PERSONALITY TYPE, PERCEPTUAL STYLE PREFERENCES, AND STRATEGIES FOR LEARNING ENGLISH AS A FOREIGN LANGUAGE

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We investigated the influence that personality type has on perceptual learning style preference and language learning strategies. Participants were 364 senior high school students in Taiwan who were studying English as a foreign language. The instruments used to collect data were the Myers-Briggs Type Indicator (Myers & McCaulley, 1985), the Perceptual Learning Preferences Survey (adapted from Kinsella's 1995 survey), and the Strategy Inventory for Language Learning (Oxford, 1990). Results showed significant relationships between language learning strategy and the introverted/extroverted personality type. Significant relationships were also found between the sensing/intuitive personality type and memory, compensation, social, and metacognitive strategies.

Keywords: personality type, perceptual learning style preference, language learning strategies, English as a foreign language, individual differences.

In response to the demands of globalization, the people of Taiwan seem to have an unquenchable desire to learn English (Katchen, 2002). However, the teaching of English in Taiwan has been viewed as ineffective, insofar as it does not satisfy social needs. According to Shih (1993), few college students are able to master English, even after studying the language for six years. Similarly, Liang (1996) observed that most Taiwanese students are hardly able to communicate in

English even after six years of study. The reasons for these failures are complex and varied. One reason may be that individual differences, such as learning style preference, use of learning strategies, and personality type, have not been incorporated in the instructional process.

In Western countries, over the past few decades, the focus in the field of foreign-/second-language education has shifted from teaching to learning (Lessard-Clouston, 1997; Nunan, 1988; Peng, 2002). In a considerable number of studies researchers have found that students' individual differences play an important role in the quality of their foreign-/second-language learning (Ehrman, 1990; Galbraith & Gardner, 1988; Oxford, 1992; Oxford & Ehrman, 1993; Scarcella & Oxford, 1992; Skehan, 1989).

Among these individual difference variables, Oxford (1989, p. 21) identified "language learning styles and strategies…[as] the most important variables influencing performance in a second language" (Oxford, 1989, p. 21). Reid (1996, p. 3) expressed the view that, as a result, "language teachers should provide a wealth of information to students in order to raise their awareness about learning styles and strategies…[and should] work with students' learning strengths".

Learning styles are "*cognitive, affective, and physiological traits that are relatively stable indicators of how learners perceive, interact with, and respond to the learning environment*" (Keefe, 1979, p. 4). O'Malley and Chamot (1990) defined *learning strategies* as "*the special thoughts or behaviors that individuals use to help them comprehend, learn, or retain new information*" (p. 1).

Ethnicity and/or nationality have a strong influence on the language learning strategy that is used (Bedell, 1993). A number of researchers have investigated the role of personality in learning English in Western countries (Carrell & Monroe, 1993; Ehrman, 1990; Ehrman & Oxford, 1990, 1995). However, few researchers have examined whether or not there are differences among personality type, perceptual learning style preference, and language learning strategies across cultures. Therefore, currently it is not known whether or not findings about learning in Western societies can be generalized to learners in Taiwan.

Literature Review

Relationship between Personality Type and Language Learning Style Preference

Educational psychologists have found that each individual learns differently, and personality type plays a significant role in determining how an individual learns best (Borg & Shapiro, 1996). That is to say, personality characteristics might affect how learners perceive information and what they learn (Moody, 1988). Carrell, Prince, and Astika (1996) indicated that the success of second

language learners is affected by both cognitive factors such as language aptitude (Carrol, 1990), affect, personality, and motivation, and by demographic factors, such as age, gender, and ethnicity (see e.g., Ehrman & Oxford, 1990, 1995; Galbraith & Gardner, 1988; Oxford, 1992; Oxford & Ehrman, 1993; Scarcella & Oxford, 1992; Skehan, 1989).

The Myers-Briggs Type Indicator (MBTI; Myers & McCaulley, 1985) is a personality inventory designed to examine individuals' basic preferences for perceiving and processing information (Johnson, Mauzey, Johnson, Murphy, & Zimmerman, 2001). This self-report instrument has four dimensions: extraversion (focus on the perception of the outer world of people and objects) vs. introversion (focus on the perception of the inner world of concepts and ideas); sensing (practical, realistic focus on facts and procedures) vs. intuition (imaginative, concept-oriented focus on meanings and possibilities); thinking (tendency to make decisions based on logic and rules) vs. feeling (tendency to make decisions based on personal and humanistic considerations); judging (setting and following agendas) vs. perceiving (being flexible, adapting to changing circumstances).

Ehrman (1990) used the MBTI to assess personality types and learning strategies in an intensive foreign language-learning program in the US. The participants were 78 people studying Japanese, Thai, and Turkish. For 99% of the sample, English was the mother tongue. The results showed that there were relationships among learning styles, language learning strategies, and various outcome measures for students. Ehrman reported that introversion, intuition, and perceiving were associated with searching for, and communicating, meaning; feeling and perceiving were associated with general study strategies that are helpful in any subject, and intuition was associated with hypothesis formation and testing and formal model building (p. 168).

Carrell et al. (1996) explored the relationships between the academic performance and personality type of students in Indonesia. The students completed the MBTI, which had been translated into Indonesian. The results showed that performance in the grammar test correlated significantly with both the judging and perceiving scales and that the stronger the student's preference for perceiving over judging, the better was their performance on the grammar tests. There was also a statistically significant correlation between vocabulary test performance and the extraversion/introversion scale in that introverted students performed better on the vocabulary tests than did extraverted students.

Relationship between Language Learning Strategies and Personality Type

Ehrman and Oxford (1989) examined the relationship between personality type and the individual's choice of learning strategies. They used the MBTI to measure the overall personality types of 79 language learners, teachers, and supervisors in an intensive training setting. The results revealed that extraverts

used affective and visualization strategies more than did introverts, and that introverts used strategies for searching and communicating meaning more frequently than did extraverts.

Ehrman and Oxford (1989) also found that, compared with sensing-type people, intuitive-type people used more strategies for searching and communicating meaning, building mental models of the language, using language for authentic communication, and managing emotions. They also found that judging-type individuals used general study strategies more frequently than did perceiving-type individuals, but perceiving-type individuals used strategies for searching for and communicating meaning more frequently than did judging-type individuals.

With the aim of providing language teaching professionals with additional insight into how better to meet the individual education needs of the learner, in this study we examined whether or not there are relationships among personality type, perceptual learning style preference, and language learning strategies of students in Taiwan who are studying English as a foreign language (EFL). Our two research questions were:

What are the relationships between personality type and perceptual learning style preferences of EFL students in Taiwan?

What are the relationships between personality type and language learning strategies of EFL students in Taiwan?

Method

Participants

Participants in this study were 364 senior high students (157 males and 207 females) from rural areas in southern Taiwan. Participants and their parents or guardians signed consent forms. Permission to administer the survey was obtained with the aid of the school principal and English teachers. Each of the instruments used took 25 minutes to administer.

Instruments

The MBTI (Form M; Myers, McCaulley, Quenk, & Hammer, 1998) translated into Chinese was used to measure individual preferences in terms of four bipolar characteristics of extroversion/introversion, sensing/intuition, thinking/feeling, and judging/perceiving. The MBTI has been widely used both in the US with speakers of English as their mother tongue and with speakers of English as a foreign/second language (Carrell et al., 1996; Ehrman, 1990; Ehrman & Oxford, 1989). Before we conducted the survey, the MBTI in the Chinese translation was administered to a sample of 50 students. The internal consistency reliability of the Chinese MBTI was .81.

The Perceptual Learning Preferences Survey (PLPS) is a self-report survey that

is used to measure participants' perceptual style preferences. The instrument was adapted from Kinsella's (1995) survey, which includes four category statements that are used to assess students' perceptual learning style preferences. The PLPS involves a 3-point scale, on which 1 = *rarely*, 2 = *sometimes*, and 3 = *usually*. The participants were asked to respond to 30 statements.

The Strategy Inventory for Language Learning (SILL; Oxford, 1990) EFL/ESL (English as a second language) version 7.0 was used to investigate the frequency of EFL/ESL learners' use of language learning strategies in general. The SILL has been described as "perhaps the most comprehensive classification of learning strategies to date" (Ellis, 1994, p. 539). Yang (1992), Liao (2000), and Liu (2004) translated Oxford's SILL into Chinese. The internal consistency reliability of Yang's (1992) Chinese SILL was .94, the internal consistency reliability of Liao's (2000) Chinese SILL was .96, and the internal consistency reliability of Liu's (2004) Chinese SILL was .94. Before conducting the survey, a pilot test was administered to 50 students. The Cronbach's alpha for the Chinese SILL was .91.

Data Analysis

Chi-square test and analysis of variance (ANOVA) were used to analyze data in the SPSS program. The significance level for each test was $p < .05$.

Results and Discussion

Chi-square test results indicated that there were no statistically significant relationships between perceptual learning style preferences and personality types in any of the four categories of extroversion/introversion ($\chi^2 = .697$, $p = .952$), sensing/intuitive ($\chi^2 = 4.508$, $p = .342$), thinking/feeling ($\chi^2 = 3.947$, $p = .413$), and judging/perceiving ($\chi^2 = 3.656$, $p = .455$). Our findings should help teachers to recognize individual differences in their students' learning styles and personality type as well as examine their own teaching styles in order to positively influence students' academic achievement. However, the majority of the senior high school students who took part in our study preferred a visual/nonverbal learning style and classified themselves as the extroverted, intuitive, feeling, and judging personality type and we were aware that this may have influenced our findings.

One-way ANOVA revealed statistically significant relationships between introverted/extroverted personality types and memory ($F(1, 361) = 8.564$, $p = .004$), cognitive ($F(1, 361) = 12.956$, $p = .000$), compensation ($F(1, 361) = 8.466$, $p = .004$), metacognitive ($F(1, 361) = 15.993$, $p = .000$), affective ($F(1, 361) = 25.060$, $p = .000$), and social strategies ($F(1, 361) = 12.203$, $p = .001$). As shown in the results in Table 1, extroverts reported a higher frequency of use of compensation, metacognitive, cognitive, memory, affective, and social strategies

than did introverts. Participants of the introverted or extroverted personality type used compensation strategies more frequently than they used any of the other strategies, with an average of 2.930 and 3.189 respectively.

Table 1. *Mean Scores on Learning Strategy Categories for Personality Types*

		Memory	Cognitive	Compensation	Metacognitive	Affective	Social
Introvert	M	2.307	2.390	2.930	2.303	2.209	2.350
(n = 124)	SD	.667	.774	.822	.841	.796	.870
Extrovert	M	2.527	2.684	3.189	2.674	2.638	2.683
(n = 240)	SD	.683	.718	.795	.838	.763	.857
Total	M	2.452	2.584	3.101	2.548	2.491	2.570
	SD	.685	.750	.813	.856	.799	.875
Intuitive	M	2.518	2.623	3.180	2.622	2.540	2.670
(n = 244)	SD	.687	.746	.806	.850	.804	.871
Sensing	M	2.317	2.504	2.938	2.397	2.392	2.364
(n = 120)	SD	.663	.754	.806	.851	.784	.851
Total	M	2.452	2.584	3.101	2.548	2.491	2.570
	SD	.685	.750	.813	.856	.799	.875
Feeling	M	2.458	2.580	3.114	2.538	2.499	2.542
(n = 323)	SD	.690	.761	.798	.856	.792	.875
Thinking	M	2.407	2.612	2.993	2.622	2.429	2.783
(n = 41)	SD	.654	.657	.927	.785	.863	.853
Total	M	2.452	2.584	3.101	2.548	2.491	2.570
	SD	.685	.750	.813	.856	.799	.875
Judging	M	2.500	2.647	3.085	2.629	2.528	2.650
(n = 224)	SD	.700	.759	.814	.858	.753	.905
Perceiving	M	2.374	2.483	3.126	2.419	2.434	2.441
(n = 140)	SD	.655	.726	.814	.839	.869	.812
Total	M	2.452	2.584	3.101	2.548	2.491	2.570
	SD	.685	.750	.813	.856	.799	.875

Note: N = 364.

One-way ANOVA indicated significant relationships between sensing/intuitive personality types and memory ($F(1, 361) = 7.098$, $p = .008$), compensation ($F(1, 361) = 7.252$, $p = .007$), metacognitive ($F(1, 361) = 5.564$, $p = .018$), and social strategies ($F(1, 361) = 10.108$, $p = .002$). As shown in Table 1, intuitive types reported greater use of memory, compensation, metacognitive, and social strategies than did sensing types. The participants whose personality type was either sensing or intuitive used compensation strategies more frequently than they used any of the other strategies, with an average of 3.180 and 2.938, respectively.

One-way ANOVA indicated that there was no significant relationship between the six categories of language learning strategies and thinking/feeling personality types ($p > .05$). As shown in Table 1, these participants used compensation strategies more frequently than they used other strategies, with an average of

3.114 and 2.993, respectively. Memory strategies were found to be the least popular strategies for these participants, with an average of 2.458 and 2.407, respectively.

One-way ANOVA showed statistically significant differences among students with judging/perceiving personality types in the use of cognitive ($F(1, 361)$ = 4.170, p = .042), metacognitive ($F(1, 361)$ = 5.248, p = .023), and social strategies ($F(1, 361)$ = 4.984, p = .026). As shown in Table 1, students with a judging-type personality showed a greater use of metacognitive, cognitive, and social strategies than did students with a perceiving-type personality. These participants used compensation strategies most frequently with averages of 3.085 (judging) and 3.126 (perceiving). Memory strategies were the least popular strategies among these participants, with an average of 2.500 and 2.374, respectively.

Cultural Differences in Personality Type, Learning Style, and Language Learning Strategies

The students who participated in this study preferred a visual/nonverbal learning style. This finding is in agreement with the results in a study by Reid (1995), who reported that Asian students are highly visual in their perceptual learning style.

According to Wharton (2000), bilingual Asian students favor social strategies more than any other strategy. In this study, we found that the strategies used most frequently by Taiwanese EFL students were compensation strategies. This suggests that a weak learning foundation and a weak foundation knowledge of English meant that the students taking part in our study had to use compensation strategies to help them overcome limitations in their existing knowledge, such as guessing the meaning of unknown words while reading or listening, as well as using gestures to signal their meaning when speaking and substituting synonyms when writing (Oxford, 1990). Our findings are consistent with those of Bedell and Oxford (1996) whose tentative conclusion was that "high use of compensation strategies might be typical of Asian students" (p. 58).

Our results in this study indicated that extroverted students used compensation, metacognitive, cognitive, memory, affective, and social strategies more than did introverted students. This finding was not consistent with the result reported by Ehrman and Oxford (1989). They found that extroverts used affective strategies and social strategies more frequently than did introverts, and that introverts tended to use metacognitive strategies for planning upcoming language tasks more frequently than did extroverts. We also found that students with an intuitive personality type used memory and compensation strategies more frequently than did students who had a sensing personality. Just as Ehrman and Oxford had found in their study, intuitive types in our study chose compensation over

other strategies. However, our findings in regard to the group who had a sensing personality were not consistent with those of Ehrman and Oxford, who had found that sensing types reported the most frequent use of memory strategies. This inconsistency may have been because the participants in our study had a different cultural background from the participants in the study by Ehrman and Oxford. However, our results with this small student group may not be generalizable to the entire population in Taiwan.

Pedagogical Implications

In view of the influence personality type has on learners' use of learning strategies, language instructors should take personality type into consideration when they design learning tasks and activities. For example, in social strategy training for introverted students, teachers can put students in groups of four or six based on how extroverted/introverted they are. An oral topic may be given to both extroverted and introverted groups in order to facilitate the use of communication skills. In the class, both introverted and extroverted groups should be given freedom to discuss the topic and exchange information on it. This enables the introverted students to lower their anxiety level and conquer their hesitancy about social interactions.

We found that the participants in this study made little use of memory and cognitive strategies. Therefore, it is essential for teachers to teach students how to use cognitive and memory strategies relevant to the task. We suggest that teachers help their students become self-directed and effective language learners by integrating language learning strategy instruction into regular language lessons. An example is the Cognitive Academic Language Learning Approach (CALLA) developed by Chamot and O'Malley (1994). First, teachers identify the learning strategies students are currently using. Teachers then explain why and how to use new learning strategies like summarizing, drawing diagrams, inferring, asking questions, or working in groups. In the final steps of the process students use these strategies to learn new material, evaluate their use of the strategy and its effectiveness for the task, and then become independent and self-directed language learners by transferring the strategies they have learnt to new tasks.

Limitations and Recommendations for Further Research

This study should be replicated using a variety of populations as participants and should be expanded to include students at different academic levels in other regions and also learners' individual differences in learning style, learning strategies, learning aptitude, age, gender, and the affective domains of motivation, anxiety, self-efficacy, tolerance of ambiguity, and so on. Because of time limitations, in our study we did not consider all individual difference variables.

In this study, we used only a survey instrument. In future studies researchers could employ qualitative methodology such as interviews, classroom observations, diary analysis, and think-aloud, in order to conduct a deeper examination of students' perceptual learning style preferences and language learning strategies.

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