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Examining the Perceptual Learning Style Preferences of Korean EFL Middle School Students

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The purpose of this study was to identify the perceptual learning style preferences of 97 Korean EFL students in middle school. Furthermore, it examined if students' learning styles varied in terms of gender and grade level. Data was collected by using Reid's (1987) PLSPQ and a personal background questionnaire and was analyzed by using descriptive statistics, MANOVA, ANOVA, and *t*-test. The results revealed that subjects had all six major learning styles but among them, auditory, group, and visual styles were the most preferred by them. The results found in this study, presented that Korean EFL middle school students favored learning English through listening, reading and working in groups and that younger students preferred learning through physical involvement and practicum. The findings of this study provide a number of useful insights for EFL and ESL educators and instructors in Korea. The current study suggests that a great number of variables such as culture, learning situation of the target country, age, and grade level can all play important roles in shaping the learning preferences and the learning styles of students. Considering these variables and promoting a curriculum that is interesting, appealing and successful may help maximize student L2 learning.

[learning styles/English learning/gender/academic year level]

I. INTRODUCTION

Learning style has been defined as "cognitive, affective and physiological traits that are

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relatively stable indicators of how learners perceive, interact with, and respond to the learning environment" (Keefe 1979, p. 4); as "cognitive and interactional patterns which affect the ways in which students perceive, remember, and think" (Scarcella, Andersen & Krashe, 1990, p. 114); and as preferred or habitual patterns of mental functioning and dealing with new information (Ehrman & Oxford, 1990, p. 311). In other words, learning styles are the ways in which a person acquires, retains and retrieves new information that pertain to them as individuals and differentiate them from others. For example, a person might be more visually oriented or more reflective than someone else-these are styles that characterize a general pattern in a person's thinking or feeling.

While we all demonstrate innate human characteristics of learning, every individual approaches a problem or learns a set of facts from a unique perspective. With this said, the individual learners in a second language class differ in many ways at every level of instruction. The practical implications of this information for people learning a second language are that awareness of one's preferred learning style may help to explain why some aspects of language learning seem to come easier for some and difficult for others. In a perfect learning situation, learners would be able to choose their preferred style and ensure that it matches the teacher's teaching methodology in every class. Of course learners have no such option but it is believed that the teacher who is making decisions regarding the type of activities to conduct in a language classroom should consider such learner diversities (Bada & Okan, 2000). This brings forward the notion that information has to be exchanged about roles and expectations. Both teachers' and learners' awareness of each other's needs and resources have to be raised, and compromises have to be reached between what learners expect and want and what the teacher feels he/she can ought to provide in order to generate effective language learning (Brindley, 1989).

Many studies of foreign or second language learning have examined the individual difference variables to explain the variance in L2 achievement (Bailey, Onwuegbuzie, & Daley, 2000; Ehrman & Oxford, 1995). A considerable research in the general area of learning styles that covered cognitive, affective and physiological domains have been done mainly with students whose native language is English (Cavanaugh, 1981; Hodges 1982) and with English speakers learning a second language in the United States and Canada. However, a little was and is still known about the preferred styles of English as a second language (ESL) speakers. It wasn't until the 1980's when research posited that cultural values influence learning with significant differences in attitudes, perceptions and interpersonal relationships between non-Western and Western cultures. Before Reid's (1984) work, ESL classes were taught with little teacher's awareness of the style differences that delineated ESL students from each other and from native speakers of English. As a result, this mismatch between student and teacher caused learning difficulties, de-motivation, disinterest and even failure.

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Despite Reid's pioneering research and many other studies, there's still a lack of consensus on developing reliable and valid learning styles instruments that can be used and applied to maximize the learning of ESL students. While there is an abundance of literature on learning style theories and general assessments and extensive work done on learning styles across all ages, educational levels, and disciplines, the vast majority of the research has focused on native speakers of English. Consensus that describes in depth the perceptual learning preferences of nonnative speakers (NNS) of English and second language learning, especially those that contain references to Korean EFL secondary students is quite limited (Kim, 2007a, 2007b). Teachers need to recognize and understand a multiplicity of cognitive variables active in the second language learning process and to make appropriate judgments about individual learners. Meeting them where they are and providing them with the best possible opportunities for learning is essential since the compatibility of a teacher's instructional style and student learning style is a significant factor in the success of learning process (Carrell & Monroe, 1993; Dunn & Griggs, 1995).

Therefore, it is necessary to consider more research in this particular domain of learning styles in order to provide educators with more insights on the needs of EFL/ESL learners. In return, this can provide more reliable and effective learning styles instruments and methods of teaching to maximize students' interest and understanding in learning a second language.

This study aims to identify the perceptual learning style preferences of a group of Korean EFL middle school students and it further examines if students' learning styles vary in terms of gender and academic year levels. The present study is designed to provide EFL and ESL instructors with insights about individual learning style preferences and also guide them in the selection of appropriate instructional methods and materials to maximize student L2 learning. Two major hypotheses about learning styles will build the theoretical background to the present study: 1) all learners have their own learning styles; and 2) learning will be improved if instructors become aware of a wide range of students' learning styles. The following specific research questions are to be addressed:

1. Which aspects of the perceptual learning styles are the most common among Korean EFL junior high school students?
2. What are the differences in the students' learning styles based on their gender?
3. What are the differences in the students' learning styles based on their academic year level?

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II. REVIEW OF THE LITERATURE

1. Learning Styles and Related Research of Native Speakers of English

Thirty years ago, theorists and researchers in the education field, were studying the concept of cognitive style; how the mind works, how it processes information or how it is affected by each individual's perception (Reid, 1987). In the mid to late 1970's, paradigms began to be developed to identify the more external, applied modes of learning styles (Reid, 1987). *Style* refers to a pervasive quality in the learning strategies or the learning behavior of an individual, "a quality that persists though the content may change." (Fischer & Fischer, 1979, p. 245). With this said, relevant works Dunn (1983) and Dunn and Dunn (1979) have reported on perceptual learning styles, that describes the variations among learners in using one or more senses to understand, organize and retain experience. Research with the U.S school children (Dunn, 1983, 1984) has demonstrated that learners have four basic perceptual learning channels: visual (reading, looking at pictures and flashcards and studying charts), auditory (listening to lectures and audiotapes), kinesthetic (experiential learning that is total physical involvement with a learning situation), and tactile ("hands-on" learning such as building models or doing laboratory experiments).

Consequently, a number of various learning styles instruments for native speakers of English have been developed to determine the needs of different learners and to maximize English achievement. Among these include: the Learning Style Inventory (Dunn, Dunn, & Price, 1975), The Grasha-Riechman Student Learning Styles Scales (Riechmann & Grasha, 1974), The Gregorc learning Style Delineator (Gregorc, 1982), and Kolb's (1976, 1985) Learning Styles Inventory. Frizzell (1984) in his overview of learning styles, acknowledged three trends in learning-style research: the global approach, the analytic approach and the school-oriented approaches. Though many learning style models have emerged, the most significant ones to date are those of Dunn et al. (1975), Hill (1976), and the National Association of Secondary School Principals (Keefe, Monk, Languis, Letteri, & Dunn, 1986).

Research that identifies and measures perceptual learning styles relies primarily on self reporting questionnaires by which students select their preferred learning style. The questions of the identification and classroom application of both student and teacher preferred styles are discussed in Student Learning Styles: Diagnosing and Prescribing Programs (Keefe, 1979), and Student Learning Styles and Brain Behavior: Programs, Instrumentation, Research (Keefe, 1982). In addition a list of articles on cognitive and learning styles of elementary, secondary, postsecondary, adult education and vocational education journals attest to the breadth of current research.

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2. Learning Styles and Related Research of Second Language Learners

Instruments that have reliability and variability for native speakers of English cannot be assumed reliable and valid for non-native speakers. Reid (1990) found significant differences in correlations between native speakers and non-native speakers, as well as differences among various language/cultural groups, in the process of norming her learning styles questionnaire, and concluded that those instruments that are normed only on native speakers of English are suspect (Eliason, 1995). Katz (1986) also noted that to accurately interpret individual learning styles, one must compare individual scores to the group norm of that person's culture. As ESL teachers, we must consider whether the instrument has been appropriately normed and whether the design of a learning styles instrument and/or the research results from the learning styles investigations have properly controlled for a student's length of time in the second culture, the length of time he/she has spent studying the second language and the English proficiency of the student. All these variables could affect students' responses. Using heterogeneous linguistic groups for research can lead to multiple resources of undocumented variance, including socio-cultural, personality, cognitive, and first language factors, along with variance in second language proficiency (Chapelle & Green, 1992). Thus it is necessary to do more research and develop more reliable and valid theories and assessments that address the learning preferences of nonnative speakers of English.

For non-native speakers of English, Reid's (1984) Perceptual Learning Style Preference Questionnaire (PLSPQ), O'Brien's (1990) Learning Channel Preference Checklist and Oxford's (1993) Style Analysis Survey are among the better known of the learning style assessment instrument normed in the ESL field (Wintergerst, Decapua, & Itzen, 2001). A normed assessment instrument gives the researcher the opportunity to interpret a student's performance on an instrument compared to others students who took the assessment test (Gay & Airasian, 2000).

The earliest and the most widely used instrument for ESL learners is Reid's PLSPQ, which is based on the concept of six learning style references: visual (these learners prefer reading and studying charts), auditory (prefer listening to lectures and audiotapes), kinesthetic (prefer experiential learning through active participation), tactile (prefer hands-on work), group (prefer studying with others), and individual (prefer studying alone). Reid's research which provided a baseline data on perceptual mode preferences, has led to an increasing understanding of the similarities and differences in the ways ESL students and native English-speaking Teachers (NEST) process information (Stebbins, 1995).

The PLSPQ has been used cross-culturally in studies with Chinese, Japanese, Bruneian, and mixed language groups of ESL/EFL students (Reid, 1990; Stebbins, 1995; Wintergrest, Decapua, & Itzen, 2001; Wintergrest, Decapua, & Verna, 2003), and adult L2 immigrants

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in the US (Rossi-Le, 1995). Overall, results based on this instrument showed that ESL/EFL students favored kinesthetic styles and disfavored group learning. Researchers however, suggested that L2 teachers are cautioned against over reliance on the learning styles since certain factors such as English proficiency, cultural background, and the length of time student have spent studying English could affect students' learning styles (Eliason, 1995).

Several other studies have drawn attention to relationships between learning styles and L2 achievement (Kim, 2007a). At the high school level, although auditory students were more motivated than visual students, the visual learning style was more predictive of Japanese language achievement, than auditory and tactile/kinesthetic styles in a study with native English speaking high school students learning Japanese through the medium of satellite television (Oxford, Park-Oh, Ito, & Sumrall, 1993) However, studies with Korean high school students showed mixed and perplexing results that visual, intuitive, and global males revealed higher scores on listening proficiency measures than auditory, extrovert, ands sequential males, while auditory females outperformed visual counterparts (Park, 1998). Research at the college level also showed confusing results, concluding that more research is required (Kim, 2007b). Another research carried out by Stebbins (1995) that paralleled Reid's (1987) results, showed that Korean college students were stable in their choice of multiple learning styles.

Researchers say that these mixed results imply that learning styles are influenced by the learning situation and content areas (Ehrman, 1996; Westman, 1993), and they may change with the learning tasks (Park, 1999). That is, some students with specific learning preferences may benefit more when taught in their styles, whereas some may be subjected to lower achievement in a task in which a certain skill or task is emphasized (Kim, 2007a). Given the current trends in L2 pedagogy focusing on interactive pair and small-group activities with native English teachers, individual learning types may be disadvantaged for L2 performance (Roh, 2006). Korean EFL students with their variety of language experience, educational backgrounds and proficiency level, often come together in English programs or classrooms in which they are taught homogeneously by native English teachers who have little knowledge of Korean students' learning styles. EFL/ESL instructors often use methods and materials that have been developed with the learning needs of native speakers of English in mind. In many cases, neither students nor teachers are aware that the difficulty in learning class material, high frustration levels, and even failure may not rest solely in the material itself. However, little is known to conclude that learning styles are predictors of L2 learning. Therefore, there is a need for more research and assessments that describe the learning style preferences of EFL and ESL learners and a valid instrument that can be used to meet their needs. A further investigation of the role of learning styles in the maximization and achievement of L2 is necessary to provide important insights to educators as the number of NEST increases in the English education

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institutions in Korea every year and as there is a need for more effective and appealing second language learning programs and curriculum.

III. RESEARCH METHOD

1. Participants

The sample involved 97 junior high school students who are learning English as a foreign language. The ages of the students ranged from 14 to 17. Nine students were in 7th grade, 12 students were in 8th grade, and 76 students were in 9th grade, with a male and female ratio of 50:47. Only the students who had a substantial amount of interest in learning English were chosen for the purpose of getting accurate data. This justifies why there is an uneven distribution across different year levels. When asked to rate themselves on their self-perceived English proficiency, 36 (37.1%) reported their level as medium, 30 (30.9%) as poor, and 15 (15.5%) as very poor. Fifteen (15.5%) rated themselves as good, while only 1 rated as excellent. Of the total participants, 83 (85.6%) reported that they were satisfied with English instruction by native English speaking teachers. About two thirds of the participants (65=67%) think that native English teachers are better than Korean English teachers in teaching target language culture. The same figures were revealed when asked if they have more chances to improve English speaking and listening skills when taught by native English teachers.

The sample participants chosen for this study were all enrolled in intensive “before and after school” English classes to improve their English proficiency and have great interest in learning English. These classes include English conversation and English grammar and writing classes that are designed to help improve their speaking abilities as well as with their midterms and final tests. In addition, these classes were created with the aims of helping students who are interested in English and giving opportunities to those who can’t afford financially to take additional classes in private institutes and academies.

Instruction was conducted by the native English-speaking teacher emphasizing speaking and listening skills. In addition, interactive pair and small group activities as well as individual activities that might encourage and promote creativity and thinking were the main style of the instructor.

2. Measures and Data Collection

The PLSPQ and a background information questionnaire were given to all the participants during class time in the middle of the spring semester in 2008. The PLSPQ

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contains 30 items to assess the way students learn best and prefer to learn with 5-point Likert scales (1=strongly disagree, 5=strongly agree). For the validity of the PLSPQ, the original items were developed by consultants in the fields of linguistics and the English learning and teaching programs. Many researchers studied with a translated version of the PLSPQ and acknowledge that it was a valid and reliable instrument for EFL students' learning styles (Kim, 2007a, 2007b; Melton, 1990; Peacock, 2001; Thomas, Cox & Kojima, 2000). The PLSPQ which was not established in the Korean version was translated into Korean by English-Korean bilinguals. Furthermore, several modifications were made on the PLSPQ to suit the learning situation in Korea and in the school. "English" was added to some items to ensure that the students would report their learning style preferences for English. The background information questionnaire was designed to obtain demographic data about the participants and information relevant to their English learning such as gender, age, study hours, self-assessed English proficiency, and satisfaction with an English class taught by native English speaking teachers.

3. Data Analysis

Descriptive statistics were calculated to summarize the participants' responses to the PLSPQ as well as the background questionnaire. A multivariate analysis of variance (MANOVA) was conducted to examine the differences in learning style preferences in terms of students' gender and academic year levels. The independent samples *t*-test was performed to check if there is any significance in learning style based on gender. Finally, ANOVA was used to investigate the relationship between students' academic level and preferred learning styles.

IV. RESULTS

1. Learning Styles Preferences of Korean EFL Students

The results of students' preferred learning styles can be different in terms of the unit of analysis. If the study took each individual item as a unit of analysis, it would deal with what is called the *composite score*, a much more complex procedure. To calculate composite scores, all items of each learning style need to be added. As shown in Table 1, responses show that Korean EFL junior high school students have all six major learning style preferences. Students favored auditory, group and visual styles, while they less favored individual style. The results revealed in the present study are quite different from those of Reid (1987) who carried out a study with Korean ESL students. While Reid's

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participants reported kinesthetic (*M*=14.58) learning as the most preferred learning style, participants of this study reported auditory (*M*=16.84) style as the most preferred one. Furthermore, while Reid's participants disfavored group (*M*=11.42) learning, the participants of the present study on the contrary, rated group (*M*=16.62) learning as their second most preferred learning style.

TABLE 1
Means of Learning Style Preferences of Korean Students

Study	Visual	Auditory	Tactile	Kinesthetic	Individual	Group
Present study	16.05	16.84	15.93	16.00	14.12	16.62
Reid (1987)	14.07	13.73	14.48	14.58	12.46	11.42

Note: Means 13.5 and above=major learning style preference; means of 11.50~13.49=minor learning style preference; means of 11.49 or less=negative learning style preference (Reid, 1987)

2. Learning Style Differences by Students' Gender

The MANOVA yielded that there was no significant gender difference, with a multivariate $F(6,90)= 2.083$ at $p=.063$. As displayed in Table 2, female students revealed slightly higher mean scores on all learning style preferences than male students. Females seemed to prefer auditory (*M*=16.85) style the most. Their male counterparts also displayed high mean scores for auditory (*M*=16.84) style and scored individual (*M*=13.18) style as the least preferred style. However, both visual and individual styles showed significant differences regarding gender with $t= -2.44$ and $t=-2.56$, respectively in the ANOVA.

TABLE 2
Learning Styles by Students' Gender

Gender	Visual	Auditory	Tactile	Kinesthetic	Individual	Group
Male (n=50)	15.36	16.84	15.74	15.38	13.18	16.42
Female (n=47)	16.79	16.85	16.12	16.66	15.25	16.85
t	-2.44*	-0.02	-0.51	-1.74	-2.56*	-0.52

* $p<.05$ in the *t*-tests.

3. Learning Style Differences by Academic Year Level

The study found that there was no significant learning style preferences in relation to students' academic year levels indicating an $F(12,178)=1.258$ ($p=.248$) in the MANOVA. However, 7th graders displayed slightly higher mean scores in all areas of learning style except for individual (*M*=13.44) styles as appeared in Table 3. 8th graders also showed

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similar results in all learning style areas except for kinesthetic (M=13.83) and individual (M=13.00) as the lowest. 9th graders showed similar mean scores across all learning styles. Furthermore, the univariate ANOVA indicated that there were significant academic year level effects on students' learning style preferences in tactile (F=3.26) and kinesthetic (F=3.83) styles. The *post hoc* tests yielded that the 7th graders preferred both tactile and kinesthetic styles significantly more than the 8th graders. The significant differences in the tactile and kinesthetic styles between the 7th and 8th graders were found at p=.037 and p=.021, respectively.

TABLE 3

Learning Style Differences across Academic Year Level

Grade	Visual	Auditory	Tactile	Kinesthetic	Individual	Group
7th	17.55	17.88	18.55	18.11	13.44	18.00
8th	15.41	16.16	14.58	13.83	13.00	16.16
9th	15.97	16.82	15.82	16.09	14.46	16.53
F	1.48	0.72	3.26*	3.83*	0.81	0.61

* p<.05 in the ANOVA.

V. DISCUSSION

1. Summary of Findings and Related Discussion

This study was designed to identify Korean EFL junior high school students' learning styles as measured by the PLSPQ, and to compare their style preferences based on their gender and academic year level. The results revealed that the students had all six major learning styles. However among them, auditory, group, and visual learning styles were the most preferred by the students. The results revealed in this study showed that there was a considerable degree of difference with those of Reid (1987). The greatest difference was in group styles with a mean difference of 5.20: least favored style in Reid and the most favored in the present study. Student's responses reflected their English learning situation and current trends in English instruction in Korea where native English speaking teachers emphasize and often use pair and/or small group activities in their classroom. That is to say that English instruction has shifted from teacher-directed classroom tasks to more learner-centered. The students thought that group activities used in their English class matched their learning styles.

To further elaborate on this finding, some cultural influences may also be at play regarding the preference in group learning. Anderson (1988), Banks (1994) and Longstreet

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(1994) contend that culture, ethnicity, class and gender play important roles in shaping the learning preferences and learning styles of students. Anderson (1995) argues that the cultural values of certain groups lend themselves more readily to collaborative learning than to competitive learning at the secondary and post-secondary levels. Asian cultures fall very close to the collective or group oriented dimension. According to Wintergrest et al. (2003), Asian education puts emphasis on the group rather than the individual where students are taught to cooperate with each other, work for the common good of the group and not elevate themselves above others. This cultural influence may have some influence on why the participants in this study highly value group style over individual style. However, this claim is debatable thus more research is required on culture and its influences in learning.

Another very interesting finding was that participants in this study rated auditory style as the highest of all other styles. In Reid's (1987) study, auditory style was rated as the 3rd least favored style while in the current study it was rated as the most preferred style. The anticipatory results were that auditory style was going to be rated as one of the lowest since listening skills of the students in this study are very low. Often times, EFL and ESL students have problems following the native English teacher's instructions for activities and games in the classroom which result in confusion, disorientation, frustration, and even failure unless translated in their native language. This phenomenon may be a reflection of the learning situation in Korea. Wintergrest et al. (2003) argue that Asian students expect modes of learning where the information comes from the teacher, requires little or no class participation, and focuses on visual and auditory learning. Furthermore, Anderson (1995) and Reid (1987) argue that Asian culture emphasizes teacher-centered classrooms, where the teacher's role is that of transmitter of knowledge. Materials come from textbooks, teacher-lectures and information on the blackboards. This learning situation may influence the students to prefer learning through listening or hearing the information because it's something that they've been exposed to for several years and feel comfortable. Despite these plausible reasons, there is not enough research done in this particular subject of learning styles to draw any definite conclusions.

In terms of learning style differences based on gender, there were no major differences in any learning styles. The findings regarding gender showed that auditory style was the most preferred by both male and female. Furthermore, findings also displayed that both visual and individual styles were slightly more preferred by females than their male counterparts and thus the males were likely to prefer the group styles over the individual styles and prefer receiving information by listening rather than reading. There is little or no research that suggests gender differences in visual style preference (Oxford, 1995). Therefore, more research is needed in this field to build a background theory.

Another interesting finding through this study is females preferring more individual style

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than males. Oxford (1995) stated in her study that females prefer to converse, discuss and do group work. This contradicts the findings in the present study where females preferred individual styles more than males. Despite these findings, the numbers yielded in the results are not significant enough to conclude that females are more the individual type. In order to address gender issues in more conclusive recommendations, further examinations are required.

Finally, learning styles based on academic year level, also showed no major significant differences. The 7th graders displayed slightly higher mean scores than its counterparts in all areas of learning except for individual styles. The 8th graders also showed similar results across all learning styles except for kinesthetic and individual styles as being the lowest. The 9th graders showed similar scores in all learning styles. However, findings regarding academic year level in which the 7th graders were significantly more kinesthetically oriented and favored more tactile learning than the 8th graders, provide some interesting information about the younger students. Younger students who prefer tactile learning by doing hands-on activities and kinesthetic learning that involves role playing and situation based activities may be due to their frequent exposure to such learning styles in the past. It may be that in elementary schools these students were more often exposed to learning situations that are more concrete than abstract in order to facilitate comprehension and learning. In addition, it is common sense that younger children like to move around, touch and sense things to retain information as they lack the ability of being autonomous which only seems to develop as one matures. To back this hypothesis, Dunn and Dunn (1979) found that only 20-30% of school age children appear to be auditory learners, while the remaining are visual, tactile, kinesthetic or a combination of tactile/kinesthetic or visual/tactile. Older students may not have indicated such high scores in these style variables since they have been exposed to more abstract modes of learning as they mature and as the learning circumstances require them to be. For example, students at the higher secondary school levels, are required to do tests and examinations as well as independent research which requires them to develop an individual sense. In spite of these findings, it is still premature to draw any conclusions that address this issue as more study and research is required.

2. Teaching Implications

The results and comments aforementioned in this study raise some important teaching implications to consider when meeting the needs of Korean EFL learners and when choosing and planning appropriate lessons. The current study suggests that culture can influence learning style. Indeed, many researchers in the second language acquisition field argue this point. For example, both Reid (1987) and Rossi-Le (1995) found that native

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language background was a factor in students' perceptual learning-style preference. Oxford et al. (1993) also presented many examples of cultural influences on learning styles, and noted that although culture is not the single determinant, and although many other influences intervene, culture often does play a significant role in the learning styles unconsciously adopted by many participants in the culture. Asian cultures fall very close to the group oriented dimension in which students lend themselves more closely to collaborative learning than to competitive learning (Wintergrest et al., 2003). This may explain why Korean students in this study, highly prefer group over individual learning style. This suggests that, it is important to attend to students' cultural learning styles when teaching in another culture by learning and by being aware of the target culture's learning style.

Another interesting teaching implication that should be considered in the field of ESL teaching is that the students learning styles may vary depending on factors that can affect language learning. The Learning Style Inventory developed by Dunn, Dunn, and Price (1975), includes elements of instructional environments that learners are affected by: Their immediate environmental (sound, light, temperature, seating design); their emotionality (motivation, persistence, responsibility, structure); sociological preferences (learning alone, in a small group, as a part of a team, with an authoritative adult, and variety or routines); physiological characteristics (perceptual strengths, time-of-day energy levels, and need for intake or mobility while learning); and processing inclinations (global/analytic, right/left hemisphere, and impulsive/reflective). In this study's case it may have been the sociological factor where the teacher is the authoritative adult that learners were dependent on in their daily study routine. Thus, it is important to keep in mind these factors and how they can affect learners. Situations in which there is difficulty learning the class material, high frustration levels, and failure may not rest solely on the material itself. Teachers need to consider a whole range of cognitive as well as affective variables that are present in the L2 learning process and make appropriate judgments about learners.

Finally, a last important implication to consider is that younger students closely associate with learning that is hands-on and practical. As revealed in the current study, the younger students preferred kinesthetic and tactile styles of learning the most among the other two higher graders. It is therefore important to consider this factor when teaching different year levels. It is also essential to choose materials and prepare lessons that are suitable to different age groups. Younger students may not be very interested with learning that involves a lot of focusing and listening, breaking down abstract information and theory, and working autonomously and independently. Creating a learning situation that involves moving, touching, making, building and experimenting things would be more appealing to the younger level students.

Instructors confronted with this list might feel that it is impossible to do all that in a

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course and still cover the syllabus. Also, in reality of the classrooms, it is impossible to always take into account all the linguistic variables and sensory learning style preferences. It is also impossible to constantly remember how each student learns best. The idea however is not to adopt the techniques at once nor to always meet every students' needs but to look for ways that are feasible and try them on an occasional basis. This might aid in teacher identification of student learning style preference which can guide in the selection of appropriate teaching methods and materials to maximize student learning. In addition, knowledge of student profiles can be used as an instructional guide for individuals or for groups with the same style preferences. In this way a teaching style that is both effective for students and comfortable for the instructor will evolve naturally, with potentially a dramatic effect on the quality of learning.

VI. CONCLUSION

The findings of this study presented that Korean junior high school students favored learning English through listening, reading, and working in groups and younger students preferred learning through physical involvement as well as practicum. These results provide a number of useful implications for L2 teachers to consider.

Students learn best when they are in learning situations that meet their learning style needs. A mismatch between teaching and learning styles, as Reid (1987) mentioned, can cause frustration and sometimes even failure. Thus teachers can help students identify their styles in which they feel comfortable and interested in learning the L2. In addition, teachers can use this information to create lessons that are appealing, interesting and successful. If teachers can show students the variety of learning style by providing experiences in different teaching styles, the resulting awareness may allow students to meet the demands of academic teaching methods and assignments.

Despite the useful and interesting findings that have been revealed through this study, there are however, some limitations to consider. First, due to a small sample number of participants as well as an unequal distribution in year levels, it would be premature to say that that learning styles are predictors of L2 performance as well as achievement. Furthermore, it would be inconsistent to say that the learning style preferences found here are the same across all Korean junior high school students since they differ in terms of many factors such as learning situation and content areas; educational background; proficiency level; and language and personal experiences. All these factors can shape one's mode and preference of learning.

Another limitation to consider is the research method and instrument used for this study. If for instance, an interview or a classroom observation was carried out, then this study

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might have yielded different results than the ones found by using the PLSPQ only.

Given these limitations, more research that considers a great number of variables (cognitive, affective, personality) that relate to learning styles with further quantitative and qualitative analyses must be considered in order to address the full complexity of this field. Classroom observations and well conducted interviews might help contextualize learning style patterns found in the PLSPQ. Indeed classroom observations are particularly useful in examining how teachers' instructional methods are implemented and what effects they have on students' learning styles (Kim, 2007b). Furthermore, more research that provides both theoretical insights as well as practical implications is necessary. Theoretical studies should provide educational researchers expand their knowledge base about learning styles and teaching methods and techniques that suit learners. Practical studies should provide instructors with a more clear view on the range of learning styles in the classrooms which would allow them to create activities and lessons that will benefit the learners at some time during the course.

To conclude, as we continue to explore the field of learning style in teaching ESL/EFL, we may find that the most important is not whether we label the students or the teachers as "visual or kinesthetic" or as "practical or unpractical" but whether we are able to acknowledge the various types of learners in the classroom, and continue to understand and accommodate them. Despite the fact that it is unrealistic to meet the needs and interests of all learners, it is the educators' job to build bridges to all learning styles by helping students to learn as much as possible, in a way that is natural and comfortable to them. The goal of every teacher is to support the learning of every student, appealing to a variety of learning styles and to nurture all the forms of intelligence represented in each class.

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