

A Study on Cognitive Differences of Learners and Second Language Acquisition Based on Constructivism Theory

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Abstract: Individual Differences Are an Important Factor Affecting Language Teaching. Students with Different Cognitive Styles Often Adopt Different Learning Strategies. by Analyzing the Differences in Students' Subjective Cognitive Styles, the Paper Points out That in Recent Years, Constructivism Learning Theory Has Shown Great Vitality in the World. as a New Epistemology, Constructivism Theory Has Exerted a Certain Influence on Teaching. Learning Subjects with Different Cognitive Styles Often Adopt Different Learning Methods in Language Learning, and the Final Learning Results Also Have Great Differences. Second Language Teaching Has Been Trying to Explore More Effective Teaching Methods. This Paper Attempts to Analyze the Relationship between Cognitive Differences of Learners and Second Language Acquisition from the Perspective of Constructivism Learning Theory, and Discusses That in Foreign Language Teaching, Teachers Should Choose Teaching Methods Suitable for Learners' Cognitive Style, and Truly Teach Students in Accordance with Their Aptitude, So as to Improve the Quality of Foreign Language Teaching.

1. Introduction

In Recent Years, Constructivism Learning Theory Has Shown Great Vitality in the World. as a New Epistemology, Constructivism Theory Has Exerted Certain Influence on Teaching [1]. Since the Late 1960s, the Focus of Second Language Acquisition (SLA) Research Has Shifted from Teaching Methodology to Learner Characteristics and Their Role in the Acquisition Process. in Recent Years, the Study on Individual Differences of Learners Has Attracted More and More Attention from Foreign Language Learning Researchers, Including the Study on the Differences in the Methods Used by Learners in Learning Foreign Languages and Solving Problems, That is, the Study on the Differences in Cognitive Styles [2]. the Study of Individual Differences of Learners is on the Rise, Including the Study of Differences in Cognitive Styles of Learners, Which is the Main Body of Learning [3]. Cognitive Style Refers to the Individual Differences That People Show When Processing Information and Experience. It is the Attitude and Way That Individuals Often Adopt in the Process of Perception, Memory and Thinking. Cognitive Style is Rational and Stable, and It is Closely Related to Cognitive Strategy and Personality, Because the Way People Use in the Process of Information Processing is Often the Most Appropriate Way They Think, and People with Different Personalities Have Different Ways of Thinking [4]. Different Cognitive Styles Have Different Effects on Language Learning, That is, Learners with Different Cognitive Styles Often Adopt Different Ways in Language Learning, So the Final Learning Results Are Also Very Different [5].

In the Process of Language Learning, Learners with Different Cognitive Styles Often Have Different Interests, Personalities, Feelings, Motivations, Etc., Which, to a Certain Extent, Determines Their Attitudes Towards Different Types of Learning Tasks and Materials, Their Behaviors in Classroom Activities and Their Relationship with Teachers [6]. Learning Subjects with Different Cognitive Styles Often Adopt Different Learning Methods in Language Learning, and the Final Learning Results Also Have Great Differences [7]. This Paper Studies Two Groups of Different Cognitive Styles from the Perspective of Cognitive Psychology and Second Language Acquisition. the Results Show That People with Different Cognitive Styles Often Adopt Different Learning Strategies in Language Learning. It is Very Necessary to Study the Differences in Students' Individual Cognitive Styles, So That Teachers Can Better Understand Students' Cognitive

Characteristics [8]. At the Same Time, Teachers Can Improve the Quality of Foreign Language Teaching According to Different Learning Environments and Different Learning Tasks, and Guide Students According to Their Aptitude [9]. Second Language Teaching Has Always Been Everyone's Endeavor to Explore More Practical and Effective Teaching Methods. in the New Era of Efficiency, Constructivist Views on Learning and Teaching Have Opened Up a New Path for Us [10]. This Paper Attempts to Explore the Relationship between Cognitive Differences of Learners and Second Language Acquisition from the Perspective of Constructivism Learning Theory.

2. Types and Characteristics of Cognitive Styles of Learning Subjects

Constructivism Holds That Learning is a Process in Which Individuals Actively Construct Meaning through Interaction with the Environment on the Basis of Existing Knowledge and Experience. Learning Activity is an Active Process. Each Learner Encodes New Information Based on His or Her Original Experience System, and the Original Knowledge is Adjusted and Changed Due to the Entry of New Experience. Therefore, the Learning Process is Not a Simple Input, Storage and Extraction, But a Two-Way Process between Old and New Experiences [11]. the Research of Modern Cognitive Psychology Shows That the Information in Long-Term Memory is Stored in the Form of Visual Representation and Verbal Representation. People's Perception and Understanding of All Things in the World Have Different Cognitive Styles. These Cognitive Styles Are Different. According to These Differences, Two Different Cognitive Styles Can Be Divided: Field Dependence and Field Independence. for Example, When Evaluating Oneself or Others, When Responding to Environmental Stimuli, They Are Often Influenced and Interfered by External Factors. When Dealing with and Solving Problems, It is Easy to Ignore the Specific Factors of the Problem and Be Guided and Controlled by the Overall Perceptual Characteristics.

Students Are the Main Body of Information Processing and the Active Constructors of Meaning, Emphasizing Students' Active Exploration of Knowledge, Active Discovery and Active Construction of the Meaning of Learned Knowledge. on the Whole, the Hypothesis Model of the Relationship between Foreign Language Learner Corpus and Learning Effect Agrees with the Observed Data. Each Path Coefficient of the Path Model Has Significant Significance. Figure 1 is a Path Analysis Model of Effective Foreign Language Learning Environment Construction Dimension and Learning Effect.

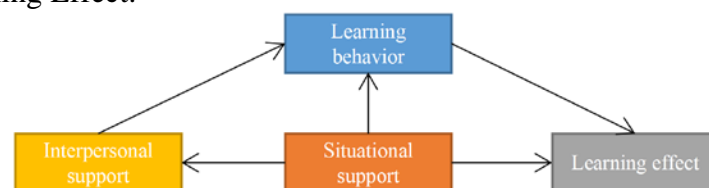


Fig.1 Path Analysis Model

By analyzing the whole, the vision is broadened, and the research on various cognitive styles and their relationships is more comprehensive and in-depth. It helps us grasp the nature of cognitive styles and the relationship between cognitive styles and foreign language teaching. Generally speaking, people can use two methods to encode at the same time, but some people tend to use one of them to store information. The visual imager is the person who thinks in the main way [12]. The difference in people's acceptance and generalization of things in the objective world has led to a cognitive tendency towards tolerance and rejection. These two different ways of cognition are the tendency of individuals to classify things too wide or too narrow. Advanced learning requires students to be able to apply the knowledge they have learned widely and flexibly to specific situations. Teaching is mainly based on guiding students to understand the knowledge. On the whole, even when perceiving individual information, it is easy to be influenced by the overall perceptual background. Information processing tends to be based on abstract analysis, good at analyzing things and problems, and easy to distinguish parts from the whole. The role of teachers in the classroom is the tutor of students' learning, the designer of real learning environment, the comprehender of students' learning process and the cooperator of students' learning, not the teacher

and indoctrinator of knowledge.

3. Enlightenment of Cognitive Style Differences on Foreign Language Teaching

The characteristics of field-dependent students are that they are weak in independent self-study and have unique advantages in memorizing learning materials. Teachers should always emphasize and highlight the key points of learning in teaching and give specific guidance to prevent students from memorizing by rote. Teachers should try to avoid severe criticism and criticism in public and point out their shortcomings in the form of encouragement and expectation. Teachers' understanding of and respect for learners' cognitive styles can organically link their teaching characteristics with students' needs and establish a good teacher-student relationship. The characteristics of field independent students are that they are good at independent thinking and personal study, and can make learning plans according to personal reality. Teachers should give full play to their advantages, provide sufficient self-study materials, give more time and space for self-study and thinking, and conduct periodic inspections and guidance. Constructivists advocate that the teaching objectives should be analyzed first in the teaching process, and the teaching objectives of the whole course and each teaching unit should be analyzed to determine the current teaching theme.

An excellent language learner should flexibly and alternately use cognitive styles suitable for occasions and language tasks according to different learning objects and tasks. Teachers can urge students to change their styles through various means in teaching to make up for the deficiency of cognitive style. Learning behavior, interpersonal support and situational support are also significantly positively correlated with learning effect. This shows that the three dimensions are all correlated with the learning effect, further reflecting the higher internal consistency reliability of the overall scale. As shown in table 1.

Table 1 Correlation Analysis Results of Effective Learning Environment Construction Corpus

	Learning behavior	Interpersonal support	Scenario support	Learning effect
Learning behavior	1	0.647	0.714	0.642
Interpersonal support	0.682	1	0.578	0.577
Scenario support	0.746	0.626	1	0.646
Learning effect	0.726	0.585	0.649	1

A foreign language culture test is conducted on non-foreign language major students in colleges and universities in order to understand their cognitive differences in cross-cultural communication. The subjects have taken the college foreign language proficiency test before taking this test, so it is possible to make a comparative statistical analysis of their language test results and social and cultural test results. The main statistical data of sociocultural and language tests are shown in Table 2.

Table 2 Statistics of Social Culture and Language Test

	Social culture test	Language testing
Highest score	73	90
Lowest points	27	62
Average score	55	71
Standard deviation	5.62	6.23

In order to give every student the opportunity to express himself, in the second language teaching, teachers should design more group discussions or debates. Constructivists pay special attention to maintaining students' continuous interest in learning. This requires teachers not only to make full use of the advantages of the language environment in this short class, to give students the opportunity to play independently in practice, but also to stimulate their greater enthusiasm for learning and satisfy students' sense of achievement in learning. It should be noted that a cautious attitude should be taken to change students' cognitive style. If students are forced to change their emphasis on cognitive style, it will damage students' self-image and lead to their alienation from schools and teachers. As far as teachers are concerned, it is important to respect each student's cognitive style and to encourage students to learn, develop and pursue in their own unique ways on

the premise of clear goals and evaluation criteria. In class is the guidance of extracurricular, students in the classroom to learn the sentence will eventually be used in life. Teachers can make full use of students' spare time life and let them communicate with others with problems by properly arranging homework in combination with teaching contents. Because the traditional teaching method overemphasizes the accuracy and ignores the fluency, the students' communicative ability is too poor, but the traditional teaching method can not be abandoned. It should be noted that since all researchers use dichotomy to classify cognitive models, it is inevitable to cover the whole with partial approach, which can not really reflect the richness and complexity of human cognitive style. Teachers should treat learners with different cognitive styles differently, improve teaching methods, teach students according to their aptitude and improve teaching quality.

4. Conclusion

Modern foreign language teaching research pays more and more attention to the subject status and individual differences of foreign language learners in the learning process. Cognitive style research is a specific aspect of individual differences. In recent years, the research on second language acquisition has developed rapidly. With the deepening of the research in this field, people are increasingly aware of the need to organize truly effective language teaching and optimize the teaching process. Information processing tends to be carried out on the basis of abstract analysis, is good at analyzing things and problems, and is easy to distinguish part from the whole. Although the research on cognitive psychology and psycholinguistics has achieved fruitful results, the research on cognitive style in foreign language teaching is characterized by complexity and diversity. Students are the main body of information processing and the active constructors of meaning, emphasizing the students' active exploration, active discovery of knowledge and active construction of the meaning of knowledge. Like other factors, cognitive style has an important influence on foreign language teaching. Therefore, it is a new topic for foreign language teachers and foreign language workers to explore and solve to conduct a comprehensive and in-depth study of various cognitive styles in foreign language learning, and apply the research results to practical teaching, guide and cultivate students' correct cognitive styles, so as to promote foreign language learning.

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