A Comparative Study of General Secondary School Students’ Perceptual Learning Styles in the Czech Republic and the People’s Republic of China

Master’s Thesis

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Declaration

Hereby I declare that I worked on this thesis on my own and used only the sources listed in the bibliography.

I agree that the thesis be placed in the library of the Faculty of Education of Masaryk University in Brno and made accessible for study purposes.

Brno 30th March 2019

Meichen Zhang
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Abstract

In recent years, the focus of the foreign language learning research has been gradually shifted from the perspective of teachers to students. And researches show that in the process of foreign language learning, individual differences among different students is one of the key factors which could have a great influence on the success in class. As an important component of students’ individual differences, perceptual learning styles has attracted more and more attention from foreign language teachers and researchers.

Based upon the general secondary school subjects from the Czech Republic and People’s Republic of China, this thesis investigates their perceptual learning style preferences. The first two objectives of the research are to identify the perceptual learning style preferences of Czech subjects and Chinese subjects respectively. Then the similarities and differences between subjects from these two countries are supposed to be concluded. And finally, this thesis also aims to make relative suggestions as to how to apply the results of the research into foreign language learning and teaching.

There are altogether six chapters in this thesis. Chapter One begins with the background introduction, objectives, significance and structure of this research. In Chapter Two, the literature review which includes the perceptual learning style theory and related theoretical support are presented. Chapter Three compares the culture backgrounds and education systems between the Czech Republic and People’s Republic of China. Chapter Four puts forwards the research purposes, questions, methods and data collection procedures. Results and discussion of the comparative research are provided in Chapter Five. Chapter Six concludes the whole thesis and suggests directions for further study in this area.

Results show that in terms of perceptual learning style preferences, there are similarities and differences for subjects from different cultural backgrounds. Both Czech and Chinese subjects show a variety of perceptual learning style preferences. The majority of Czech and Chinese participants choose the auditory learning style as
their major learning style and the visual learning style as their minor one. However, the most obvious difference between subjects from these two countries is that more Czech students prefer to work individually while more Chinese students enjoy working with others. This results are consistent with Hofstede’s cultural dimensions theory.

Concluded from the results and discussion of the thesis, foreign language teachers and learners are encouraged to become aware of the vital importance of perceptual learning style preferences. It is also recommended to match teachers’ teaching styles with students’ perceptual learning styles. In order to create the harmony between teachers and students in foreign language class, teachers could provide students with various learning materials or divide students into different groups according to their preferences and students are also encouraged to actively matching their learning preferences with their teachers’ teaching styles.

**Key words**: general secondary school students; perceptual learning style preferences; visual; auditory; kinesthetic; tactile; individual; group; foreign language learning and teaching; culture background; education systems; comparative study; the Czech Republic; People’s Republic of China
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Chapter 1 Introduction

1.1 Background of the study

Over the past decades, more and more attention has been paid to education and as a result, it has been developed tremendously. It is widely known that more and more researchers begin to realize the vital important of individual differences among different learners. Many researchers stated that it could be different if people are aware that there can be various methods to approach teaching and learning.

In 2004, Cassidy mentioned that research in the area of learning style could date back to around four decades ago. Although learning styles has become popular with the public especially since the late 20th century, there is general acceptance that the definition of the term is not straightforward. According to Kolb (1981), “Learning styles represent preferences for one mode of adaptation over the others; but these preferences do not operate to the exclusion of other adaptive modes and will vary from time to time and situation to situation” (p. 290). Reid (1987) illustrated “perceptual learning styles refers to the variations among learners in using one or more senses to understand, organize, and retain experience” (p. 89). It is of little wonder that there are many learning style models and instruments, such as Kolb’s Experiential Learning Model and his Learning Styles Inventory, Honey and Mumford’s Learning Style Questionnaire and so forth. In 1987, Reid constructed Perceptual Learning Style Preference Questionnaire for non-native speakers in the United States to determine students’ preferences.

A large number of studies show that it is valuable to identify what type of learning styles the learners prefer. Dunn (1984) demonstrated that learners were able to largely precisely identify the learning styles they prefer. There is evidence that when the learners are taught in their preferred learning styles, their motivation, performances and achievements will be enhanced. Becoming aware of students’ learning characteristics is meaningful to both students and teachers. On the one hand, learners might consciously choose their preferred learning methods and environment after realizing
their own learning styles and on the other hand, teachers could help learners study more efficiently and give them enough room to develop their potential.

The more important thing in foreign language teaching is to know the factors which contribute to the success of learning and how to create them in teaching process rather than what should be taught and how to teach. In other words, language teachers are supposed to shift their attention from the curricula, teaching resources and teaching methods to the learners. It could be found that students learn in different ways. For example, some students can learn better by seeing which means they can understand and remember information better if they read a book or notes from lectures. However, some learners are more sensitive to listen so they might achieve better if they have more opportunities to hear audiotapes, lectures and discussions. In addition, some prefer to be physically involved in classroom experiences, such as role-playing and so on. There are still some students learn best if they have chances to do their own experiments and projects. And some of them would like to work in groups while others want to have more time to study alone.

The Czech Republic in Europe and the People’s Republic of China in Asia are two countries with different cultural background. By using Hofstede’s cultural dimension model, it is not difficult to find that there are obvious differences between the two cultures, especially in dimensions of power distance, individualism and uncertainty avoidance. Since education is an important part of culture, it is impossible for educators and researchers to neglect the differences in education systems between these two countries. For instance, in the control of educational processes and outcome, the Czech Republic is more decentralized compared with China.

English is not the mother tongue for both Czechs and Chinese. It is widely accepted that English is such an important language so it is taught in both the Czech Republic and China. In these two countries, besides being taught in public and private schools, an increasing number of one-on-one lessons are provided in many language companies as well. Teachers from the two nations began to realize the influence of individual differences, especially learning styles, when students learn foreign languages.

It is worth mentioning that the elementary or compulsory education takes nine
years both in the Czech Republic and China, usually from the ages of 6 to 15. Additionally, students have the option to apply for gymnasiums after their elementary education in the Czech Republic and similarly, children can apply for general secondary schools after the compulsory education in China. Thus, there are parallels between education in Czech gymnasiums and general secondary education in China. There have been studies on learner’s perceptual learning style by using Reid’s Perceptual Learning Style Preference all over the world but very few researches have been carried out to compare senior high school students’ perceptual learning styles in the Czech Republic and the People’s Republic of China. This research is one of the proceedings of previous studies concerning senior high school students’ perceptual learning styles. Additionally, this thesis focuses on general secondary school learners from the Czech Republic and the China and attempt to investigate the differences between them, which is expected to be helpful and useful for both teachers and learners from these two countries in the process of English teaching and learning.

1.2 Significance of the study

There is no doubt that nobody is born with his or her learning style and actually, it is developed gradually in the learning process. Practically, the research is supposed to help teachers and students realize the individual differences in perceptual learning styles. From the perspective of teachers, it is vital to identify and understand how students prefer to learn. Thus, teachers can choose appropriate methods to motivate learners, present information and teach more efficiently. According to Cassidy (2004), identifying the learning style preferences of nonnative speakers had a great influence on curriculum design, materials development, student orientation, and teacher training. As for students, being aware of their individual perceptual learning styles could help them use proper learning strategies in the process of learning and cultivate the awareness of autonomous learning. What is more, Reid (1987) suggested that future research projects were encouraged to replicate the original study and additional refinement of student variables and subgroups would extend the research. Additionally,
translation of the questionnaire was mentioned as well. Thus, theoretically, the study aims to enrich the perceptual learning style theory by using Reid’s Perceptual Learning Style Preference Questionnaire (PLSPQ).

The Czech Republic and the People’s Republic of China are two countries far away from each other so it cannot be neglected that there is huge cultural difference between these two nations. In 1987, Young described it was proved that students from different cultural groups showed certain learning styles. Moreover, in 1990, Melton pointed out that English learners from different language backgrounds showed different perceptual learning styles. Under the background of globalization, English language teaching is so prominent that there are more and more English teachers and students around the world. The communicative language teaching is becoming increasingly important nowadays. Gonzalez (1977) urged bilingual teachers to identify individual differences and employ various approaches to achieve interaction. In this case, this paper aims to find out the differences between Czech and Chinese general secondary school students in terms of perceptual learning styles. By bridging this gap, it is expected that this research could be useful for English teachers and learners in these two nations.

To sum it up, the objectives of the study are as follows:
(1) To identify and describe the perceptual learning style preferences of the Czech general secondary school students.
(2) To identify and describe the perceptual learning style preferences of the Chinese general secondary school students.
(3) To find the differences between Czech and Chinese general secondary school students in terms of perceptual learning styles preferences.
(4) To attempt to find the relations between students’ perceptual learning style preferences and their culture background.
(5) To help English teachers understand the importance of identifying students’ perceptual learning styles and to give relevant teaching suggestions.
(6) To help English learners understand the importance of identifying their own perceptual learning styles and to give relevant learning advice.
1.3 Structure of the thesis

This thesis consists of six chapters. Chapter One is the general introduction of the research which includes the background information, objectives and significance, structure of the thesis. Chapter Two is the literature review part in which the Perceptual Learning Style theory and related theoretical support for the study are presented. Chapter Three introduces the differences in culture and educational systems between the Czech Republic and the People’s Republic of China. The fourth and fifth parts are the main body of the research. Chapter Four focuses on the design of the study, including research purposes, questions, methods and data collection. Chapter Five aims to analyze and discuss the data and findings from the research. Last but not the least, there are conclusion and limitation of the study in Chapter Six and recommendations for further research are discussed as well in the final part.
Chapter 2 Literature Review

2.1 Learning style

Although the origin of learning style might date back to much further, Herbert Thelen put forward the concept of learning style for the first time to illustrate learners’ individual needs in 1954. He also mentioned that students’ learning experience was a complicated process because it involved thoughts, feelings, actions, emotions and desires. Since then, there have been more and more theories and models which made great contribution to the development of learning style. However, based on the wide range of learning style’s definitions, what could be found from previous literature is that the definition of the term is not straightforward. In 2006, Wang stated that the phenomenon was understandable because the learning style involved many elements, such as perception, cognition, conceptualization, affect and behavior. And he specified that its definitions could range from concerns about preferred sensory modalities to cognitive-information-processing patterns. In other words, different researchers study the term from different perspectives.

According to Keefe (1979), learning style was defined as “the characteristic cognitive, affective and physiological traits that serve as relatively stable indicators of how learners perceive, interact with and respond to the learning environment. Learning style is a consistent way of functioning, which reflects underlying causes of behavior” (p. 4). Kolb (1981) believed “Learning styles represent preferences for one mode of adaptation over others; but these preferences do not operate to the exclusion of other adaptive modes and will vary from time to time and situation to situation” (p. 290). Honey and Mumford (1992) defined learning style as “a description of the attitudes and behavior which determine an individual’s preferred way of learning” (p. 1). For Vermunt (1996), learning style was “a coherent whole of learning activities that students usually employ, their learning orientation and their mental mode of learning” (p. 29).

In 1995, Kinsella suggested the elements of learning style could be classified into five stimulus categories: environmental elements (sound, light, temperature, and
design), emotional elements (motivation, persistence, and responsibility), physical elements (perception, intake, time, mobility), sociological elements (self, partner, team), and psychological elements (global/analytical, impulsive/reflective). Wang (2006) emphasized the learning style was multidimensional because it involved three domains which were cognitive domain, affective and physiological domains.

2.2 Learning style models

Since researchers study the learning style from different perspectives, there are various models as well. Nevertheless, it is impossible to cover all influential views on learning style models in this thesis so only some of them will be discussed in detail in the following.

2.2.1 Dunn and Dunn’s model and instruments of the learning style

Rita Dunn who was the professor at St John’s University and Kenneth Dunn, the professor from City University of New York, began to study the learning style in 1960s because of the New York State Education Department’s concern for poorly achieving learners. (Coffield, Moseley, Hall, & Ecclestone, 2004) Inspired by her early teaching experience with children at schools and students who had learning difficulties, Rita Dunn became interested in individual learner’s reactions to different stimuli and conditions. What is more, “she believed that students’ preferences and learning outcomes were related to factors other than intelligence, such as environment, opportunities to move around the classroom, working at different times of the day and taking part in different types of activity” (Coffield et al., 2004, p. 20). It is believed that their model is user-friendly which covers motivational factors, social interaction, physiological and environmental elements.

Carried out their research at St. John’s University, the Dunns were the first researchers to make it possible in the campus in the United States. Moreover, the model has become increasing popular not only in America but also in many other counties, like Australia, Bermuda, Finland, Denmark, Sweden, Singapore and so on. The Dunns
has spent more than 35 years to develop research programs in order to improve their learning style model. And over 25 years, Dunn and Dunn produced many instruments, such as the Dunn and Dunn Learning Styles Questionnaire (LSQ) in 1979, the Dunn, Dunn and Price Productivity Environmental Preference Survey (PEPS) in 1996, the Building Excellence Survey (BES) in 2002, to name a few. It is worth mentioning that this model affirms preferences and does not depreciate different preference types. Supporters for the model claimed it had high reliability and validity while critics argued there were problems with its design and the evidence for its validity was not convincing. In addition, Yu (2011) stated that the Dunns’ model was too general so it cannot be used to measure the language learning style.

2.2.2 Kolb’s Experiential Learning Model and Learning Style Inventory (LSI)

David Kolb, the professor at Case Western Reserve University in the US, is well known for launching the modern learning styles movement in the year of 1984. His interests focus on the experiential learning theory. Kolb (1976, 1984) believed the process of learning was a four-stage learning cycle, including active experimentation (AE), reflective observation (RO), concrete experience (CE) and abstract conceptualization (AC). Built upon his Experiential Learning Model, Kolb (1984) described there were four types of learners: converger, diverger, assimilator and accommodator.

As first, the converger refers to people who prefer abstract conceptualization and active experimentation. They are best at solving problems and handling technical problems. But this type of learners is less attracted to interpersonal issues. Secondly, the diverging learning style focuses on concrete experience and reflective observation. Divergers are imaginative and able to view situations from different perspectives. Compared with taking action, they prefer observation and they are usually interested in people and gathering information. Thirdly, the assimilating style emphasizes abstract conceptualization and reflective observation. Assimilators pay more attention to abstract concepts than people and they value concise, logical ideas. In addition, they
accommodation style rely primarily on concrete experience and active experimentation. Accommodators appreciate new experiences and they like carrying out plans. Intuition is of vital importance to them. However, sometimes, they are thought to be impatient.

Since different people prefer different learning style, Kolb (1999) mentioned people can benefit from others through the appreciation of differing learning styles. The Learning Style Inventory (LSI) which is the instrument to assess individual orientations towards learning has three versions and these versions appeared in 1976, 1985 and 1999 respectively. The experiential learning theory has wide implications in education and LSI has been translated into many other languages, such as Chinese, Italian, Spanish, Swedish, French and so on. It is believed that over 30 years of critique have helped to improve the reliability the LSI. Nevertheless, critics pointed out it had low predictive validity.

2.2.3 Honey and Mumford’s Learning Style Questionnaire (LSQ)

In 1970s, Alan Mumford invited Peter Honey to join him in investigating how managers learn. Base on Kolb’s Learning Style Inventory (LSI), Mumford and Honey spent four years to improve it and the Learning Style Questionnaire (LSQ) was created finally in 1982. The difference between these two instruments is that Honey and Mumford tried to study people’s general behavioral tendencies instead of asking people directly how they learn. Moreover, according to Mumford (1987), the LSQ helps people “improve their learning processes, not just diagnose them” (p. 59).

In 2000, Honey and Mumford put forward the four dimensions of the learning cycle, consisting of activist (having an experience), reflector (reviewing the experience), theorist (concluding from the experience) and pragmatist (planning the next steps). To begin with, being flexible and open-minded, activists are people who like changes and they usually learn by doing, like playing role-play and solving problems. What is unavoidable for them is that they sometimes take unnecessary risks and do not prepare adequately. As for reflectors, they perform better in listening to others and assimilating
information. These learners are thoughtful thus they prefer to look at experiences from different perspectives. On the other side, it might take a long time for reflectors to make a decision and they could have the tendency to be too cautious. Additionally, theorist refers to those logical thinkers and they are better at understanding the theories behind the actions. In their learning process, they pay more attention to systematic models, concepts and facts. As a result, these learners have low tolerance for ambiguity and intuitive ideas. Pragmatics are practical and realistic learners who are eager to put what they learn into practice. They treasure discussions and case studies but they tend to be impatient with theories and principles.

LSQ is popular with people around the world because it could help them devise personal development plans. However, critics argued Honey and Mumford did not assess the validity of LSQ and there was only moderate internal consistency in it.

2.3 Perceptual learning style

It is not difficult to notice some people prefer to learn through seeing pictures to help them understand new ideas while there are some learners favor learning by hearing others, such as teacher’s instructions and class discussions. A large quantity of studies prove that different people learn through different senses. In 1995, Reid argued the learning style could be divided into three major categories, including cognitive learning style, sensory learning style and personality learning style. Lincoln and Rademacher (2006) explained sensory or perceptual learning style could show the physical senses which were preferred by the students when they acquire and process new information or learn new skills.

Reid (1987) supported perceptual learning style was “the variations among leaners in using one or more senses to understand, organize, and retain experience” (p. 89). Aimed to assess language learners’ preferred learning style in terms of their senses, Perceptual Learning Style Preference Questionnaire (PLSPQ) was developed by Reid and it is supported by many researchers. For example, Gilakjani (2012) evaluated that PLSPQ was easy to administer, interpret and complete because it was scored by learners
themselves rather than some external agent and it had reliability and validity. According to Reid (1987), language learners were classified into six types from the perspective of perceptual learning style. Additionally, relevant activities are suggested by other scholars.

(1) Visual major learning style preference

These learners are able to quickly process the information they see compared with others. They can learn better if they have more opportunities to see new information in books or on the board. Researchers conclude these students can often learn more when they work alone with a book and take notes from lectures. Students can keep journals of class and highlight important points in order to remember new information and teachers are encouraged to provide learners with reading resources and handouts.

(2) Auditory major learning style preference

Learners who prefer auditory learning are more sensitive to listening and they benefit most when they hear audiotapes, lectures, and class discussions. They have potential to perform well on oral exams. Teachers can give students more chances to make conversation and discuss in class and lectures are useful for them as well. Students could find more listening exercises for themselves to practice and peer tutoring is suggested as well.

(3) Kinesthetic major learning style preference

This type of learners learn best by being involved physically in the learning process. They learn better when they actively participate in activities, such as charades, filed trips or role plays. Teachers are recommended to present problem solving tasks in class as well. Students might find it is helpful to teach others the material.

(4) Tactile major learning style preference

As for tactile learners, they benefit from hands-on experiences with materials, such as doing experiments in a laboratory, building models and so on and so forth. Teachers could make tactile learners attempt to make or build things, or put things together. Writing notes or instructions is helpful for students to remember information and a variety of physical involvement activities in class may help them understand new information.
(5) Group major learning style preference

Group learners work more efficiently when they learn with at least one other student. The stimulation they receive from other group members could help them process new information. Teachers are supposed to create more group work chances for this type of learners in class.

(6) Individual major learning style preference

Unlike group learners, individual students prefer to work alone. They will learn more successfully and make better progress when they learn by themselves. In this case, individual work is more necessary than working in pairs or groups.

2.4 Researches into perceptual learning style for EFL and ESL students

In 1977, Gonzalez encouraged teachers in language classrooms to identify students’ variables and take different methods to achieve interaction. According to Reid (1987), the learning process could be more successful if the teachers used different kinds of teaching styles and the students had the awareness of their own learning style preferences.

The original research into perceptual learning style for ESL (English as a second language) students was conducted by Reid in 1987 by using PLSPQ. In the research, Reid (1987) concluded that the majority of ESL students in the US strongly preferred kinesthetic and tactile learning styles. In terms of the gender variable, males preferred visual and tactile learning than females. Reid also demonstrated that ESL learners with different language backgrounds could show different learning style preferences. For example, compared with other ESL leaners, Japanese speakers were significantly different in their learning preferences. Arabic, Chinese and Korean learners tended to show multiple major learning style preferences. Chinese speakers chose auditory learning as one of their major learning styles but Thai, Malay and Spanish students showed the auditory learning as a minor learning style. It was surprising to find all the speakers who participated in Reid’s research did not show strong preferences for group and individual learning.
Since then, more and more studies which focus on EFL/ESL students’ perceptual learning style have been conducted in different countries around the world. The first perceptual learning style study in China was conducted by Reid as well. There were altogether 90 Chinese EFL students and the findings were Chinese EFL learners prefer a variety of learning style preferences. Another research was by Melton (1990), he concluded Chinese learners preferred kinesthetic, tactile and individual learning styles. Visual and auditory learning styles were their minor styles while group learning was relatively negative. In 1993, Hyland stated Japanese students favored auditory and tactile styles. The visual and group styles were not popular among the students. Peacock (2001) reported that Chinese EFL students favored kinesthetic and auditory learning styles and disfavored group and individual styles. In 2011, Gillakjani investigated the perceptual learning style of 100 Iranian EFL students and it showed around half of them preferred visual learning style while about a third of them preferred auditory learning style. In addition, the kinesthetic learning style is the major one for 15 students. With the aim of bridging the culture gap, this thesis would compare senior high school students’ perceptual learning styles between the Czech Republic and the People’s Republic of China.
Chapter 3 Differences between the Czech Republic and People’s Republic of China

A clear comprehension of differences of culture and education systems between the Czech Republic and People’s Republic of China could enhance the understanding of individual’s learning style preferences. Thus, this chapter is devoted to discuss the differences between Czech culture and Chinese culture and differences about education systems between these two countries as well.

3.1 Cultural differences

It is widely accepted that culture is complex and multidimensional. In 1953, Kroeber and Kluckhohn concluded more than 160 different definitions of culture. And one of the earliest definitions was given by Tylor in 1881, “that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society” (p.1). In 1985, Terpstra and David defined the term from another perspective, “Culture is learned, shared, compelling, interrelated set of symbols whose meaning provides a set of orientations for members of a society. These orientations, taken together, provide solutions to problems that all societies must solve if they are to remain viable” (p.5). Hofstede (1987) stated that culture was “collective programming of the mind” (p.1). According to Fan (2000), culture could be defined as “the collection of values, beliefs, behaviors, customs, and attitudes that distinguish a society” and the society’s culture “provides its members with solutions to problems of external adaptation and internal integration” (p.3).

The Hofstede’s cultural dimensions theory was created by Geert Hofstede. The aim of the framework was to understand the cultural differences across countries. There are six dimensions in Hofstede’s cultural dimensions model, including power distance, individualism, masculinity, uncertainty avoidance, long term orientation and indulgence. The Czech Republic and People’s Republic of China which locate in
Europe and Asia respectively, are two nations far away from each other. By using Hofstede’s cultural dimensions model, it is obvious to find the cultural differences between these two countries, especially in dimensions of power distance, individualism and uncertainty avoidance.

![Figure 1. Cultural differences between People’s Republic of China and the Czech Republic.](image)

### 3.1.1 Power distance

Power distance is a measure of the power between the superior and the subordinate. Hofstede (2011) mentioned that power distance had been defined as “the extent to which the less powerful members of organizations and institutions (like the family) accept and expect that power is distributed unequally” (p. 9). People from high power distance countries do not question the authority very often while individuals from low power distance countries have a relatively low tolerance for social inequalities. For example, teacher-centered education is more common in high power distance countries.

As Figure 1 above, what could be found is that in China, the power distance is markedly larger than in the Czech Republic. It is believed that Confucianism is one of the most influential thoughts in China which forms the foundation of Chinese traditions and still has significance for individual behaviors today. The basic teaching of Confucianism is the Five Constant Virtues consisting of humanity, righteousness, propriety, wisdom and faithfulness. What is more, Confucianism regards the Three Principles as the basic methods to manage the society which includes ruler guiding
subject, father guiding son and husband guiding wife. It is of vital importance that individuals take on their own responsibilities and make contribution to the society. In Chinese society, it is not difficult to find that older people are respected and parents teach children obedience. And teachers have authorities in class as well.

In 1996, Thorpe and Pavlica conducted a discourse analysis in the Czech Republic and found that Czech managers thought they were powerful in the teams. On the other hand, Kruzela (1995) demonstrated that the equal attitude was a characteristic of the Czech society. What should be noticed is that inequality is universal and it exists within any culture. The difference is the extent to which it is accepted.

3.1.2 Individualism

According to Hofstede (2011), individualism or collectivism was “the degree to which people in a society are integrated into groups” (p. 11). In individualist societies, people pay more attention to themselves and their immediate families while people in collectivist societies value interpersonal relationships and their clans.

As the figure suggested, China is a highly collectivist culture compared with the Czech Republic. Chinese society places more emphasis on collective interests which encourages people to sacrifice their personal interests if there is any conflict or inconsistency. Harmony is a crucial value for Chinese society. For example, the word “country” in Chinese consists of two Chinese characters which means “state” and “home”. The whole country always goes before the individual home and Chinese people believe the country is the largest home for every citizen. But it is worth mentioning that the younger generation is becoming increasingly individual in the context of globalization.

The individualistic nature of the Czech society is described by Kruzela in 1995. Kruzela added one of the proofs was the Husite movement happened in the fifteenth century. And the leader of the movement, Jan Hus, placed importance upon individual rights and responsibilities. The individualism is also characterized by general loosening of family ties. The social welfare system helps the older generation decrease their need
of the material support from their adult children in the Czech Republic.

3.1.3 Masculinity

In 2011, Hofstede explained masculinity and femininity referred to “the distribution of values between the genders which is another fundamental issue for any society” (p. 12). In masculine countries, people value competition, achievement and success. But people from feminine countries emphasize the quality of life. Hofstede claimed the difference was the motivation for the society.

The figure shows both China and the Czech Republic are masculine societies, but the score of China is a little higher. In ancient China, the Three Obediences and Four Virtues had been the guidance for women over thousands of years. In the feudal society, the Three Obediences mean an unmarried women should obey her father then she had to obey her husband after the marriage and obeyed her sons in widowhood without any question. Moreover, the Four Virtues for women referred to the female virtues, words, appearances and work. It is undeniable that the principles still have small influences on Chinese female social status, especially in less developed areas. There is no doubt that the Chinese society is motivated by achievement and success. For instance, there are millions of people who work in the cities for the better payment but leave their families behind in faraway places.

Regarding the Czech Republic, Thorpe and Pavlica (1996) provided an explanation as to the masculine attitude of Czech managers who regarded themselves as “strong male individuals” (p. 222). Sioras and Spilling (2009) highlighted “In 2005, the average wage for women in the Czech Republic was 73 percent of men’s wage level. Czechs do not appear to challenge certain premises that influence and restrict any trend toward real gender equality” (p.79). In addition, it was suggested that Czech women also faced the threat of divorce. For example, the Czech statistical office showed the divorce rate was nearly 50 percent in 2008 and as a result, the women’s living standard decreased by 73 percent in average.
3.1.4 Uncertainty avoidance

Hofstede (2011) noted that the uncertainty avoidance dealt with the tolerance for ambiguity within a society and it “indicates to what extent a culture programs its members to feel either uncomfortable or comfortable in unstructured situations” (p. 10). People from uncertainty avoiding cultures tend to feel uncomfortable with the uncertain future and they attempt to control it. However, in countries with a low score on uncertainty avoidance, people are more comfortable with ambiguity.

It shows that the Czech Republic scores far higher than China in terms of uncertainty avoidance. In addition to Confucianism, the second major religion or tradition in China is Taoism. One of the most influential concepts of Taoism is Wuwei which could be understood as the attitude of letting things take their own course. Additionally, Taoism encourages humans to live in harmony with the nature because the nature could teach us the peace of mind which is beneficial to the health. From another perspective, the Chinese language is featured with its ambiguity. And the ambiguity feature is helpful for being polite and saving face.

Since the Czech Republic scores 74 on this dimension, it is suggested that the majority of Czech People value the feeling of security in life thus they are reluctant to take risks in order to avoid uncertainties. For example, a number of people would choose to stay in their jobs even though they often complain about the jobs.

3.1.5 Long term orientation

The long term orientation dimension was identified by Chinese researchers for the first time and it is becoming increasingly important in recent years with the development of economy. Those cultures which score high in this dimension emphasize thrift and perseverance. And those people are more pragmatic and provident. On the other hand, short-term oriented cultures attach greater importance to past and present.

Both countries tend to the long term orientation pole of the dimension, and China even more than the Czech Republic. Hofstede (2011) commented “the positively rated values of this dimension were already present in the teachings of Confucius from
around 500 BC” (p. 13). It could be inferred from the figure that both Czech and Chinese people are pragmatic in lives and they have strong awareness of thriftiness and perseverance.

3.1.6 Indulgence

The new dimension was added by Hofstede in 2010 and Hofstede (2011) explained indulgence “stands for a society that allows relatively free gratification of basic and natural human desires related to enjoying life and having fun” (p. 15). On the contrary, people from restrained cultures attempt to control their emotions and desires.

The low scores of these two countries imply that both Chinese and Czech people are generally not indulgent. They devote less time to leisure activities and this is especially true with Chinese people. The common ground for both societies is that they value social norms and rules. As the world’s fourth-largest religion around the world, Buddhism has a large number of followers in China and one of the crucial principles for Buddhists is Asceticism. Another characteristic for restraint cultures is that people are likely to have negative emotions. In 2012, Statistics showed that the Czech Republic is “the second most pessimistic nation on Earth” (Scott, 2013).

3.2 Comparison of Czech and Chinese education systems

As an element of culture, education is very crucial in different countries all over the world. In the majority countries and areas, every child has the right to education. Different education systems could be found in different countries in order to adapt to their national conditions.

3.2.1 Introduction to Czech education system

Czech education system is governed by the Ministry of Education, Youth and Sports. Figure 2 is the structure of the Czech education system concluded by Bačáková in 2017.
From the above figure, it could be easily found that Czech children start their education with kindergarten. In the 2017/2018 school year, it is compulsory for children to attend kindergartens in the last year before their elementary learning. According to Bačáková (2017), it is prescribed by the government that “Each municipality must ensure that all children with permanent residency and of the age of four are able to attend a kindergarten” (p. 6). The first two years of preschool education are not free while the last year of it is funded by the government. The new law in the Czech Republic specified children from the age of two were supposed to benefit from preschool education from the year of 2020. At this stage, children are supposed to learn to think in a logical way, improve their own memories and imaginations.

After the preschool education, children could receive education in elementary schools for nine years, usually from the ages of 6 to 15. The above figure shows there are two levels in elementary school education, consisting of the first level of five grades and the second level of four. During the nine-year compulsory education, public elementary schools are free of charge.

When students graduate from elementary schools, they can continue their studying by applying for secondary schools. There is the public entrance examination administered by the Ministry of Education, Youth and Sports. The exam is basically
from Czech language and Mathematics and applicants have two attempts. Compared with elementary education, secondary education offers students more options, including a general secondary school (gymnázium), technical schools (střední odborná škola), vocational schools (střední odborné učiliště) or a conservatory. (Bačáková, 2017). Although the secondary education is not compulsory for Czech students, the fact is that the overwhelming majority of them choose to continue their education. Among all the secondary schools, the general secondary school (gymnázium) is the most academic one because part of its aim is to prepare students for universities. And there are three types of general secondary schools which normally take four years, six years and eight years respectively. Students who study in the four-year general secondary schools are at upper secondary level since they have finished their compulsory education before and it is the most common one in the Czech Republic. The other two multi-year general secondary schools cover the end of compulsory education in their junior years and the eight-year one is more common than the six-year one. At the end of their studies, students who study at secondary schools would take the Maturita Exam which is a state exam managed by the Ministry of Education, Youth and Sports. The basic structure of the exam for all secondary schools is common but the details vary according to the specific secondary school. The majority of students take this school leaving exam because it is a crucial prerequisite for admission to universities or tertiary professional schools and it is important for students’ working career as well.

After graduating from secondary schools, students can apply for universities to pursue the Bachelor degree which usually lasts for three years and then there are Master and Doctoral programs as well. In addition, graduates from secondary schools are also allowed to continue their studying in tertiary professional schools. Compared with universities, tertiary professional schools are more practical and the studying is usually for three years. The title for tertiary professional school graduates is Dis.

**3.2.2 Introduction to Chinese education system**

As one of the largest education systems in the world, the education system in China
is managed by the Ministry of Education. In 2014, National Bureau of Statistics of China reported that there were nearly 260 million students and more than 15 million teachers in the whole of China. Figure 3 is the structure of the Chinese education system from Organization for Economic Cooperation and Development (OECD) in 2016.

In China, children are usually enrolled in kindergartens when they are two or three years old and finish their preschool education at age of five or six. Since preschool education is not compulsory for children, parents need to pay for it and a large number of kindergartens are privately owned.

The compulsory education in China lasts for nine years which includes primary and junior secondary education. Most children begin their primary education at age of six and finish their compulsory education when they are 14. The compulsory education is free of charge. Before the 1990s, the students were admitted into the schools on the basis of an entrance examination. However, in order to emphasize the compulsory nature of the education during this period and promote education equality, the enrollment for junior secondary schools is based on an area of residence instead of the entrance examination after 1990s.

After the compulsory education, students have the right to decide whether to continue receiving education or not. The senior secondary education takes three years
in China and there are many different forms as well, including general senior secondary, technical or specialized secondary, adult secondary, vocational secondary and crafts schools. Before applying for senior secondary schools, students have to take the public examination which is organized by the local government named Zhongkao because the senior secondary schools enroll students according to their results. In 2015, National Bureau of Statistics of China stated that in the year of 2014, 95% of junior secondary graduates choose to continue their education.

When students graduate from senior secondary schools, there is the national college entrance examination called Gaokao. And it is usually organized by the provincial education authorities. It happens in June all over China but in most cases, the content of the examination is different among different provinces. Regarding the higher education, the admissions to undergraduate programs depend on their results of Gaokao while some students could be enrolled because of recommendations. In China, it normally takes four years for students to complete their Bachelor programs and two or three years for Master programs. Graduates then can apply for the Doctoral education programs. In addition to the Bachelor programs in universities and colleges, students can also choose to apply for tertiary or professional higher education programs which usually take three years.

3.2.3 Comparison of Czech and Chinese education systems

After the introduction to the structures of Czech and Chinese education systems, it is worth mentioning that these two systems share some common features but there are some differences as well.

3.2.3.1 Decentralization

During the past decades, the Czech Republic has experienced an extensive process of decentralization. According to Daun (2004), “In the mid-1990s, 76 school offices at the district were established and had some authority by delegation from the central level” (p. 339). Since the end of the 1990s, the education reforms have been more radical and
municipalities have had a relatively limited influence on education. The school councils which consist of representatives of school founders, parents and older students were established in 1995. Rýdl (2003) emphasized that Czech secondary schools were independent legal entities and universities owned academic freedom and had autonomy as well. Instead of being managing by the central government, Daun (2004) explained “School director have total responsibility for quality and effectiveness, the financial management of the school, recruitment of teachers and the relations with the municipality and other stakeholders” (p. 339). In a word, the trend of autonomy is an important characteristic of education reforms in the Czech Republic.

Compared with the Czech Republic, the education system is more centralized in China. Due to the vast territory and large population, there are many levels of education administration including the central government, provincial level, county level and township level. In 2016, there were 32 educational organizations and 75 universities which were directly managed by the Ministry of Education. The Ministry of Education is also responsible for designing the national education policies and strategies. There are different departments of education in different provinces and in the county level, there are bureaus of education that are in charge of education. The local education departments and bureaus are responsible for formulating and implementing local education policies. Although teachers have the freedom to develop their own courses according to relevant education policies, it could be noticed that the autonomy of schools is relatively limited.

3.2.3.2 Competition

In 2007, Straková claimed that the Czech education system seems to be very selective since the selection process started very early for children. Straková added “Czech students can take their first entrance examinations at the age of eight, when they apply for admissions to classes or schools with extended curricula of foreign languages” (p. 591). When students are eleven or thirteen years old, they could take the second examination in order to apply for the multi-year gymnázium. For students who
complete the compulsory education, Straková (2007) pointed out only 10% of them were admitted into gymnázium and 40% of them chose the secondary technical track.

The fierce competition is one of the characteristics of Chinese education system as well. The selective tradition for Chinese education could actually date back to thousands years ago. During the Xia dynasty (2070 BC-1600 BC), formal schools were established for the first time. In ancient China, the imperial examination system was established in the Sui dynasty (581-618). The imperial examination lasted over 1,300 years and the examination requirements were slightly different from dynasty to dynasty. The aim of the imperial examination was to select talented people across the country and the system had influenced East Asia even the whole world. In modern China, there are many important examinations for students as well. For example, Gaokao which refers to the national college entrance examination is one of the most important examinations for Chinese students. Statistics showed that there were more than nine million students who registered for it throughout China in 2018. Universities and vocational colleges enroll students according to their results of Gaokao so its competition is extremely fierce.
Chapter 4 Research design

To meet individual differences is one of the teachers’ responsibilities in the teaching process. Since the present research takes interest in general secondary school students’ perceptual learning styles in the Czech Republic and China, this chapter is devoted to present the purposes of the research, research questions, subjects of the research and the data collection methods respectively.

4.1 Purposes of the research

It could be observed from Chapter three that cultures and education systems are different in the Czech Republic and China. Thus it is acceptable if the students in these two countries show different types of major perceptual learning styles.

The official language of the Czech Republic is Czech which belongs to the Czech-Slovak group while the official language of China is Mandarin Chinese which is a branch of Sino-Tibetan language family. There is no doubt that English is a foreign language for both Czech and Chinese students. In the background of globalization, English is taught in these two countries and there are more and more language companies which provide English learners with one-on-one lessons. One of the reasons why one-on-one lessons are so popular recently is that students found they can learn more efficiently and their individual needs could be satisfied. In 1977, Gonzalez has already emphasized the importance of meeting individual differences in language teaching and various methods were encouraged to be employed in order to achieve interaction in the teaching process. Among all the differences of learners, the perceptual learning styles are worth studying for English teachers and students.

The number of international students whose lingua franca is English is steadily growing in recent years and many of them are from the Czech Republic and China. It could be found that there are very few comparative studies based on Czech and Chinese students’ perceptual learning styles. In order to fill in this gap, this research is aimed to
compare their perceptual learning styles which is supposed to be beneficial to both students and teachers in these two countries. As for students, they are able to purposefully choose their learning strategies according to their individual perceptual learning styles. Regarding teachers, by keeping students’ perceptual learning styles in mind, they could teach more efficiently and improve students’ motivation during the teaching process.

From the theoretical point of view, many researchers claimed that students from different language backgrounds exhibited certain perceptual learning styles so this comparative research is also devoted to study whether this opinion would apply to English learners in the Czech Republic and China. Since Reid (1987) also encouraged the further research on the replication of the perceptual learning style’s study by refining the subgroups, this research is supposed to enrich Reid’s perceptual learning styles theory as well.

4.2 Research questions

Since the present research focuses on the perceptual learning style characteristics of the Czech and Chinese subjects as well as the differences between them, the questions of this study could be concluded as follows:

1. What kind of perceptual learning style preferences will the Czech subjects have?
2. What kind of perceptual learning style preferences will the Chinese subjects have?
3. Will there be significant differences between Czech and Chinese subjects?
4. What are the implications of the perceptual learning style preferences for EFL learning and teaching in general secondary schools in both the Czech Republic and China?
4.3 Subjects

There are 284 general secondary school students who participated in the research. 171 students are from the Czech Republic and 113 students are Chinese.

4.3.1 Subjects from the Czech Republic

There are altogether 171 participants from the Czech Republic. Among all the students, 107 of them study at Šlapanice Gymnázium and 64 of them study at Cyrilometodějské Gymnázium. Both Šlapanice Gymnázium and Cyrilometodějské Gymnázium are prestigious general secondary schools in Brno in the Czech Republic. From the gender perspective, there are 83 boys and 88 girls and their ages range from 15 to 19. The details of the Czech subjects are shown in Table 1.

Table 1

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>83</td>
<td>48.5</td>
</tr>
<tr>
<td>Female</td>
<td>88</td>
<td>51.5</td>
</tr>
<tr>
<td>Total</td>
<td>171</td>
<td>100</td>
</tr>
</tbody>
</table>

4.3.2 Subjects from China

The Chinese subjects are from 113 students of two classes of Huantai No.2 general secondary school in Shandong Province. Among the 113 students, there are 68 boy participants and 45 girl participants. Their ages range from 15 to 18. The details of the subjects could be found in Table 2.

Table 2

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 4.4 Instruments

The instrument used in this research is Perceptual Learning Style Preference Questionnaire (PLSPQ) designed by Reid. Reid developed this questionnaire especially for foreign language learners. Based on this self-reporting questionnaire, students are able to assess their own perceptual learning style preferences. What is more, this questionnaire is relatively easier to administer and interpret. Gilakjani (2012) emphasized that the reliability and validity of the instrument was supported by many researchers.

In order to adapt to this comparative study, some modifications have been made to the original questionnaire. The questionnaire used in the present study consists of three parts. The first part is the introduction and directions of the questionnaire. The second section concerns learners’ personal details, including their age and gender. The third part which consists of 30 statements is the main body of the questionnaire. All the 30 statements cover six perceptual learning style preferences, including visual, auditory, kinesthetic, tactile, individual and group preferences. There are 5 questions for each type of perceptual learning style preference but these 5 questions are randomly arranged. Students are asked to consider every statement and then respond to it by using a five-point scale ranging from “strongly agree” to “strongly disagree”. For example, if the participant strongly agrees with the statement, he or she will choose the “strongly agree” which values 5 points. On the contrary, if the student strongly disagrees with the statement, the “strongly disagree” will be chosen by the learner and it values 1 point. After completing the questionnaire, all the points for each type of perceptual learning style preference would be added up and then multiplied by 2. If students score 38-50
points on one or more styles(s), this or these styles would be their major perceptual learning style preferences. If students score 25-37 points on one or more style(s), this or these styles would be their minor perceptual learning style preferences. The scores of the negligible perceptual learning style preferences are 0-24. For instance, statement 6, 10, 12, 24 and 29 are the five statements for visual learning style preference. If the student chooses “strongly agree” for all these five statements, then he or she would have 50 scores for the visual learning style preference which means that it is his or her major learning style preference.

4.5 Data collection

Since the present research is a comparative study between Czech students and Chinese students, the procedures of data collection were carried out in these two countries respectively.

4.5.1 Data collection in the Czech Republic

The questionnaires in paper were given to 171 Czech students at Šlapalice Gymnázium and Cyrilometodějské Gymnázium respectively in February 2019. Founded in 1993, Šlapalice Gymnázium is an eight-year general secondary school in Brno. The entrance examination for this school is a written test from mathematics and Czech language. And students complete their studies here by taking the school-leaving examination (Maturita Exam). One of the educational goals of Šlapalice Gymnázium is to prepare students for universities. The school’s target capacity is 260 students, with the class size of 30 students in each year. The first foreign language for students from this school is English and their second foreign language is German or French. In addition, this school is involved in many international projects so that students could have the opportunities to go abroad to open their minds. In order to collect more valid data, the author of this thesis went to Šlapalice Gymnázium in person and talked with the participants and their teachers. Students were very cooperative and it took students approximately 15 minutes to complete the questionnaires. After the questionnaires were
collected, a presentation about Chinese education system and Chinese culture was presented. Cyrilometodějské Gymnázium is one of the most prestigious Gymnáziums in Brno. And its history could date back to 1933. The school motivates students to develop their personality, study foreign languages, humanities, mathematics and other natural sciences. It reports that most students from this school have been accepted to universities. In addition, Cyrilometodějské Gymnázium cooperates with many international partners from France, Germany, Austria and so on. With the help of teachers in class, the subjects from Cyrilometodějské Gymnázium received clear instructions on how to fill out the questionnaires. And then all the questionnaires were collected and analyzed later.

4.5.2 Data collection in China

Founded in 1958, Huantai No. 2 general secondary school is one of the key general secondary schools in the county of Huantai. There are 48 classes and more than 3,000 students at the school. The school puts a special emphasis on the quality of teaching and aims to prepare students for universities. Compared with the procedures of collecting data in the Czech Republic, the procedures in China were different. In the first place, the Perceptual Learning Style Preference Questionnaire (PLSPQ) designed by Reid was translated into Mandarin Chinese considering the English language level of Chinese students. What is more, the online questionnaire was created by using SO JUMP in order to collect data more conveniently. The link of the online questionnaire was sent to the English teacher of the two classes at Huantai No. 2 general secondary school. Then the link was forwarded to students with the instructions and explanations from the teacher and 113 students completed the online questionnaires during their free time. Finally, the data were collected in February 2019.
Chapter 5 Results and discussion

In this chapter, the questionnaire results obtained from the Czech and Chinese subjects would be presented and interpreted respectively. Moreover, the third part of this chapter is the comparative discussion on the differences and similarities between the Czech and Chinese subjects. And the fourth part is supposed to offer relative ideas about English teaching based on the research results and discussion.

5.1 Results and discussion on the Czech subjects

As what has been mentioned in last chapter, there are altogether 171 participants from the Czech Republic and among all the subjects, there are 83 boys and 88 girls. It could be known from Chapter four that students’ perceptual learning style preferences could be marked by major, minor and negligible according to their scores of each perceptual learning style category. So the following results and discussion are presented from these three perspectives.

5.1.1 Major perceptual learning style preference results of the Czech subjects

Czech subjects’ major perceptual learning style preferences implied that they benefited most from these learning styles.

Table 3

<table>
<thead>
<tr>
<th>Style</th>
<th>Number of Subjects</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual</td>
<td>40</td>
<td>23.39</td>
</tr>
<tr>
<td>Auditory</td>
<td>80</td>
<td>46.78</td>
</tr>
<tr>
<td>Kinesthetic</td>
<td>61</td>
<td>35.67</td>
</tr>
<tr>
<td>Tactile</td>
<td>40</td>
<td>23.39</td>
</tr>
<tr>
<td>Group</td>
<td>57</td>
<td>33.33</td>
</tr>
</tbody>
</table>
Table 3 presents the general major perceptual learning style preference results of the Czech students in detail. It is not difficult to find that almost half of the Czech subjects preferred auditory learning styles which shows that a large number of subjects learn better when they hear words spoken and oral explanations. Thus, hearing audio tapes, lectures and class discussions could have a beneficial influence on the students. What is more, 35.67% of the students chose kinesthetic learning style as their major preferences which means that they enjoy being involved physically in classroom experiences. Thirdly, it is surprising to find that 57 students had group major learning style preference while 57 students had individual major learning style preference. The proportions of these two styles were exactly the same. In other words, Czech subjects did not show an obvious difference between group and individual learning style preference. In addition, 23.39% of them expressed a preference for visual major learning style and subjects who favored the tactile major learning style preference also took 23.39%.

Table 4

**Major Perceptual Learning Style Preference Results of the Czech Subjects According to Gender**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Visual</th>
<th>Auditory</th>
<th>Kinesthetic</th>
<th>Tactile</th>
<th>Group</th>
<th>Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male (%)</td>
<td>21.69</td>
<td>50.60</td>
<td>38.55</td>
<td>22.89</td>
<td>36.14</td>
<td>36.14</td>
</tr>
<tr>
<td>Female (%)</td>
<td>25.00</td>
<td>43.18</td>
<td>32.95</td>
<td>23.86</td>
<td>30.68</td>
<td>30.68</td>
</tr>
</tbody>
</table>

Table 4 shows the data from the gender perspective. As for male subjects, nearly half of them chose auditory as their major learning style preference. And 38.55% of them had kinesthetic major learning style preference. Regarding the group and individual preferences, the numbers of male students for these two preferences were the same, with the percentage both being 36.14%. The percentage of tactile learning style
was a little higher than the one of visual learning style.

It could be seen from the Table 4 that the female Czech subjects showed similar major perceptual learning style preferences with the male Czech subjects. To be more specific, the first two major preferences were auditory and kinesthetic learning styles. The percentage for group and individual styles were both 30.68%. Different from the male students, the percentage of tactile learning style was actually lower than the one of visual learning style.

5.1.2 Minor perceptual learning style preference results of the Czech subjects

Although compared with major perceptual learning styles, minor perceptual learning styles are not that obvious. But the statistics are still well worth studying because these minor styles are helpful for students as well.

Table 5

<table>
<thead>
<tr>
<th>Style</th>
<th>Number of Subjects</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual</td>
<td>117</td>
<td>68.42</td>
</tr>
<tr>
<td>Auditory</td>
<td>88</td>
<td>51.46</td>
</tr>
<tr>
<td>Kinesthetic</td>
<td>96</td>
<td>56.14</td>
</tr>
<tr>
<td>Tactile</td>
<td>101</td>
<td>59.06</td>
</tr>
<tr>
<td>Group</td>
<td>78</td>
<td>45.61</td>
</tr>
<tr>
<td>Individual</td>
<td>87</td>
<td>50.88</td>
</tr>
</tbody>
</table>

The Czech subjects’ minor perceptual learning style preferences are clearly described in Table 5. Among all the styles, the first one is the visual learning style with the percentage of 68.42%. And 59.06% of the students chose the tactile learning style as their minor preference. Additionally, 56.14% of the Czech participants took the kinesthetic learning style and 51.46% of them favored auditory. As for the group and individual preference, it could be seen that more students preferred to work individually.
Table 6

Minor Perceptual Learning Style Preference Results of the Czech Subjects According to Gender

<table>
<thead>
<tr>
<th>Gender (%)</th>
<th>Visual</th>
<th>Auditory</th>
<th>Kinesthetic</th>
<th>Tactile</th>
<th>Group</th>
<th>Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>68.67</td>
<td>48.19</td>
<td>55.42</td>
<td>57.83</td>
<td>39.76</td>
<td>45.78</td>
</tr>
<tr>
<td>Female</td>
<td>68.18</td>
<td>54.55</td>
<td>56.82</td>
<td>60.23</td>
<td>51.14</td>
<td>55.68</td>
</tr>
</tbody>
</table>

Concerning the male students from the Czech Republic, 68.87% of them took the visual learning style as their minor preference. Their second and third minor perceptual learning styles were tactile and kinesthetic with the percentage of 57.83% and 55.42% respectively. Table 6 also shows 48.19% of male students preferred auditory learning style. 45.78% of them enjoyed work individually while 39.76% of them chose to work in groups.

As for the female students, their minor perceptual learning style preferences were roughly the same. According to Table 6, the top three minor preferences were the visual, tactile and kinesthetic learning styles. Different from the male students, the fourth one was the individual preference. 54.55% of them favored the auditory learning style and 51.14% of them preferred to work with others.

5.1.3 Negligible perceptual learning style preference results of the Czech subjects

Negligible perceptual learning style preferences suggest students might have difficulties learning in that way.

Table 7

General Negligible Perceptual Learning Style Preference Results of the Czech Subjects

<table>
<thead>
<tr>
<th>Style</th>
<th>Number of Subjects</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual</td>
<td>14</td>
<td>8.19</td>
</tr>
<tr>
<td>Auditory</td>
<td>3</td>
<td>1.75</td>
</tr>
</tbody>
</table>
Table 7 presents that the most negligible preference for Czech participants was the group learning style. And the second was the tactile one. Besides, the students who chose the visual learning style and the kinesthetic learning style as their negligible preferences were relatively few. Nevertheless, the above table could also be studied from the opposite perspective. In other words, since only 1.75% of Czech students believed the auditory learning style was negligible for them, it means the overwhelming majority of them benefited from the auditory learning style.

Table 8

<table>
<thead>
<tr>
<th>Gender</th>
<th>Visual</th>
<th>Auditory</th>
<th>Kinesthetic</th>
<th>Tactile</th>
<th>Group</th>
<th>Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male (%)</td>
<td>9.64</td>
<td>1.20</td>
<td>6.02</td>
<td>19.28</td>
<td>25.30</td>
<td>18.07</td>
</tr>
<tr>
<td>Female (%)</td>
<td>6.82</td>
<td>2.27</td>
<td>10.23</td>
<td>15.91</td>
<td>18.18</td>
<td>13.64</td>
</tr>
</tbody>
</table>

According to Table 8, 25.30% of the male students did not prefer to study with others and 19.28% of them did not favor the tactile learning style. However, only 1.20% of them regarded the auditory learning style as negligible.

In terms of negligible perceptual learning style preference, female Czech students shared similar characteristics with male Czech students. For example, the most negligible preference for female students was the group learning style and the least one was the auditory learning style as well.

In conclusion, the Czech subjects showed a variety of perceptual learning style preferences. Among the major perceptual learning styles, the auditory learning style
was chosen by the most Czech students. What is more, the most of them took the visual learning style as their minor perceptual learning styles. In addition, the most negligible preference was the group learning style while the least one was the auditory learning style. In terms of gender, there were no significant differences between male and female Czech students.

5.2 Results and discussion on the Chinese subjects

It has been mentioned in the fourth chapter that there are altogether 113 subjects from China and among all of them, there are 68 boys and 45 girls. Like the discussion on the Czech subjects, Chinese participants’ perceptual learning style preferences would also be studied from the major, minor and negligible perspectives respectively.

5.2.1 Major perceptual learning style preference results of the Chinese subjects

The major perceptual learning style preferences of Chinese subjects suggested how they preferred to learn. Regardless of the gender difference, the results of their general major perceptual learning style preferences are presented in Table 9 in detail.

Table 9

<table>
<thead>
<tr>
<th>Style</th>
<th>Number of Subjects</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual</td>
<td>12</td>
<td>10.62</td>
</tr>
<tr>
<td>Auditory</td>
<td>102</td>
<td>90.27</td>
</tr>
<tr>
<td>Kinesthetic</td>
<td>94</td>
<td>83.19</td>
</tr>
<tr>
<td>Tactile</td>
<td>97</td>
<td>85.84</td>
</tr>
<tr>
<td>Group</td>
<td>94</td>
<td>83.19</td>
</tr>
<tr>
<td>Individual</td>
<td>9</td>
<td>7.96</td>
</tr>
</tbody>
</table>

From the above table, it could be noticed that a large number of Chinese subjects chose the auditory learning style as their major learning style, with the percentage as
high as 90.27%. In addition, 85.84% of them favored the tactile learning style. The two proportions of students who showed kinesthetic preference and students who preferred group preference were exactly the same. 10.62% of the students had visual major learning style preference and only 7.96% of them showed individual major learning style preference. It could be inferred that there were much more students who believed they could learn better by working with others instead of learning by themselves.

Table 10

Major Perceptual Learning Style Preference Results of the Chinese Subjects According to Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Visual</th>
<th>Auditory</th>
<th>Kinesthetic</th>
<th>Tactile</th>
<th>Group</th>
<th>Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male (%)</td>
<td>10.29</td>
<td>95.59</td>
<td>88.24</td>
<td>89.71</td>
<td>85.29</td>
<td>7.35</td>
</tr>
<tr>
<td>Female (%)</td>
<td>11.11</td>
<td>82.22</td>
<td>75.56</td>
<td>80.00</td>
<td>80.00</td>
<td>8.89</td>
</tr>
</tbody>
</table>

Taking the gender factor into consideration, Table 10 clearly shows the similarities and differences between male and female Chinese subjects. As for the male subjects, 95.59% of them had the auditory major learning style preference. The tactile learning style was favored by 89.71% of them. The second and third major learning style for male students were kinesthetic learning style and group learning style respectively. Male students who took the visual and individual learning style as their major preferences were obviously fewer.

According to Table 10, female Chinese students showed similar major perceptual learning style preferences with the male Chinese participants. For example, among female students, the most common major preference was the auditory learning style as well. And there were not many female students who regarded the visual learning style as their major one. As for the group and individual preference, female students also preferred to learn in groups.
5.2.2 Minor perceptual learning style preference results of the Chinese subjects

It is understandable that students could learn in many different ways and Table 11 describes the minor perceptual learning style preferences of the Chinese participants in detail.

Table 11

<table>
<thead>
<tr>
<th>Style</th>
<th>Number of Subjects</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual</td>
<td>92</td>
<td>81.42</td>
</tr>
<tr>
<td>Auditory</td>
<td>2</td>
<td>1.77</td>
</tr>
<tr>
<td>Kinesthetic</td>
<td>10</td>
<td>8.85</td>
</tr>
<tr>
<td>Tactile</td>
<td>7</td>
<td>6.19</td>
</tr>
<tr>
<td>Group</td>
<td>8</td>
<td>7.08</td>
</tr>
<tr>
<td>Individual</td>
<td>7</td>
<td>6.19</td>
</tr>
</tbody>
</table>

According to Table 11, it could be seen that 92 students took the visual learning style as their minor style, with the percentage up to 81.42%. Besides, 8.85% of Chinese subjects favored the kinesthetic learning style. Eight of them could benefit from working in groups. And the percentages of students who had the minor tactile and minor individual learning style were both 6.19%. The auditory learning style was the minor preference for 1.7% of them.

Table 12

<table>
<thead>
<tr>
<th>Gender</th>
<th>Visual (%)</th>
<th>Auditory (%)</th>
<th>Kinesthetic (%)</th>
<th>Tactile (%)</th>
<th>Group (%)</th>
<th>Individual (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>86.76</td>
<td>1.47</td>
<td>8.23</td>
<td>7.35</td>
<td>10.29</td>
<td>4.41</td>
</tr>
<tr>
<td>Female</td>
<td>73.33</td>
<td>2.22</td>
<td>8.89</td>
<td>4.44</td>
<td>2.22</td>
<td>8.89</td>
</tr>
</tbody>
</table>
Table 12 presents the minor perceptual learning style preferences of the male and female Chinese students respectively. For male students, the visual learning style were beneficial to 86.76% of them. 10.29% of them enjoyed working with others. Students who had kinesthetic minor learning style accounted for 8.23% of them and 7.35% of them had tactile minor learning style. The minor individual learning style was choose by 4.41% of male students and the proportion for the auditory learning style was 1.47%.

Regarding the female Chinese participants, 73.33% of them favored the visual learning style. And the percentage of the kinesthetic learning style was 8.89%. 4.44% of them enjoyed the tactile learning style and 2.2% of them had the auditory minor learning style preference. As for the group and individual preferences, the above table showed that compared with male students, more female students had the individual minor learning style preference.

5.2.3 Negligible perceptual learning style preference results of the Chinese subjects

This section is devoted to present and discuss the negligible perceptual learning style preferences of the Chinese students.

Table 13

<table>
<thead>
<tr>
<th>Style</th>
<th>Number of Subjects</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual</td>
<td>9</td>
<td>7.96</td>
</tr>
<tr>
<td>Auditory</td>
<td>9</td>
<td>7.96</td>
</tr>
<tr>
<td>Kinesthetic</td>
<td>9</td>
<td>7.96</td>
</tr>
<tr>
<td>Tactile</td>
<td>9</td>
<td>7.96</td>
</tr>
<tr>
<td>Group</td>
<td>11</td>
<td>9.73</td>
</tr>
<tr>
<td>Individual</td>
<td>97</td>
<td>85.84</td>
</tr>
</tbody>
</table>

It could be seen from Table 13 that 85.84 % of the Chinese students did not enjoy
learning by themselves which means that the majority of them preferred to learn in groups. And the proportions of students who had the visual, auditory, kinesthetic and tactile negligible learning style preferences were all exactly the same, with the percentage of 7.96% for each style.

Table 14

**Negligible Perceptual Learning Style Preference Results of the Chinese Subjects According to Gender**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Visual</th>
<th>Auditory</th>
<th>Kinesthetic</th>
<th>Tactile</th>
<th>Group</th>
<th>Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male (%)</td>
<td>2.94</td>
<td>2.94</td>
<td>2.94</td>
<td>2.94</td>
<td>4.41</td>
<td>88.24</td>
</tr>
<tr>
<td>Female (%)</td>
<td>15.56</td>
<td>15.56</td>
<td>15.56</td>
<td>15.56</td>
<td>17.78</td>
<td>82.22</td>
</tr>
</tbody>
</table>

Taking the gender factor into account, 88.24% of male Chinese subjects did not show preferences for individual learning. And the percentages for visual, auditory, kinesthetic and tactile negligible learning style preferences were all 2.94%.

As for the female Chinese students, 82.22% of them did not enjoy working individually. And the group learning style were negligible preference for 17.78% of them. The percentages of subjects who had the visual, auditory, kinesthetic and tactile negligible learning style preferences were all 15.56%.

What could be concluded from the above results and discussions is that the Chinese subjects had a variety of perceptual learning style preferences. Among the major perceptual learning style, the overwhelming majority of Chinese students chose the auditory learning style as their major preferences. Additionally, as for the minor learning style, the visual learning style was chosen by most of them. Moreover, the most negligible preference was the individual learning style. From the gender perspective, both male and female Chinese participants showed similar preferences towards each learning style.
5.3 Comparative discussion between the Czech and Chinese subjects

Since the results and discussion on perceptual learning styles preferences of the Czech and Chinese subjects have been presented respectively in the last two sections of this chapter, this section focuses on the similarities and differences among these subjects from the perspective of their nationalities.

5.3.1 Comparative discussion on major perceptual learning style preferences between the Czech and Chinese subjects

Subjects’ major perceptual learning style preferences implied how they could learn more efficiently. Table 15 clearly compares the major perceptual learning style preferences between the Czech and Chinese students.

Table 15
Major Perceptual Learning Style Preference Results of the Subjects According to Nationality

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Visual</th>
<th>Auditory</th>
<th>Kinesthetic</th>
<th>Tactile</th>
<th>Group</th>
<th>Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech subjects (%)</td>
<td>23.39</td>
<td>46.78</td>
<td>35.67</td>
<td>23.39</td>
<td>33.33</td>
<td>33.33</td>
</tr>
<tr>
<td>Chinese subjects</td>
<td>10.62</td>
<td>90.27</td>
<td>83.19</td>
<td>85.84</td>
<td>83.19</td>
<td>7.96</td>
</tr>
</tbody>
</table>

According to Table 15, one of the similarities is that both Czech and Chinese subjects showed strong preferences for the auditory learning style, with the percentages as high as 46.78% and 90.27% respectively. The percentage of Czech subjects who had visual major learning style is higher than the one of Chinese subjects. However, more Chinese students chose kinesthetic and tactile learning styles as their major preferences. As for the group and individual learning styles, Czech students did not show obvious preferences but Chinese students preferred to work in groups.
5.3.2 Comparative discussion on minor perceptual learning style preferences between the Czech and Chinese subjects

In addition to the major perceptual learning style preferences, students could benefit from their minor preferences as well. Table 16 presents the minor perceptual learning style preference results of the Czech and Chinese subjects in detail.

Table 16

Minor Perceptual Learning Style Preference Results of the Subjects According to Nationality

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Visual</th>
<th>Auditory</th>
<th>Kinesthetic</th>
<th>Tactile</th>
<th>Group</th>
<th>Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech subjects (%)</td>
<td>68.42</td>
<td>51.46</td>
<td>56.14</td>
<td>59.06</td>
<td>45.61</td>
<td>50.88</td>
</tr>
<tr>
<td>Chinese subjects (%)</td>
<td>81.42</td>
<td>1.77</td>
<td>8.85</td>
<td>6.19</td>
<td>7.08</td>
<td>6.19</td>
</tr>
</tbody>
</table>

It could be concluded from Table 16 that for both Czech and Chinese students, the percentages for those who chose the visual learning style as their minor preference were both the highest. Czech students showed stronger preferences for auditory, kinesthetic and tactile minor learning styles. For the Czech participants, the individual minor learning style was more popular than the group minor learning style. On the contrary, the group minor learning style was preferred by more Chinese students.

5.3.3 Comparative discussion on negligible perceptual learning style preferences between the Czech and Chinese subjects

It has been mentioned that the negligible preferences suggested the perceptual learning styles which were not favored by learners. Czech and Chinese students’ negligible perceptual learning style preferences are compared in Table 17.
Table 17

Negligible Perceptual Learning Style Preference Results of the Subjects According to Nationality

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Visual</th>
<th>Auditory</th>
<th>Kinesthetic</th>
<th>Tactile</th>
<th>Group</th>
<th>Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech subjects (%)</td>
<td>8.19</td>
<td>1.75</td>
<td>8.19</td>
<td>17.54</td>
<td>21.64</td>
<td>15.79</td>
</tr>
<tr>
<td>Chinese subjects (%)</td>
<td>7.96</td>
<td>7.96</td>
<td>7.96</td>
<td>7.96</td>
<td>9.73</td>
<td>85.84</td>
</tr>
</tbody>
</table>

From Table 17, it is not difficult to find that compared with the Chinese subjects, more Czech students chose the group learning style as their negligible preference. And much more Chinese students did not prefer to learn individually. In addition, more Chinese students showed the visual, kinesthetic and tactile learning style preference. And fewer Czech learners did not favor the auditory learning style.

To summarize, both the Czech and Chinese learners showed a variety of perceptual learning style preferences which means students could learn in many different styles. What is more, for the major perceptual learning style preference, the auditory learning style was the most remarkable one. Regarding the minor learning style preference, the visual learning style was chosen by most Czech students and the results were same for Chinese learners. Last but not least, the biggest difference between Czech and Chinese subjects was that more Czech learners preferred to work individually and more Chinese students enjoyed studying with others.

5.4 Implications of the perceptual learning style preferences for EFL learning and teaching

The findings of this comparative research between Czech and Chinese subjects prove that students from different cultural backgrounds show certain perceptual learning style preferences. What is more, students might be different from each other although they share the same culture. The present investigation is supposed to help
English teachers teach more efficiently and English learners learn more effectively.

5.4.1 Being aware of perceptual learning styles

It is very common for language learners to take the placement tests before starting a new stage of language learning. Keeping the language level of students in mind, teachers could prepare more appropriate teaching materials for students. Nevertheless, in most cases, students are given the same learning materials in class. It could be noticed that some of them are more motivated to learn and could achieve better but some of them are less successful than others. Thus it is not enough for teachers to only identify the language level of the students because the individual differences among learners are of equal importance.

As what has been mentioned before, by studying the perceptual learning style preferences of Czech and Chinese subjects, it could be concluded that EFL students from different language backgrounds could differ from one another in their learning styles. The findings are consistent with the finding of Reid in 1987. Moreover, students might show different preferences for perceptual learning styles even they share the same cultural background. Thus among the differences of EFL students, their different perceptual learning styles are supposed to be focused on.

From the perspective of teachers, after identifying EFL students’ perceptual learning styles, teachers could be more confident about developing teaching materials and motivating students. Teachers are supposed to be more aware of students’ perceptual learning style differences in order to create a classroom open to style diversity. There are many reasons why some language learners are less successful than others, such as students’ intelligence, aptitude and so on. It should be noticed that it is of vital importance for teachers to identify the real reasons since the teachers’ attitudes would have a great influence on students. The lack of understanding of students’ perceptual learning style preferences would be a reason for misunderstanding.

It is also necessary for students to be aware of their own perceptual learning style preferences. In 1987, Reid stated that students’ own awareness of their individual
learning styles might influence the success in the classroom as well. To some extent, students’ strengths and weaknesses could be reflected from their learning style preferences. In most public schools, it is impossible for students to have one-on-one language lessons. People who know the students best are exactly the students themselves. So being aware of their perceptual learning style preferences could help students participate more actively in their language learning process.

In conclusion, raising the awareness of students’ differences, especially the diversity of their perceptual learning style preferences, is one of the most important prerequisites to create the harmony between teachers and students.

5.4.2 Matching teachers’ teaching styles with students’ perceptual learning styles

In the majority of English classrooms, no matter where the students come from, every student has his or her own characteristics in terms of perceptual learning styles. Many researchers proved that students were able to achieve better when their learning styles were consistent with their teachers’ teaching styles. However, it is almost impossible for teachers to prepare different lesson plans for every single student in class. Taking the reality factors into consideration, two approaches are recommended to English teachers. The first one is to prepare various activities that could benefit students with different perceptual learning style preferences. So more language learners could actively participate in the learning process. What is more, Melton (1990) suggested that teachers were encouraged to divide students into different groups according to their learning style preferences and students would be given learning materials and activities based on their styles. It should be emphasized that there is no better learning styles thus teachers are supposed to avoid labeling students because different learning styles deserve to be equally respected.

There are suggested activities for each perceptual learning style. To begin with, as for the students with the visual learning style, teachers could provide these students with more reading materials and videos. Students could benefit from keeping journals of class activities and taking notes on lectures as well. Secondly, students who prefer
the auditory learning style might enjoy class discussions and can learn more from other students. Teachers could prepare more listening materials for them and lectures are also beneficial for them. Thirdly, regarding learners who show the kinesthetic learning style preference, the teaching method of Total Physical Response would help teachers work with them more efficiently. And they would be interested in playing charades, role-plays games and solving problems based on real situations. In addition, for students who favored the tactile learning style, many physical involvement activities could help them learn and some other specific activities are suggested as well, like rearranging sentences, drawing pictures and so on. Last but not least, the group and individual learning style actually influence the whole teaching process. It is the teachers’ responsibilities to provide students choices so that they could choose to work individually or with others.

5.4.3 Modifying students’ perceptual learning styles

It has been discovered by researchers that learning styles could change as the children develops. In 1981, Davidman stressed that the learning styles are people’s habits rather than biological attributes and this is the reason why the learning styles could be modified.

The comparative study of students’ perceptual learning style preferences between the Czech and Chinese subjects showed that one of the main differences between them is that more Czech students preferred to learn individually while more Chinese students favored working in groups. By using Hofstede’s cultural dimensions model, it has been concluded that China is a highly collectivist culture compared with the Czech Republic. To some extent, students’ perceptual learning style preferences have some relation with their cultural backgrounds. In other words, specific culture could cultivate learners’ certain perceptual learning style preferences. So this also proves that learning styles could be modified and extended.

It is undeniable that teachers might find it is too challenging to accommodate all the various learning style preferences that exist in class. Since students’ learning styles
could be modified in some cases, students are encouraged to actively matching their learning style preferences with their teachers’ teaching styles.
Chapter 6 Conclusions

Based on the statistical processing of the data and the discussions of the research findings, the last chapter is divided into three parts. The first part aims to draw conclusions concerning the research questions. The second part would discuss the limitations of the present research. And the last part devotes to the recommendations of further study.

6.1 Conclusions of the study

In this thesis, general secondary school students’ individual differences were investigated in terms of perceptual learning style preferences. Perceptual learning styles are of vital importance for foreign language education. From the above analyses, some conclusions could be obtained from the present research.

With regard to perceptual learning style preferences of Czech subjects, they showed a variety of perceptual learning style preferences. Among all the six perceptual learning styles, the majority of Czech participants chose the auditory learning style as their major perceptual learning style. What is more, a large number of them took the visual learning style as their minor style. Additionally, the most negligible preference for Czech students was the group learning style. And the gender factor did not have significant effect on students’ perceptual learning style preferences.

Concerning perceptual learning style preferences of Chinese subjects, they showed a variety of perceptual learning style preferences as well. As for their major perceptual learning style, most of Chinese students chose the auditory learning style. A great number of Chinese subjects took the visual learning style as their minor style. In addition, their most negligible preference was the individual learning style. From the gender perspective, there were no great differences between male and female Chinese participants.

It could be concluded that there were similarities and differences between Czech and Chinese students in terms of their perceptual learning style preferences. First of all,
both Czech and Chinese subjects showed a variety of preferences. And the majority participants from these two countries both chose the auditory learning style as their major learning style. Secondly, as for the minor perceptual learning style preference, the visual learning style was chosen by most Czech students and the findings were that same for Chinese students. Besides, the gender did not have a great influence on students’ perceptual learning style preferences. Nevertheless, the most obvious difference between Czech and Chinese subjects was that the most negligible preference for Czech students was the group learning style while the most negligible preference for Chinese students was the individual learning style. Hofstede’s cultural dimensions theory gave the reasonable explanations for this difference since it suggested that China was a highly collectivist culture compared with the Czech Republic.

Based upon students’ perceptual learning style preferences, both teachers and students are encouraged to become aware of the vital importance of perceptual learning styles. In order to help teachers teach more efficiently and language learners study more effectively, it is recommended to match teachers’ teaching styles with students’ perceptual learning styles. Teachers could prepare various activities which are beneficial to students with different preferences or divide students into different groups according to their perceptual learning style preferences. Since students’ perceptual learning styles could be modified and extended, another method to create the harmony between teachers and students in class is to encourage students to actively matching their preferences with their teachers’ teaching styles.

6.2 Limitations of the study

It cannot be denied that the results and discussion in this thesis is only a tiny part of the research into perceptual learning styles. What is more, due to some author’s subjective understanding and objective factors, the present comparative study is far from being perfect although all possible efforts have been made to improve it.

First and foremost, while the Perceptual Learning Style Preference Questionnaire (PLSPQ) which was designed by Reid for EFL learners is supported by many
researchers around the world, some problems appeared during the data collecting process. One of the problems was the ambiguity of the statements from the questionnaire. It could be noticed that the 30 statements were rather abstract without providing specific examples. So many students asked about the meaning of the statements even they could totally understand the language. Although explanations were provided for students, it could be inferred that there might be a few students who chose the answers without full understanding.

Moreover, there were altogether 284 subjects for the comparative research and 171 of them came from the Czech Republic and 113 participants were from China. The sample group was rather small in size as well. Thus it could not present the overall pictures of all English learners at general secondary schools in the Czech Republic and China. The results and discussion of the research might not be applicable to other students from different schools.

In conclusion, this comparative research only devotes to a small part of the perceptual learning style issue. But with more and more attention paid to this research area, it is likely to have deeper understanding of the related issues of perceptual learning styles.

6.3 Recommendations of further study

There is no doubt that the research on perceptual learning styles is worthwhile to be studied further. There are some suggestions for further research about this topic. To begin with, in order to help students fully understand the statements from the questionnaire, the Perceptual Learning Style Preference Questionnaire (PLSPQ) created by Reid is supposed to be improved. What is more, since the number of subjects for this present study is limited, more samples are encouraged to be collected. Last but not least, aiming to create the harmony between teachers and students in class and help students be more successful during their language learning process, the teaching styles of teachers are expected to be studied as well.
References


Heinle.
Appendix A

Perceptual Learning Style Preference Questionnaire (In English)

Dear students, thank you very much for participating in this study. Perceptual Learning Style Preference Questionnaire (PLSPQ) has been designed by J. Reid.

Please read each statement on the following pages. Respond to the statements as they apply to your study of English. Decide whether you agree or disagree with each statement. For example, if you strongly agree, choose Strongly Agree (SA).

<table>
<thead>
<tr>
<th>SA</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td>Agree</td>
<td>Undecided</td>
<td>Disagree</td>
<td>Strongly Disagree</td>
</tr>
<tr>
<td>×</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Respond to each statement quickly, without too much thought. Try not to change your responses after you choose them. Please answer all the questions.

Your age: 15 16 17 18 19
Your gender: Male Female

<table>
<thead>
<tr>
<th>Item</th>
<th>SA</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When the teacher tells me the instructions I understand better.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I prefer to learn by moving around and doing something in class.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I get more work done when I work with others.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I learn more when I study with a group.</td>
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<p>| | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>5.</td>
<td>In class, I learn best when I work with others.</td>
</tr>
<tr>
<td>6.</td>
<td>I learn better by reading what teacher writes on the whiteboard.</td>
</tr>
<tr>
<td>7.</td>
<td>When someone tells me how to do something in class, I learn better.</td>
</tr>
<tr>
<td>8.</td>
<td>When I make things in class, I learn better.</td>
</tr>
<tr>
<td>9.</td>
<td>I remember things I have heard in class better than things I have read.</td>
</tr>
<tr>
<td>10.</td>
<td>When I read instructions, I remember them better.</td>
</tr>
<tr>
<td>11.</td>
<td>I learn more when I can make a model of something.</td>
</tr>
<tr>
<td>12.</td>
<td>I understand better when I read instructions myself.</td>
</tr>
<tr>
<td>13.</td>
<td>When I study alone, I remember things better.</td>
</tr>
<tr>
<td>14.</td>
<td>I learn more when I make something for class project.</td>
</tr>
<tr>
<td>15.</td>
<td>I enjoy learning in class by doing experiments.</td>
</tr>
<tr>
<td>16.</td>
<td>I learn better when I make drawing as I study.</td>
</tr>
<tr>
<td>17.</td>
<td>I learn better in class when the teacher gives a lecture.</td>
</tr>
<tr>
<td>18.</td>
<td>When I work alone, I learn better.</td>
</tr>
<tr>
<td>19.</td>
<td>I understand things better in class when I participate in role-playing.</td>
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<tr>
<td>20.</td>
<td>I learn better in class when I listen to someone.</td>
</tr>
<tr>
<td>21.</td>
<td>I enjoy working on an assignment with two or three classmates.</td>
</tr>
<tr>
<td>22.</td>
<td>When I build something, I remember what I have learned better.</td>
</tr>
<tr>
<td>23.</td>
<td>I prefer to study with others.</td>
</tr>
<tr>
<td>24.</td>
<td>I learn better by seeing the directions than by listening to someone.</td>
</tr>
<tr>
<td>25.</td>
<td>I enjoy making something for a class project.</td>
</tr>
<tr>
<td>26.</td>
<td>I learn best in class when I can participate in related activities.</td>
</tr>
<tr>
<td>27.</td>
<td>In class I work better when I work alone.</td>
</tr>
<tr>
<td>28.</td>
<td>I prefer working on projects by myself.</td>
</tr>
<tr>
<td>29.</td>
<td>I learn more by reading textbooks than by listening to lectures.</td>
</tr>
<tr>
<td>30.</td>
<td>In general I prefer to work by myself.</td>
</tr>
</tbody>
</table>

Thank you for your cooperation. ☺️
Appendix B

Perceptual Learning Style Preference Questionnaire (In Chinese)

感知学习风格调查问卷

亲爱的同学们，非常感谢你们参加此次问卷调查。以下是由美国 J. Reid 博士设计的感知学习风格调查表。请逐条阅读，根据自己的英语学习情况勾选适合自己的选项。所有选项没有对错，好坏之分。例如，如果你非常同意此条说法，请选择 5（非常同意）。

选项中的数字从左到右依次代表：
5—非常同意
4—同意
3—不确定
2—不同意
1—非常不同意

本次调查问卷中个人资料只供学术研究之用，所有信息我们将为你们保密。感谢你参加此次调查问卷。

你的年龄: 15  16  17  18  19
你的性别: 男   女

<table>
<thead>
<tr>
<th>题目</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 听老师讲解学习效果好。</td>
<td></td>
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<tr>
<td>2. 我喜欢在课堂上“做中学”。</td>
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<tr>
<td>3. 当我与同学一起做学习活动时，效果更好。</td>
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<tr>
<td>4. 和小组一起学习，我能学到更多知识。</td>
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<tr>
<td>5. 课堂上当我和其他同学一起学习时，效果更好。</td>
<td></td>
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<td>6. 我只有看到老师写在黑板上的东</td>
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<tr>
<td>1</td>
<td>我更喜欢和他人一起学习。</td>
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<tr>
<td>2</td>
<td>西，才能学得更好。</td>
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<tr>
<td>3</td>
<td>课堂上，有人告诉我如何学习时，我学得比较好。</td>
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<tr>
<td>4</td>
<td>当我在课堂上参与活动时，我会学得比较好。</td>
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<tr>
<td>5</td>
<td>我在课堂上专注听讲比我看书记忆深刻。</td>
<td></td>
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<tr>
<td>6</td>
<td>当我阅读时，我更容易记住内容。</td>
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<tr>
<td>7</td>
<td>我有机会模仿的时候学得更多。</td>
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<tr>
<td>8</td>
<td>当我阅读教学材料时，我理解得更好。</td>
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<tr>
<td>9</td>
<td>当我一个人学习时，我记得更清楚。</td>
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<tr>
<td>10</td>
<td>当动手完成某项课堂任务时，我学得更好。</td>
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<tr>
<td>11</td>
<td>我更喜欢在课堂上通过实验来学习。</td>
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<tr>
<td>12</td>
<td>我边学边画记得更牢。</td>
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</tr>
<tr>
<td>13</td>
<td>在课堂上，听老师讲课，我学得更好。</td>
<td></td>
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<tr>
<td>14</td>
<td>当我独自学习时，效果更好。</td>
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</tr>
<tr>
<td>15</td>
<td>当我在课堂上参与角色扮演时，能更好地理解所学的东西。</td>
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</tr>
<tr>
<td>16</td>
<td>在课堂上，当我倾听别人讲解时，学得更好。</td>
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</tr>
<tr>
<td>17</td>
<td>我喜欢和两、三位同学一起完成任务或作业。</td>
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<tr>
<td>18</td>
<td>当我制作与上课相关的东西时，更能记住所学的内容。</td>
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<td></td>
</tr>
</tbody>
</table>

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24. 自己看书比听别人讲解学得更好。
25. 我喜欢动手制作些东西来完成某项学习任务。
26. 在课堂上参与相关活动时，我学得最好。
27. 在课堂上，我单独学习效果好。
28. 我更愿意独自完成学习任务。
29. 自己阅读课本比上课听讲学得更多。
30. 我喜欢独自学习。

谢谢同学们的配合。😊
Appendix C

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Table 5 General Minor Perceptual Learning Style Preference Results of the Czech Subjects
Table 6 Minor Perceptual Learning Style Preference Results of the Czech Subjects According to Gender
Table 7 General Negligible Perceptual Learning Style Preference Results of the Czech Subjects
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