

# 政院國家科學委員會補助專題研究計畫成果報告

## 台灣之大學生英語學習動機之研究

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計畫主持人：張善賢

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Conceptualizing Taiwanese College Students' English Learning Motivation

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## 一、中文摘要

語言學習動機之心理建構 (construct) 理論過去有學者以單一建構 (如 Krashen, 1981; Schumann, 1986) 或雙因子 (如 Gardner, 1985) 的模式討論及敘述。近年來一些學者認為語言學習動機是多因子建構 (multifactorial construct), 所以在研究動機時應該涵蓋社會、認知以及情意等因素 (如 Crookes & Schmidt, 1991; Dornyei, 1990; Oxford & Shearin, 1994; Schmidt et al., 1996); 這些學者並且在不同的學習環境中研究發現了一些影響動機的因素 (motivational components)。同時這些學者也指出動機的因素的內涵以及重要性可能因地而異, 不能一概而論。

此研究主要探討國內大學生 EFL (English as a Foreign Language) 學習動機的因素以了解學生動機的結構。此外, 本研究要確認動機因素與學生語言的使用、英文程度和動機強度之間的關聯性。

受測者為 750 位交通大學一至四年級各系的大學生。此研究發展出一份合適本校學生使用的問卷。問卷量表包涵六個分量表: 動機、語言使用領域、態度、動機強度、希望之英文程度、以及可能達到的英文程度; 前二個分量表將以因素分析之統計方法確認學生的動機因素以及英語使用領域之因素。探討這兩組因素之間的相關程度便有助於我們了解學生的動機因素。此外, 動機因素和英語程度以及動機強度之間的相關程度將被計算以探討各動

機因素之重要性。

研究結果顯示, 學生的外與學習動機可明顯區分為七個不同的因子; 而這七個因子可納入四個不同的領域: 1) 內在動機, 2) 融合動機, 3) 工具動機, 以及 4) 英語課好的表現。學生在實際使用英文上可分為五大領域: 1) 娛樂, 2) 課堂要求, 3) 出國或與外國人溝通, 4) 閱讀新知, 5) 電腦網路。另外結果還顯示學生的內在動機的重要性, 此一結果與先前的諸多研究結論相符。

關鍵詞: 學生動機、學生態度、語言使用、學生成就、第二語、外語

## ABSTRACT

Instead of viewing L2 (second/foreign language) motivation as a single construct (Krashen, 1981; Schumann, 1986) or a dichotomous construct (Gardner, 1985), a number of recent researchers have claimed that L2 motivation is a multifactorial construct that involves social, cognitive, and affective factors (Crookes & Schmidt, 1991; Dornyei, 1990; Oxford & Shearin, 1994; Schmidt et al., 1996). These researchers have identified several factors motivating students to learn the target language (motivational components) in a variety of learning contexts. Researchers have cautiously

pointed out that the results obtained from previous studies may not be generalized to those unexamined language learning contexts since L2 motivation construct may vary from one learning context to another.

This study aims to conceptualize Taiwanese college students' EFL learning motivation by identifying the motivational components in relation to the students' actual language use fields, desired proficiency, actual proficiency, and motivational intensity.

The participants were more than 750 college students at National Chiao Tung University. A motivational questionnaire was developed to measure the students' motivational orientations, actual language use fields, attitudes towards the target language and culture, desired proficiency level, possible proficiency level, and motivational intensity.

The students' scores of the Motivational Orientations and Language Use Fields subscales were factor-analyzed. The extracted factors from the Motivational Orientation subscale were defined as the students' motivational orientations (see Dornyei, 1990; Schmidt et al., 1996). The Language Use Fields subscales will also be factor analyzed to determine the underlying factors of the students' language use. Pearson product-moment correlation was performed to determine the relationships among the variables.

The results showed that 7 significant motivational orientations were identified and

can be subsumed under 4 different categories: 1) intrinsic motivation, 2) integrative motivation subsystem, 3) instrumental motivation subsystem, and 4) need for good performance in English class. Students' English use fields can be divided into five different fields: 1) Entertainment, 2) Use for classroom requirement, 3) Going abroad and communicating with foreigners, 4) Reading for informational purposes, and 5) Computer and the Internet use. In addition, the results highlighted the importance of intrinsic motivation, which is consistent with previous studies on intrinsic motivation.

Key words: student motivation, student attitude, language use, student achievement, second language, foreign language

## 二、緣由與目的 (Introduction)

Recent literature in second/foreign language learning motivation (L2 motivation) has argued that the exact construct of L2 learners' motivation should be best defined in the specific context in which the target language is learned. In response to the call for more research on L2 motivation studies in different learning contexts, a number of studies have been conducted at various levels and areas in attempt to better explain the nature of L2 motivation of the context in question. These studies generally have either proposed alternative motivation factors that are different from traditional Gardnerian dichotomous view of motivation, or redefined the major components of Gardner (1985).

Clément & Kruidenier (1983), for example, investigated 871 Grade 11 students who were learning different L2 such as

French, Spanish, and English, and identified several meaningful motivations, e.g., friendship, travel, knowledge, etc. Dörnyei, (1990) investigated motivational construct of 134 adult EFL Hungarian learners and concluded that the EFL motivation can involve 4 different dimensions: Instrumental motivational subsystem, Integrative motivational subsystem, Need for achievement, and Attribution about past failures. Another study conducted in Hungary (Clément, Dörnyei, & Noels, 1994) investigated 301 EFL learners in a secondary-school indicated 5 different motivational factors: Xenophilic orientation, Identification orientation, Sociocultural dimension, Instrumental-knowledge dimension, English media factor. In other studies, many other factors have been extracted and discussed, although some of the factors may overlap in nature, by definition, or the labels given by the researchers. Only a few of them are listed below due to the space restriction: Schmidt, Boraie, & Kassabgy (1996) in Cairo, Egypt which investigating 1464 adult EFL learners of English; Morris (2001) in Puerto Rico which investigated 204 first-year high school EFL learners; Ely (1986) in California which investigated 75 first-year students of Spanish; Nikolov (1999) in Hungary investigating 84 EFL child learners; Warden & Lin (2000) in Taiwan investigating 442 technological college students; Belmechri & Hummel (1998) in Quebec City, Canada, investigating 93 francophone Grade 11 high school students; Kang (2000a, b) in Korea, investigating 234 9<sup>th</sup> and 192 10<sup>th</sup> grade EFL students, respectively.

These studies have been conducted in different social-cultural contexts under the assumption that the nature of L2 motivation is context-specific. In other words, the exact constructs of L2 motivation would vary from one social-cultural context to another. Another underlined assumption guiding the studies seems to be that the scope L2 motivational constructs would go beyond traditional Gardnerian dichotomous view of motivation, i.e., the interplay of both integrative and instrumental orientations, and accordingly these studies have been attempted to adapt concepts and factors that have been commonly discussed in other disciplines. Based on the two assumptions, the present study aimed to investigate the EFL motivation constructs of the college students at a university in Taiwan.

### 三、研究方法 (Method)

The subjects were more than 757 college students from 19 EFL classes in National Chiao Tung University which were taught by 11 different teachers. The subjects' genders and years were mixed. Among the subjects, the numbers of male and female subjects were 582 and 171 (with 3 missing), respectively. Among the subjects, 298 were the first-year students, 157 were the second-year students, 157 were the third-year students, and 145 were fourth-year students. The majors of the subjects covered all the departments in the university. Most of the subjects were from the engineering fields, which reflects the general situation in the university.

A motivational/attitude questionnaire was developed for the current context and was administered to the subjects. Most of the

administrations of questionnaire were carried out by the researcher of the study. All the questionnaire items were written in Chinese to ensure students' comprehension about each item. It took about 20 minutes for the students to fill out the questionnaire.

The items of the newly developed questionnaire used in the study were adapted from two major sources, 1) a number of published questionnaires and 2) more than 200 essays that students wrote down about their EFL learning experiences. In the essay, each student described their experiences in terms of the following aspects: 1) reasons for learning English, 2) goals of learning, 3) difficulties and joys of learning, 4) the fields of their using English, and finally 5) general reflections about learning English.

The major sections of the newly designed questionnaire used in the study included 1) students' background information, 2) desired proficiency level of English, 3) most possibly achieved proficiency level, 4) motivational orientations, 5) attitudes toward the target culture and language, 6) motivational intensity, and 7) English use fields. Section 2 and 3 were both single-item that asked students to rate their desired and possible proficiency at a scale ranging from 1 indicating very low proficiency level to 6 indicating native-like. The lengths of the other sections are 42 items for Section 4, 11 items for Section 5, 21 items for Section 6, and 17 items for Section 7. The internal consistency alphas of the sections are all fairly appreciable, with Section 4 being .87, Section 5 .81, Section 6 .91, and Section

7 .87 (in all sections,  $n \geq 740$ ).

#### 四、結果討論 (Results and discussion)

##### Students' Motivational Orientations

The statistical package SPSS for Windows Version 9.0 was used for data analysis. Factor analysis was performed on the sections of Motivational Orientations and English Use Fields in order to extract the latent factors. The analysis used the traditional minimum-eigenvalue criterion of 1.0, principle component analysis, and varimax rotation. Nine factors from the Motivational Orientations subscale and 5 factors from the English Use Fields subscale were extracted, respectively.

Factor 1 of motivational orientations concerns students' competence, interest, efficacy, sense of achievement, and emotions about learning English and therefore, this factor can be termed *Intrinsic motivation*.

Factor 2 involves items that ask students about their interests in different cultures, making friends with foreigners, traveling in English speaking countries, appreciating arts of the target culture, and using English in entertainment. This factor therefore can be labeled as *Interest in Foreign Languages, Cultures, and People*.

Factor 3 of motivational orientations includes items that reflect students' intrinsic interest in learning English which may be very likely associated with implied values of learning English. This factor can be referred to as *Implied Value with English*.

The fourth motivational factor loads on 5 items, which indicate that students learn English because of social pressures or examinations. This factor can be labeled *Requirement*.

The fifth motivational factor has high loadings on three items. The factor involves a desire of integrating into the target community. Therefore, it is labeled *Desire to Integrate into the Target Community*.

The sixth motivational factor loads distinctly on 5 items and is labeled *Technology and Knowledge*, which is considered as the typical motivation orientation for the students in this engineering university. The factor suggests the students' need of English in academy, technology, computer, and the Internet.

The seventh factor can be referred to as *Need for Good Performance in English Class*. The four items clustering together show that students work on English because they need to obtain high grades or students value their outperforming classmates in English class

The eighth factor heavily loads on the two items showing that students study English in order to pass the proficiency tests and study abroad. This factor can be labeled as *Need for Studying Abroad*.

The ninth factor is predominated by 3 items which suggest the tendency to study English for the students' career need in the future. This factor is therefore defined as *Future Career*.

Factor 6 has the highest mean scores (M=3.91, SD=.50), reflecting that the students need English in perusing knowledge and catch up the development of technology, followed by factor 9 and 2. Factor 5 has the lowest mean scores (M=2.21, SD=.75), suggesting that integrative motive is relatively a less insignificant factor in motivating students to learn English.

### Students' English Use Field

The exploratory factor analysis on the English use fields extracts 5 different factors. Factor 1 emphasizes that students use English in listening to popular music, watching movies, singing English songs, and listening to broadcast. Therefore, it can be labeled as *Entertainment*.

Factor 2 loads on 5 items which indicate that students use English in the classroom activities, writing homework, teaching other learning English, communicating with peers, and reading literature works. This factor can be labeled as *Use for Class Requirements*.

Factor 3 can be referred to as *Going Abroad and Communicating with Foreigners*. It deals with the 3 items stating that students use English in traveling and studying abroad, make friends with foreigners, and preparing for proficiency tests such as TOEFL.

Factor 4 can be labeled as *Reading for Informational Purposes*. The 3 items of the factor suggest that students read English for obtaining information from textbooks in English, technical books or papers, and newspapers and magazines.

The last factor, Factor 5, is the typical field in which these students would have to use English. It has high loadings on 2 items which show that the students use English in computer and the Internet as well as in playing on-line games. Therefore, this factor can be termed as *Computer and the Internet Use*. Not surprisingly, Factor 5 has the highest mean scores (M=3.56, SD=.97), followed by Factor 1 (M=3.37, SD=.85), 4 (M=3.03, SD=.86), 2 (M=2.49, SD=.78), and 3 (M=2.53, SD=.96).

Intercorrelations of Motivation Orientations and English Use Fields

Table 1 summarizes the correlations between motivation orientations and English use fields. As can be observed in the table, these two sets of factors are generally interrelated (35 out of the 45 coefficients are significant). However, this result is different from Dornyei (1990) which indicated that only 7 out of 28 coefficients

Table 1. Correlations between Motivation Orientations and English Use Fields.

	U1	U2	U3	U4	U5
M1	.46**	.43**	.33**	.32**	.06
M2	.46**	.36**	.38**	.23**	.10**
M3	.37**	.38**	.31**	.28**	.09**
M4	-.13**	-.13**	-.05	-.08*	.06
M5	.20**	.18**	.24**	.10**	-.06
M6	.24**	.24**	.18**	.28**	.06**
M7	.15**	.14**	.15**	.08*	.03
M8	.25**	.14	.31**	.18**	.01
M9	.05	.00	.07	.02	.01

Un=Factor n of English Use Fields, for example, U1=Factor 1 of English Use Fields; Mn=Factor n of Motivational Orientations, for example, M1=Factor 1 of Motivational Orientations; \*p<.05; \*\*p<.01

are significant. The disagreement of results may be attributed to the different nature of the participants in the two different studies. In Dornyei (1990), the participants were young adults in a language school who voluntarily spent extra time and money in learn EFL, while the students in the present study were learning EFL as a required course in the university. It seemed that since

these college students can be more homogenous in terms of educational and social background, they may have to use English in similar situations and fields. This may also explain why high correlations between motivational orientations and English use fields cannot be expected. As can in Table 1, the highest correlation coefficients are only moderate; many coefficients are low.

Correlations between Motivational Orientations and Other Student Variables

Table 2 summarizes the correlations between motivational orientation and four other student variables, motivational

Table 2. Correlations between Motivation Orientations and Other Student Variables

	MI	Attitudes	Desired	Possible
M1	.72**	.35**	.40**	.52**
M2	.53**	.46**	.31**	.37**
M3	.58**	.54**	.30**	.35**
M4	-.31**	-.05**	-.19**	-.17*
M5	.26**	.18**	.18**	.22**
M6	.44**	.33**	.17**	.22**
M7	.20**	.15**	.15**	.08*
M8	.17**	.11	.28**	.21**
M9	.07	-.02	.04	.01

MI=Motivation Intensity; Attitudes=Attitudes toward the Target Culture and Language; Desired=Desired Proficiency Level; Possible=Possible Proficiency; Mn=Factor n of Motivational Orientations, for example, M1=Factor 1 of Motivational Orientations; \*p<.05; \*\*p<.01

intensity, attitudes towards the target culture and language, desired proficiency level, and

possible proficiency level. As can be seen in the table, most motivational orientations are related to the three student variables. It is noted that Factor 4, Requirement, is negatively correlated with the three variables, which suggests that requirement motivation should be de-emphasized.

In addition, Factor 1, Intrinsic Motivation, has the highest correlations with Motivation Intensity and Desired/Possible Proficiency Level, suggesting its prominent importance among the 9 factors. Thus, the common view that intrinsic motivation is favorably linked with a higher level of effort and attainment is partly conformed by the present finding.

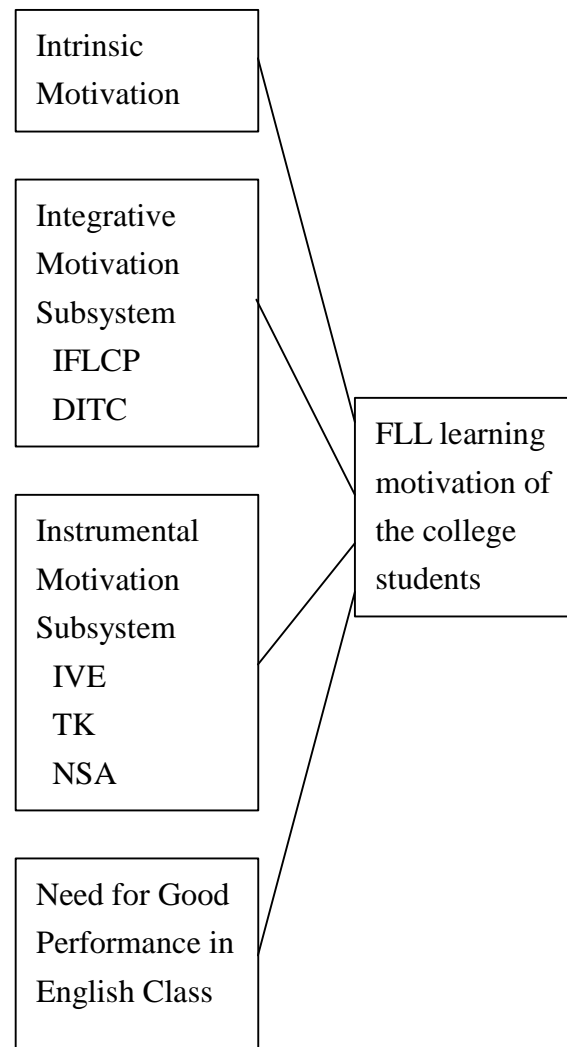
#### 五、結論 (Conclusion and implications)

As can be seen in both Table 1 and Table 2, 2 of the 9 motivation orientations consistently have no contribution to students' English use, motivation intensity, and proficiency levels, i.e., Requirement and Future Career.

Figure 1 shows the 7 significant motivation orientations that contribute the students' FLL learning motivation. The two orientations, Interest in Foreign Languages, Cultures, and People, and Desire to Integrate into the Target Community, can be theoretically subsumed within the Integrative Motivation Subsystem. On the other hand, another three orientations, Implied Value with English, Technology and Knowledge, and Need for Studying Abroad, can be logically subsumed within the category of Instrumental Motivation Subsystem. Finally, the last orientation, Need for Good Performance in English Class, can be dependent from the previous

three categories.

Figure 1. Schematic representation of the motivation constructs of the college students



Note: IFLCP= Interest in Foreign Languages, Cultures, and People; DITC= Desire to Integrate into the Target Community.; IVE= Implied Value with English; TK= Technology and Knowledge; NSA= Need for Studying Abroad



## 六、參考文獻 (Selected References)

- Belmechri, F., & Hummel, K. (1998). Orientations and motivation in the acquisition of English as a second language among high school students in Quebec City. *Language Learning, 48*, 219-244.
- Clément, R., Dörnyei, Z., & Noels, K. A. (1994). Motivation, self-confidence, and group cohesion in the foreign language classroom. *Language Learning, 44*, 417-448.
- Clément, R., & Kruidenier, B. G. (1983). Orientations in second language acquisition: I. The effects of ethnicity, milieu, and target language on their emergence. *Language Learning, 33*, 273-291.
- Crookes, G., & Schmidt, R. W. (1991). Motivation: Reopening the research agenda. *Language Learning, 41*, 469-512.
- Dörnyei, Z. (1990). Conceptualizing motivation components in foreign language learning. *Language Learning, 40*, 45-78.
- Ely, C. M. (1986). Language Learning motivation: A descriptive and causal analysis. *The Modern Language Journal, 70*, 28-35.
- Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitude and motivation*. London: Edward Arnold.
- Kang, D. (2000a). Motivation and foreign language learning in Korean EFL context. (ERIC Document Reproduction Service No. ED442284).
- Kang, D. (2000b). Motivation is such a complex process in the EFL foreign language classroom. (ERIC Document Reproduction Service No. ED444354).
- Krashen, S. D. (1981). Second language acquisition and second language learning. Oxford: Pergamon.
- Morris, F. A. (2001). Language learning motivation for the class of 2002: Why first-year Puerto Rican high school students learn English. *Language and Education, 15*, 269-278.
- Nikolov, M. (1999). 'Why do you learn English?' 'Because the teacher is too short.' A study of Hungarian children's foreign language learning motivation. *Language Teaching Research, 3*, 33-56.
- Oxford, R., & Shearin, J. (1994). Language learning motivation: Expanding the theoretical framework. *Modern Language Journal, 78*, 12-28.
- Schmidt, R., Boraie, D., & Kassabgy, O. (1996). Foreign language motivation: Internal structure and external connections. In R. L. Oxford (Eds.), *Language learning motivation: Pathways to the new century* (pp. 9-70). Honolulu: University of Hawaii Press.
- Schumann, J. H. (1986). Research on the acculturation model for second language acquisition. *Journal of Multilingual and Multicultural Development, 7*, 379-392.
- Warden, C. A., & Lin, H. J. (2000). Existence of integrative motivation in an Asian EFL setting. *Foreign Language Annals, 33*, 535-547.