can be better accounted for in terms of a dynamic system as there are a number of parallels between DST and individual differences such as dynamism. The basic philosophies of DST such as interconnectedness and dynamism can provide the very theoretical basis we need to solve the current dilemma in the studies of individual differences. Against the DST backdrop, researchers were increasingly aware of the limitations in previous studies and started to turn their attention to the possible application of DST to the studies of individual differences. Dörnyei (2009) first opted for a DST approach to understanding learner characteristics and conceptualized the relationships between language, agent and environment in second language acquisition process from a DST perspective. Dörnyei has made ground-breaking effort to introduce DST into the studies of individual differences. Dörnyei (2010) also established a tripartite framework of human mind which consists of cognition, affect and motivation and identified three higher-order combinations within this framework, namely aptitude/ trait complexes, interests and possible selves. Most studies on individual differences from a DST perspective centered on a single variable, such as motivation (e. g. Dörnyei, 2003, 2009). Studies in this line marked a major step forward from uni-variate and multi-variate studies as they fully justify the dynamic nature of individual differences. However, there have been few attempts to consider multiple variables as a macro dynamic system and examine how they interact with each other in a dynamic fashion. As a result, the present study intends to examine the interrelationships among eight learner factors and the relationship between these variables and EFL achievement from a dynamic system perspective. The learner factors selected as the focus of this study include learning strategy, learner belief, motivation, foreign language anxiety, learning style, language aptitude, effort and personality, which are chosen because they are most extensively researched and generally recognized as the typical individual difference characteristics.

#### 1.2 Research questions

Individual difference variables which constitute a dynamic system should be viewed as an inseparable whole which exerts joint influence on EFL achievement. This can be manifested by the following three aspects. First, as components of the system, some learner factors are closely related to each other while others are distantly connected. Therefore, they are grouped into different subsystems, which further constitute the system of individual differences. Second, different subsystems interact with each other and with the entire system in a dynamic and complex manner. There are also complex interactions going on within each subsystem. Third, different components and subsystems function together to achieve certain level of EFL proficiency, which also affects the constituents of the system in turn.

Researchers hold different ideas as to which factors should be regarded as EFL learners' individual differences (e. g. Larsen-Freeman & Long, 1991; Dörnyei, 2005;

Ellis, 2008a), with the list of individual differences being expanded continuously to include new factors such as willingness to communicate (WTC) or creativity. It is impossible and unrealistic to incorporate all individual difference variables in a single study. Therefore, eight key factors are selected as the focus of the present study, including learning strategy, learner belief, motivation, foreign language anxiety, learning style, effort, language aptitude and personality. This study aims at exploring the dynamic interaction of major learner factors and intends to build a model for the dynamic system of learners' individual differences. The following three paired research questions are proposed accordingly:

- 1) How can a dynamic system of individual differences be built? What are the subsystems within the dynamic system and the components within each subsystem?
- 2) What are the interrelationships within each subsystem and between different subsystems? How do their interrelationships change over time?
- 3) How do individual differences jointly contribute to EFL achievement and how does EFL achievement affect individual differences in turn? How do their interrelationships change over time?

#### 1.3 Significance of the study

The study is of both theoretical and practical importance. Theoretically, this study can intensify our understanding of the laws of foreign language learning. Individual differences, as the mental or behavioral attributes of language learners, cannot exist in isolation from each other. Rather they constitute an inseparable and integrated entity. As components of a dynamic system, individual difference variables are interconnected and operate in concert in a clearly nonlinear manner. Previous studies failed to give sufficient attention to the interaction of individual differences, resulting in inconsistent and even contradictory results which cannot offer us enough theoretical and practical guidance. The current study attempts to provide a broader theoretical scope which

covers a wide range of individual difference variables that can affect language learning success. The study focuses on the interrelationships among different variables and their joint contribution to EFL achievement. Therefore, it is more likely to overcome the limitations in previous studies and uncover the internal laws of foreign language learning.

Practically speaking, this study is of particular significance to both foreign language teaching and learning. EFL teachers in China have realized the importance of respecting learners' individual differences. However, they tend to focus on certain aspects of individual differences in their teaching practice, ignoring the fact that various factors constitute an inseparable entity. Many of them have tried to improve EFL learning through intervention on a single variable, such as learning strategy, only to produce rather unsatisfactory results. This is partially due to their ignorance of the integrated nature of individual differences. The current study can help us to identify the individual difference variables with the most crucial impact on learners' achievement and enable us to recognize the priorities in pedagogical interventions, which will improve our ability to perform more efficient and optimized interventions. Besides, students can gain from this research a thorough understanding of their foreign language learning. With better knowledge of their own mental and behavioral features, students will be more equipped to adjust and coordinate different factors to improve their learning efficiency, which will ultimately contribute to their language achievement. Moreover, as the study identifies the key contributors to EFL achievement, it can inform learners which variables are of greater significance and thus should be taken as the priorities in enhancing their EFL performance. The findings of the research guide learners to focus their attention on the whole system of individual differences as well as the variables of particular importance.

#### 1.4 An overview of chapters

Chapter One is an introduction to research background, research questions,