

A COMPARATIVE STUDY OF MOTIVATION AND PERCEPTUAL LEARNING STYLE PREFERENCES FOR LEARNING CHINESE AS A FOREIGN LANGUAGE AMONG GRADE 5 TO GRADE 8 STUDENTS OF CONCORDIAN INTERNATIONAL SCHOOL, THAILAND

Yang Tian¹

Richard Lynch²

Abstract: The purpose of this study was to examine the level of overall motivation, intrinsic and extrinsic goal orientations, perceptual learning style preferences, and to determine the motivation and perceptual learning style preference differences among 169 grades 5-8 students learning Chinese as a foreign language at Concordian International School in Bangkok, Thailand, during the first semester of the academic year 2015-2016. The study employed a quantitative research methodology utilizing a questionnaire to collect data. There were four main findings. First, the level of overall motivation for learning Chinese as a foreign language among grade 5 to grade 8 students was high, with the level of intrinsic goal orientation being moderate; and the level of extrinsic goal orientation being high. Second, kinesthetic, tactile and group learning style preferences were major, while visual, auditory and individual were minor learning style preferences. Third, there was no significant difference of overall motivation in Chinese as a foreign language learning according to grade levels, with no significant difference of intrinsic goal orientation according to grade levels and no significant difference of extrinsic goal orientation in Chinese as a foreign language learning according to grade levels. Finally, there was a significant difference of perceptual learning style preferences in Chinese as a foreign language learning according to grade levels. The study concludes with recommendations for practice and for future research.

Keywords: Motivational, Perceptual Learning Style Preferences, Chinese Achievement, Learning Chinese As A Foreign Language, Grades 5-8 Students.

Introduction

China is known as one of the cradles of human civilization, and has over 5000 years of history (Pan, 2002). China has the largest population of the world. Mandarin Chinese is the mother tongue of over 873 million people, making it the most widely

¹ M.Ed. Candidate, Master of Education in Curriculum & Instruction, Assumption University, Thailand.
amandaTian@gmail.com

² Assistant Professor, Graduate School of Human Sciences, Assumption University, Thailand.
richardlynch@alumni.usc.edu

spoken first language in the world (Zhang & Gui, 2008). Clearly, Chinese is becoming a popular foreign language for students around the globe. According to data published by the International School Association of Thailand (ISAT) in 2016, there are 120 international schools in Thailand and 32 of them have Chinese subjects and 17 schools take Chinese language education as one of their main subjects (International School Association of Thailand, 2016). However, the learning outcomes are not uniformly positive due to the nature of Chinese language (Zhang & Gui, 2008).

Motivation is one of the most important differences that affects learning outcomes (Dörnyei, 1998). According to Dörnyei (1998), a learner without sufficient motivation will not be able to accomplish long-term goals. According to Bandura's social cognitive learning theory, many factors can affect learners' motivation (Bandura, 1977; Pintrich & DeGroot, 1990).

Another important factor that affects learning outcomes is learning style. According to Claxton & Murrell (1987), an individual's learning style refers to the ways in which an individual acquires, maintains, and absorbs information. Learning styles have been extensively discussed in educational psychology literature. Guild and Garger (1985) claimed that over 30 learning style assessment instruments have been introduced in the previous 50 years. Reid (1987) noted that people actually have more than one learning style preference.

In Concordian International School, students spend equal time in both English and Chinese classrooms. However, the Chinese outcomes are not as good as the English outcomes. Students prefer to use English more than Chinese. When students enter grade 5, Chinese class time is much shorter than English class time. Some students have big decreases in Chinese language learning time from grade 5 onwards. As they get older their Chinese language learning outcomes decrease. After Grade 8, students start to prepare for university entrance tests, so English becomes their focus. For the purpose of improving the instructional effectiveness in classrooms and encouraging students to be more engaged with Chinese as a foreign language learning, the study of motivation and learning style preferences is an important endeavor.

The researcher has noticed that among the various individual differences, motivation and learning style are two of the most important factors for the researcher. Without knowing these two variables in depth, it will be difficult to design and implement effective teaching, and even more difficult to have effective learning. In this research, the researcher has applied Bandura's social cognitive learning theory and Reid's perceptual learning style preferences as the theoretical framework.

Literature Review

Dörnyei (2001) claimed that motivation has been recognized as one important factor that can affect language learning. Green (2002) claimed that motivation is an internal power that can trigger, lead, and maintain behavior.

There are over twenty theories about motivation for learning; Bandura's social cognitive learning theory is one of the most influential theories in motivation studies (Katsuda, 2012). Bandura (1989) claimed that learning behavior is reciprocally influenced by three factors: behavior, environment and personal factors. A change in

any one of the three factors will have effects on the other two. Figure 1 shows the reciprocal determinism model developed by Bandura.

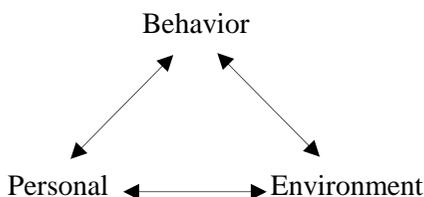


Figure 1: Reciprocal Determinism (Adapted from Bandura, 1989)

Motivation and learning style preference are both personal factors and both can have direct effects on learning behaviors and the environmental aspects of learning. Bandura (1989) claimed that intrinsic reinforcement as an internal power can trigger and affect behaviors. Intrinsic reinforcement is considered as internal reward, such as satisfaction, pride or feelings of achievement.

Goals provide direction for learners and guide them to engage in learning activities. Pintrich (2004) claimed that motivation is the process of setting goals and achieving goals. The goal orientation of motivation can be divided into intrinsic goal orientation and extrinsic goal orientation (Pintrich, 2004).

In terms of motivation and gender differences girls and boys are considered differently in many cultures and time periods. Language is often seen as a female subject in many counties (Csizér & Dörnyei (2005). Young girls are the opposite. Eccles and Wigfield (2002) stated that when compared with boys, girls prefer language related subjects more, and tend to have a higher motivation level towards these kinds of subjects. Reid (1987) classified perceptual learning styles into six categories: visual, auditory, kinesthetic, tactile, group and individual learning styles, all described below.

1. Visual major learning style preference: refers to learners who can learn well by visual channels. Learning from seeing is an effective way for this group.
2. Auditory major learning style preference: refers to learners who can learn more effectively by hearing. Learners with the preference may benefit more through lectures, audio materials and auditory channels.
3. Kinesthetic major learning style preference: refers to learners who can learn better through physical involvement, such as field trips or role-play activities.
4. Tactile major learning style preference: refers to learners who prefer to learn by hands-on works, like building models, making and creating things.
5. Group major learning style preference: refers to learners who can learn more effectively with others. Group discussion or activities are better channels for them to learn.
6. Individual major learning style preference: refers to learners who can learn well by individual activities. They can learn better by learning alone.\

Reid developed a questionnaire incorporating all 6 of the above learning styles called the Perceptual Learning Style Preferences Questionnaire (PLSPQ).

Figure 2 presents the conceptual framework of this study.

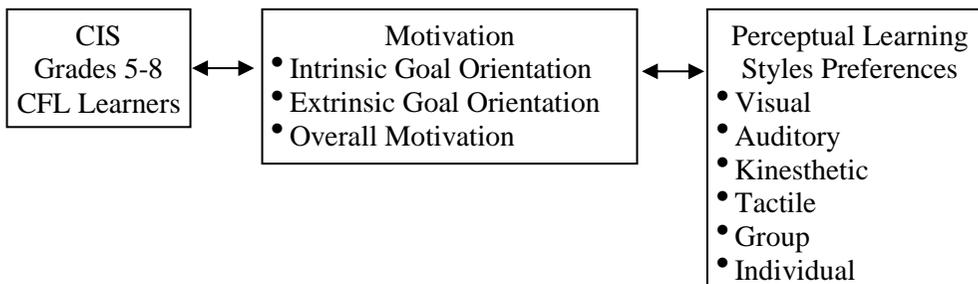


Figure 2: Conceptual Framework of This Study

Methodology

This was a quantitative research study that utilized both descriptive and inferential statistics. The study sample was 171 Grade 5 to Grade 8 students learning Chinese as a foreign language at Concordian International School during the first semester of academic year 2015-2016.

There was one research instrument for this study, a questionnaire containing three sections: the first collected demographic data; the second measured motivation for learning Chinese; the third measured perceptual learning style preferences. The motivation section measured intrinsic and extrinsic goal orientation for learning Chinese and was taken from the Motivated Strategies for Learning Questionnaire (MSLQ) (Pintrich, Smith, Garcia & McKeachie, 1991). The learning styles section was taken from the Perceptual Learning Style Preferences Questionnaire (PLSPQ) developed by Reid (1987).

The validity of the MSLQ has been attested to by several researchers (e.g., Artino, 2005; Chen and Whitesel, 2012; Taylor, 2012). Pintrich et al. (1991) as the original developers of the MSLQ, collected MSLQ reliability data three times: 1986 (326 students), 1987 (687 students) and 1988 (758 students). They computed alpha coefficients for each motivation subscale. Table 1 presents those alpha values along with those obtained in the current study.

Table 1: Reliability Statistics of Motivation Variables of the Motivation Section of the Questionnaire

Value Component	Number of items for each component	Pintrich et al. Alpha of MSLQ (1991)	Alpha value of this study
Intrinsic Goal Orientation	4	.74	.67
Extrinsic Goal Orientation	4	.62	.72

The Perceptual Learning Style Preferences Questionnaire (PLSPQ) was designed and further developed by Reid in 1987. It has been extensively used to investigate students' perceptual learning style preferences. It has high reliability in

general (Wintergerst, DeCapua, & Verna, 2002). Khatib and Ghosheh conducted a reliability analysis of the PLSPQ in 2013, the results showed that the Cronbach Alpha coefficient of the PLSPQ ranged from .71 to .80. Table 2 presents the reliability coefficients of the learning styles section of the questionnaire. Reid (1987) had divided the degree of learning style preference into three levels, which were major, minor and negative. Major level refers to the highest preference; learners under this level are able to use related learning styles to learn most effectively. Minor level means learners are able to conduct related learning styles in a neither better nor worse way. Negative level refers to learner who, when applying this learning style will learn negatively.

Table 2: Reliability Statistics of the Learning Styles Section of the Questionnaire

Value Component	Number of items for each component	Khatib and Ghosheh Cronbach's Alpha of the PLSPQ (2013)	Alpha value of this study
visual	5	.72	.76
Auditory	5	.71	.81
Kinesthetic	5	.75	.69
Tactile	5	.72	.62
Individual	5	.75	.80
Group	5	.80	.79

Procedure

The researcher distributed the questionnaire to the respondents on Jan 7th, 2016. There were 171 questionnaires distributed and 169 useable questionnaires returned, giving a return rate of 98.83%.

For objectives 1 and 2, the researcher used means and standard deviations to determine the level of motivation and perceptual learning style preferences. For objectives 3 and 4, One-Way analysis of variance was employed to determine the differences of motivation and perceptual learning style preferences.

Findings

Main Findings

There were five main findings.

Research Finding One

The level of overall motivation for learning Chinese as a foreign language among grade 5 to grade 8 students was moderate. The level of intrinsic goal orientation was moderate. The level of extrinsic goal orientation was high.

Research Finding Two

Of the 6 learning styles investigated, 3 were found to be major (kinesthetic, tactile, and group) and 3 minor (visual, auditory, and individual).

Research Finding Three

There was no difference of overall motivation, intrinsic goal orientation and extrinsic goal orientation in Chinese as a foreign language learning according to grade levels.

Research Finding Four

There was a difference of perceptual learning style preferences in Chinese as a foreign language learning according to grade levels. Higher grades had higher kinesthetic, tactile and individual learning style preferences.

Additional Findings

The additional objectives were 4, as follows:

1. To determine the level of overall motivation and subscales by gender.
2. To determine the perceptual learning styles preferences by genders.
3. To determine if there is a significant difference of overall motivation and subscales between gender.
4. To determine if there is a significant difference of perceptual learning styles preferences between genders.

Table 3: Summary of the Four Additional Findings (n=169)

Means			Differences		
Item	Gender	n	Interpretation	Significance	Interpretation
Intrinsic Goal Orientation	Male	84	Moderate	.998	No significant difference
	Female	85	Moderate		
Extrinsic Goal Orientation	Male	84	High	.298	No significant difference
	Female	85	High		
Overall Motivation	Male	84	Moderate	.490	No significant difference
	Female	85	Moderate		
Visual	Male	84	Minor	.741	No significant difference
	Female	85	Minor		
Auditory	Male	84	Minor	.569	No significant difference
	Female	85	Minor		
Kinesthetic	Male	84	Major	.445	No significant difference
	Female	85	Major		
Tactile	Male	84	Minor	.080	No significant difference
	Female	85	Major		
Group	Male	84	Major	.930	No significant difference
	Female	85	Major		
Individual	Male	84	Minor	.516	No significant difference
	Female	85	Minor		

Discussion

In terms of the level of overall motivation, the findings of this study showed that all grades 5-8 students had a moderate level of overall motivation. Chinese is the key feature of Concordian International School; Chinese is a compulsory subject that students need to take from nursery onward. Many parents send their children to Concordian International School because they want them to master this language. The students were well aware of their parents' expectations. Concordian International

School adopted the IB curriculum to teach Chinese, which makes learning a fun and challenging journey. The passion in Chinese language learning still remains strong along with the continuation through the grade levels. The findings of this study support the notion that motivation has been recognized as one important factor that can affect language learning (Dörnyei, 2001).

The findings of showed that the grades 5-8 students had a moderate level of intrinsic goal orientation. Deci and Ryan (1985) claimed that learners who have high intrinsic motivation are willing to put more effort in their learning. The learners of Concordian International School are Thais who are living in Thailand. Students do not get much opportunity to practice Chinese language outside of school, so it is not surprising to see their intrinsic goal orientation level is moderate instead of high.

For extrinsic goal orientation, the findings of this study showed that the learners had a high level. The findings of this study support the claim that learners who are externally motivated might not enjoy the learning task, but they still try to reach a goal. According Deci, Koestner and Ryan (1999), compared with intrinsic motivation, extrinsically motivated learners are seeking external rewards. This kind of motivation is unlikely to lead to a joyful learning process. As mentioned above, the parents' expectations of their children in Chinese language learning are high, thus leading to a high level of extrinsic goal orientation.

The findings of this study also showed that there was no significant difference of overall motivation, intrinsic goal orientation and extrinsic goal orientation in Chinese as a foreign language learning according to grade levels. The students of grades 5-8 in Chinese as a foreign language learning had a similar motivation level. Gagne (2009) claimed that motivation is a condition that guides people to develop high achievement. in the student body at Concordian International School is very stable, because there is not another IB school that uses Chinese as the language of instruction. The students are quite familiar with the school and learning process, which ensures a similar motivation level year after year.

From the additional findings, it is clear that the males and females had the same levels of overall motivation, intrinsic and extrinsic goal orientation. It also showed that there was no significant difference of overall motivation, intrinsic goal orientation and extrinsic goal orientation between genders. This finding differs from that of Csizér and Dörnyei (2005), who claimed that males are less motivated in second language learning than females. Eccles and Wigfield (2002) also claimed that girls tend to be motivated more in language related subjects. However, most students are enrolled at Concordian International School since nursery and they get equal chance to practice Chinese inside and outside the school. Therefore, it was not surprising to see that there was no difference between genders.

The findings of this study showed that the grades 5-8 students of Concordian International School had minor visual, auditory and individual learning style preferences; they had major kinesthetic, tactile and group learning style preferences. The result was similar to Reid's study in 1987. Reid used the PLSPQ in a study the United States with 1388 ELS students involved. The findings of the current study support Reid's previous findings. Reid claimed that the six factors develop unevenly.

In terms of group learning style preference, the findings of this study differ from Reid's research in 1987. Reid's research found the students who were learning

English as a foreign language had negligible group learning style preferences, and this study found that the group learning style preference was minor. This may have been affected by cultural differences. Asian cultures prefer closer relationships in public than Western cultures (Zhang & Gui, 2008). Age can be another factor; the sample group of this study was younger than Reid's study. Younger children tend to like group learning more than older children (Shuib & Azizan, 2015). It was not surprising, therefore, that the findings of this study showed that the grades 5-8 students of Concordian International School had major individual learning style preferences. Compared with 29 years ago, the learning environment and technology has changed a great deal and now allows students to learn more independently. Many students now use ICTs to complete their school work daily. These changes encourage students to learn alone (Shuib & Azizan, 2015).

The findings of this study showed that there is a significant difference of perceptual learning style preferences in Chinese as a foreign language learning according to grade levels among students of Concordian International School. This finding supports the idea that learning style preferences differ according to grade level (Khatib & Ghosheh, 2013).

In terms of gender, it was interesting to see that male and female students had almost the same level of learning style preference except for tactile learning preference. The results showed that females had major tactile learning style preferences and males had minor tactile learning style preferences. According to Reid (1987), there was a difference of tactile learning style preference between males and females. The findings of this study supported Reid's conclusion.

Recommendations

According to the findings of this study, the researcher recommends that teachers encourage and enhance students' overall motivation, intrinsic goal orientation and extrinsic goal orientation for better learning performance. Teachers can provide diverse assessment tools to explore learning through the students' interests and provide frequent positive feedback to encourage learners. Teachers should design teaching strategies that are in line with learning style preferences and also differentiate their teaching in terms of content, process and assessment.

Future researchers could consider conducting studies with larger sample sizes. This research was conducted with students in only 4 grades in one school. A larger sample size would provide clearer, more significant results in general among motivation and learning style preferences. Future researchers could also consider other factors that can affect motivation and perceptual learning style preferences, such as learners' age, family background and learning environment.

References

- Artino, A. R. (2005). A Review of the Motivated Strategies for Learning Questionnaire. *ERIC Document Reproduction Service No. ED499083*.
- Bandura, A. (1977). Analysis of Self-efficacy of Behavioral Change. *Cognitive Therapy and Research*, 1(4), 287-310.
- Bandura, A. (1989). Social Cognitive Theory. *Annals of Child Development*, 6, 1-60. Greenwich, CT: JAI Press.

- Chen, C., & Whitesel, J. (2012). The Validity and Reliability Study of a Revised Motivated Strategy for Learning Questionnaire (MSLQ) for Assessing Computer Software Learning Strategies. *International Journal of E-Adoption*, 4(2), 28-51.
- Claxton, C.S., & Murrell, P. H. (1987). Learning Styles: Implications for Improving Educational Practice. *ASHE-ERIC Higher Education Report No. 4*, 1987.
- Concordian International School. (2015). *Concordian International School website*. Retrieved from <http://www.concordian.ac.th/>
- Csizér, K. & Dörnyei, Z. (2005). Language Learners' Motivational Profiles and Their Motivated Learning Behavior. *Language Learning*, 55(4), 613-659.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum Publishing Co. 1985.
- Deci, E. L., Koestner, R., & Ryan, R. M. (1999). A Meta-Analytic Review of Experiments Examining the Effects of Extrinsic Rewards on Intrinsic Motivation. *Psychological Bulletin*, 125(6), 627-668.
- Dörnyei, Z. (1998). Motivation in Second and Foreign Language Learning. *Language Teaching*, 31, 117-135.
- Dörnyei, Z. (2001). Motivational Strategies in the Language Classroom. *The Canadian Modern Language Review*, 61(2), 287-289.
- Eccles, J. S., & Wigfield, A. (2002). Motivational Beliefs, Values, and Goals. *Annual Review of Psychology*, 53, 109-132.
- Gagne, F. (2009). *A differentiated model of giftedness and talent (DMGT)*. Retrieved from http://nswagtc.org.au/images/stories/infocentre/gagne_a_differentiated_model_of_giftedness_and_talent.pdf
- Green, S. K. (2002). Using an Expectancy-value Approach to Examine Teachers' Motivational Strategies. *Teaching and Teacher Education*, 18(8), 989-1005.
- Guild, P. & Garger, S. (1985). *Marching to different drummers*. Association for Supervision and Curriculum Development, Alexandria, VA. 1985.
- International School Association of Thailand. (2015). *International Schools Association of Thailand*. Retrieved from <http://www.isat.or.th/>
- Katsuda, C. (2012). *A study of learning styles, motivation for learning, and students' achievement among Thai students studying Japanese as a foreign language at King Mongkut's Institute of Technology, Ladkrabang, Thailand*. Unpublished M. Ed thesis. Assumption University, Thailand 2012.
- Khatib, S. A. A., & Ghosheh, S. K. (2013). Perceptual Learning style Preferences in Relation to Gender, Academic Achievement and Field of Study among a Sample of UAE College Students. *Scholars Journal of Arts, Humanities and Social Sciences*, 1(2), 69-80.
- Pan, J.X. (2002). *The four great inventions of Ancient China*. University of Science and Technology of China 2002.
- Pintrich, P., Smith, D., Garcia, T., & McKeachie, W. (1991). A Manual for the Use of the Motivated Strategies for Learning Questionnaire (MSLQ). *National Center for Research to Improve Post-Secondary Teaching and Learning*. (Ann Arbor, Michigan). *The University of Michigan Ann Arbor, Michigan* 48109-1259 (313)936-274.

- Pintrich, P. R. (2004). A Conceptual Framework for Assessing Motivation and Self-Regulated Learning in College Students. *Educational Psychology Review*, 16(4), 386-407.
- Pintrich, P.R., & DeGroot, E.V. (1990). Motivational and Self-Regulated Learning Components of Classroom Academic Performance. *Journal of Educational Psychology*, 82(1), 32-40.
- Reid, J.M. (1987). The Learning Style Preferences of ESL Students. *Tesol Quarterly*, 21(1), 87-110.
- Shuib, M., & Azizan, S.N. (2015). Learning Style Preferences among Male and Female ESL Students in Universiti-Sains Malaysia. *The Journal of Educators Online-JEO*, 13, 103- 141.
- Taylor, R. T. (2012). *Review of the motivated strategies for learning questionnaire (MSLQ) using reliability generalization techniques to assess scale reliability*. Auburn University of United States 2012.
- Wintergerst, A. C., DeCapua, A., & Verna, M. A. (2002). An Analysis of One Learning Styles Instrument for Language Students. *TESL Canada Journal*, 20(1), 16-37.
- Zhang, J., & Gui, L. (2008). *The development of China's economy affected the global economy*. China Research Center of Fudan University Socialist Market Economy 2008.