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Existence of Integrative Motivation in Asian EFL Setting
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Existence of Integrative Motivation in Asian EFL Setting

Abstract

The major purpose of this study was to investigate the existence of distinct motivational groups within a population of Taiwan EFL (English as a Foreign Language) learners. Based on previous ESL (English as a Second Language) research, this study assumed the existence of both an integrative and an instrumental motivation. A hypothesized motivation, labeled required, was also tested for. A survey instrument was developed and completed by over 2000 Taiwan non-English majors at two educational institutions in Taiwan. This paper reports preliminary results from the first educational institution, and includes the first wave of 500 responses. Exploratory factor analysis was employed to confirm the existence of each motivational group as well as their temporal orientation (past, present, or future). Results did not support the existence of an integrative motivational group, but did find a strong required motivational group as well as an instrumental group. Lack of an integrative motivation among Taiwan EFL learners has significance for language education in Taiwan, since most EFL classroom techniques are derived directly from Western ESL theory that assumes integration as one of the main motivations. Cultural influences on EFL settings are discussed.
Introduction

Non-English majors make up the vast majority of students in English classrooms around the world, yet teacher training programs and learning materials are widely based on assumptions that simply may not fit local classrooms. In an attempt to better understand our own local (in Taiwan) students’ attitudes about English learning we undertook a series of surveys and interviews. What we found was a complex picture that was not readily open to simple analysis or wholesale application of existing theories (Lin and Warden 1998). That finding pointed out the need for a better understanding of just what our students’ English learning motivations are. This information is fundamental to better provide our local students with adequate training, while also pointing the direction for increased localization of EFL instruction in Asia.

This topic is extremely important because motivation is considered by many to be one of the main determining factors of success in developing a second or foreign language. Motivation determines the extent of active personal involvement in L2 learning. Conversely, unmotivated students are insufficiently involved and therefore unable to develop their potential L2 skills. To what extent are the motivations in an EFL context similar or different from those of an ESL setting?

Research contrasting different educational settings has included different cultural groups (Kuhlemeier et al. 1996; Tachibana et al. 1996), different times (Hothe 2000), and different geographical locations (Lincicome 1993). Ethnocentrism as an influencing factor in language learning among Japanese was examined by Hinenoya and Gatbonton (2000) in a study that pointed out the complexity of culture-specific factors within an
EFL context. When discussing any issue about language teaching and learning, cultural
differences should contribute to the thrust of the discussion. Issues may include the
differences of educational systems, learning conditions, teaching and learning styles,
needs for language use in the job market, and language goals.

The existence of different attitudes and perspectives concerning English learning
among Taiwanese students raises the question of how we should teach students from
departments as diverse as Applied Chemistry and Finance? Students of different Taiwan
university majors show preferences for different language skills and teaching methods
(Lin and Warden 1998). While many studies of English learners in Taiwan have dealt
with English majors, there are far more students studying English because it is a core
requirement at all Taiwan colleges and universities. This is also the case in China where
over five million college, university, and adult non-English majors are studying English,
according to the Mainland Chinese Ministry of Education. What are the real needs and
motivations of these non-English major students?

**Reengineering SLA theory: Western vs. Eastern**

Sridhar (1994) states that SLA theory needs extensive change from the ground up so
that a more functionally oriented and culturally authentic theory can be obtained. Current
theories are confined by Western cultural proposition, and when a culture does not fit the
assumptions no consideration for circumstances are made. Kachru (1994) and Sridhar
(1994) have pointed out that the most influential acquisition theories and teaching
methodologies currently taught are mainly established on second language acquisition
models built in North America, Britain, and Australia (hereafter referred to as NABA).
Most of the data adopted in setting forth these theories was collected from immigrants and international students studying in NABA, and not much has been done to collect information from other contexts in the rest of the world (Kachru 1994). The most prominent L2 acquisition paradigm thus “leaves out vast millions of L2 users who learn and use second language in their own countries . . .” (Sridhar 1994, 801). “In other words, without suitable adaptation, many of the L2 acquisition theories may be irrelevant . . .” (Liu 1998b). Dornyei (1990) has pointed out that it is not appropriate to apply the results derived from second-language acquisition (SLA) contexts directly to FLL (Foreign Language Learning) situations. Gardner and Macintyre (1991), Ramage (1986) and others have also noted the differences in English learning motivation in different contexts. Holliday (1994a, 1994b) and Prabhu (1987) have shown that many teaching methodologies may not be practical or effective in Non-NABA countries.

**Different Situations and Contexts**

English education in non-NABA countries is very different from that in NABA countries and some of the main contributing factors may be categorized as follows:

1. **Educational policy**

   English language education in Asia generally takes place in state-run institutions such as elementary or secondary schools. Upon entering university students may have studied English up to eight years. On the surface this appears to be a significant investment in language learning, however, throughout those years English is treated as a required academic subject rather than a tool for social survival as is usually the case with ESL in NABA settings. The widespread nature of required English instruction actually presents problems in obtaining qualified teachers and certainly prohibits the exclusive use
of native speakers of English or even teachers who have lived in an English speaking country.

2. Tradition

Although there have been some changes, English teaching in most of Asia still tends to mean teaching grammar, reading, and translation. Language evaluation tests under this practice measure mainly grammatical competence (Campbell and Zhao 1993). In countries with a history of obedience to authority a teacher is not seen as a facilitator but as a presenter of knowledge. English teaching in Asia is still dominantly teacher-centered (Campbell and Zhao 1993). In the West teaching is process, discovery-oriented, or student-centered, including amounts of interaction and group work in classes where normal class size is under 20 students.

3. Culture

Even more basic than traditions, and more difficult to change, cultural norms encompass what students must integrate into upon graduation. Hofstede (1984, 1991) developed a cultural typology that described differences in U.S. and Taiwanese employees’ attitudes towards norms of workplace behavior. Clear differences between the two cultures were found on dimensions such as individualism, masculinity, and Confucian dynamism. Hofstede’s (1984) Confucian dynamism is highly similar to the concept of conformity as described by Schwartz (1992, 1994), which can be summarized as a tendency to restrain oneself in order to avoid upsetting social norms. Teachers in Taiwan are themselves members of the local culture and can be expected to prepare students to enter the workplace with cultural values well engrained. Local cultural values may differ from traditionally studied ESL student values, leading to a fundamental
mismatch, which is often expressed by teachers just returning from training in NABA countries in statements such as, “Why don’t they do what they’re supposed to do?”

4. Resources

Limited educational resources, lack of funds, and a shortage of teachers has led to classrooms crowded with as many as 70 students in China (Hudson 1994) and 60 in Taiwan with little or no audio-visual or other teaching equipment. These limitations have resulted in large numbers of students being taught in predominantly non-interactive lecture-style settings. English courses (with labels such as English conversation) in Asia often resemble the required introductory classes of psychology or history in American Universities.

5. Class time

Class time per week for English is limited to 2-4 hours, far fewer than in NABA’s intensive ESL programs. Such limited class time greatly constrains the amount of information that can be covered as well as simply eliminating opportunities for students to practice using the language. It is not uncommon for a required English class to meet once a week for three hours. This results in a total of 18 meetings a semester, far fewer than what most teachers in Taiwan feel is necessary for even basic progress in communicative ability.

Purpose of English Study

Before rendering assistance to our students we should work hard to ascertain what they really need, else our efforts may be in vain. Hudson’s (1994, 21) thought on the teacher training course she offered in Thailand are of special relevance: “The course
focuses on ESL because the resources and the practicum offered are in an ESL situation, not an EFL situation. Many of the students intended to use their teaching skills in an EFL situation but the differences required by the EFL situation are largely left to the students to investigate.” Although Hudson’s remarks refer to teacher training, they are also highly relevant to the problem of our students’ needs in Asia. Besides differences in learning contexts and situations, the needs of non-NABA students certainly are very different than their NABA counterparts.

**Motivational factors in language learning**

Early work by Pimsleur (Pimsleur 1963; Pimsleur et al. 1964) showed that some students, up to 20 percent, exhibited significantly lower grades in FL classes compared to their other school subjects. These students were labeled underachievers and pointed to the possibility that their language learning skills were not identical to intelligence but rather reflected other underlying factors, such as motivation (Pimsleur et al. 1962). Pimsleur included questions about interest in learning a FL on his own FL Aptitude Battery. The study of motivation in second-language acquisition became an eminent research topic after Gardner and Lambert (1972) published an extensive review of the results of a more than ten-year-long research program. They found that success in language attainment depends upon the learner’s affective predisposition toward the target linguistic-cultural group. This led them to form the concept of an *integrative motivation*, which represents “a high level of drive on the part of the individual to acquire the language of a valued second-language community in order to facilitate communication with that group” (Gardner et al. 1976, 199). Integrative motivation is related to components such as interest in foreign languages, desire for interaction with the target
language community, and attitudes toward the target language community (Gardner and Lambert 1972). This motivation is clearly distinct from a second drive, *instrumental motivation*, where the learner’s interest in learning the foreign language is related to the practical, utilitarian advantages derived from language proficiency, such as better employment or a higher salary (Dornyei 1990). Empirical support for these motivations has been mixed (Au, 1988) while researchers have also explored alternative motivation models (Crookes and Schmidt 1991; Dornyei 1994; Oxford and Shearin 1994).

Dornyei (1990) conducted a study of 134 learners of English in Hungary, a typical European FLL environment, where he investigated the components of motivation in foreign-language learning. In that research target language learning was involved in academic settings without regularly interacting with the target language community. It was assumed that the results derived from second-language acquisition (SLA) contexts are not directly applicable to FLL situations, since the target language is not an integral part of the host environment (Dornyei 1990). Among the motivational components in his motivational construct Dornyei asserted the following: (1) instrumental motivation, (2) integrative motivation, (3) need for achievement, and (4) attributions about past failures (Dornyei 1990). The results of his study indicated that the instrumental motivational subsystem and need for achievement play a significant role in controlling an intermediate level of target language proficiency, whereas the desire to go beyond this level is related to integrative motivations. In other words, it is more likely for learners with a high level of instrumental motivation and need for achievement to be successful in acquiring an intermediate level of proficiency in the target language. In order to get beyond this level, that is, to really attain fluency in the target language, an integration motivation is more
beneficial. He suggests that even if these results were based upon data obtained from only one FLL situation, it is possible that the construct applies to more general FLL situations.

It is fair to interpret Dornyei’s (1990) results as suggesting that integrative motivation might be far less relevant for EFL learners than for those learning a second language within the L2 environment. According to Dornyei (1990) foreign language learners rarely have sufficient experience with the target language community to have clearly expressed attitudes toward that community, therefore, they should not be so devoted to integrating with that target language community. According to the results in his study, instrumental motivation and need for achievement are related to each other, and these two factors influence foreign language learners at and below an intermediate proficiency level. It seems that the motivations of foreign and second language learners are often highly different, and that integrative motivation is much more meaningful for second language learners since they must learn to live in the target culture and communicate fluently in the target language, while for most foreign language learners who are separated in space and attitude from the target culture and who rarely surpass intermediate language proficiency level, integrative motivation does not seem to be so relevant (Oxford and Shearin 1994).

Differences between L2 learning motivation in second and foreign language environments have been examined by many researchers. A second language is a language learned in a place where for most people that language is typically used as the medium of everyday communication (for instance, English being learned by a non-native speaker after moving to Canada). The learner of the second language is surrounded by all
kinds of visual and auditory stimulation in the target language and, therefore, has many motivational and instructional advantages (Oxford and Shearin 1994). A foreign language is one that is learned in a place where that language is not typically used as the medium of everyday communication (for instance, English as it is usually learned in Taiwan, Japan, or Korea). In most cases foreign language learners rarely have opportunities to use the target language since they are surrounded by their own native language. They have to try hard to find some stimulation and input in the target language. Learners typically receive input in the target language only in the classroom and by rather artificial means (Oxford and Shearin 1994).

The question of whether motivations differ between learners of second and foreign languages is very important and has been repeatedly discussed in recent years. We hypothesize that in EFL settings, like ours in Taiwan, at least at a tertiary level, the L2 learning motivations are more related to the instrumental aspect of motivation rather than the integrative.

Gardner and MacIntyre (1991) found that instrumentally motivated students spent more time coming up with correct answers (to questions on an English test) than non-instrumentally motivated students when there was an opportunity to monetarily benefit from learning. The results of their study support the generalization that motivation facilitates learning, and that generally any factors that motivate an individual to learn will result in increased acquisition (Gardner 1985). Spolsky (1989) made a similar observation when he pointed out that there are many possible bases for motivation. He states that “A language may be learned for any one or any collection of practical reasons.
The importance of these reasons to the learner will determine what degree of effort he or she will make, what cost he or she will pay for the learning” (Spolsky 1989, 160).

To the list of existing motivations we add: required. While somewhat alien to the majority of NABA students, a required foreign language is quite common in educational institutions around the world. English is the language most often required in Asia, which results in many students studying English simply because it is required. Liu (1998a), in China, found that her English students, majoring in hotel management, showed strong instrumental motivations while a few students, on their own, expressed that their main motivation for studying was because the class was required. Littlewood (1999) has pointed out that our assumptions about motivations may not hold in Asian cultural settings. The idea that a requirement is not a choice may not apply in settings where the very concept of having a choice is foreign, or even viewed negatively.

In the absence of the two previously observed motivations, one could assume that the reason for studying a foreign language is simply because it is required. But can this default state actually be a motivation that helps students obtain a higher skill level? We hypothesize that Taiwan students are motivated by language learning requirements. Cultural reasons for why this is the case are far too complex to cover in this paper, but certainly may play an important role especially in relation to Chinese cultural values (Chinese Culture Connection 1987).
Research Questions

This study was directed at answering the following questions:

- Do three distinct, measurable motivation groups exist among EFL non-English major students in Taiwan: integrative, instrumental, and required?
- What is the relevant importance played by these motivations for EFL non-English major students?
- Can membership in these motivational groups be predicted or influenced by actual environmental use of English in the past, present, or future?
- Can membership in these motivational groups be predicted or influenced by expectancy factors—results of personal effort (past, present, future)?

Study

To investigate the existence of instrumental, integrative, and required motivations, a survey was created and distributed to students at two educational institutions in Taiwan. Part of a larger survey, this preliminary report focuses on the first wave of 500 surveys at a single institution. The survey was distributed to non-English majors at Chaoyang University of Technology, located in central Taiwan. Teachers in the Applied Foreign Languages Department were asked to distribute the questionnaire during their required English classes. These classes are year long courses required of both first and second year university students around the country.

The requirement for studying English is prescribed by the Ministry of Education and is not the result of decisions by individual schools. It is possible for a university to increase the required English hours when the curriculum appears highly related to English use, as in international business schools. This was not the case in the present study. Chaoyang’s non-English majors responding to the survey included students
studying chemistry, industrial design, finance, management, accounting, insurance, engineering, and computer science.

**Survey Instrument**

The questionnaire was first produced in English then translated to Chinese. Back-translation (Green and White 1976) was used to confirm accuracy and make adjustments to the Chinese version. The process included the original English being translated into Chinese by a native Chinese speaking researcher then translated back to English by a native Chinese speaker, with good English skill, who was not involved with the research. Adjustments were made and the process repeated until the original and translated English versions matched reasonably well. The survey was structured for use with factor analysis by grouping questions within the hypothesized three motivational groups (see Figure 1). A criterion set was measured by asking questions related to each of the three motivational groups (survey form reproduced in Appendix A).

Figure 1. Structure of the criterion set
The remaining three sections of the survey were constructed to test influence of three factors on the criterion set. As seen in Figure 2, these factors included environmental use of English (use of English outside of class), expectancy (attitudes towards success in the target language) and self skill estimate (self rated English skill score). The predictor set was further delineated temporally by asking each question for the past, present, and future. In this way the predictor set could capture the importance of temporal events. For example, previous requirements for English learning may not impact a student’s motivation as much as a future requirement, say entry to graduate school, yet previous negative learning experiences (expectancy) may have a larger influence than expectations about future events.

Figure 2. Structure of predictor set

Subjects

The survey was administered in the 1999 spring semester during required English class time. Of the 500 surveys distributed 442 were returned complete and usable. The
remaining number were discarded mostly due to incomplete responses. The average age of respondents was 20 (S.D. 5.05) with 68 percent female and 32 percent male.

**Results**

**Factor Analysis**

Exploratory factor analysis was used on the criterion set as a group (questions concerning the three motivations) and separately undertaken for the variables in the predictor set: expectancy, environmental use, and self skill estimate. The predictor set variables were separately analyzed in order to find any temporal influences since each survey question was repeated for past, present, and future (with the exception of the skill question). Internal consistency for the groups was high with Cronbach alphas of .95 for the criterion set (questions 1 to 14), .90 for the environmental use group (questions 15 to 26), and .90 for the expectancy group (questions 27 to 32).

Factor analysis was performed with SPSS 8.0, employing a cut off eigenvalue of one and VARIMAX rotation. From the criterion set two groups were found, not three. Table 1 shows that the first factor is made up of questions 2, 4, 3, 1, and 5. These questions relate to job benefits, such as a raise (question 2), job security (question 4), change job easily (question 3), obtain higher paying job (question 1), and get part-time consulting jobs (question 5). Question six is reflective of a required motivation (pass an exam) while question eleven reflects an integrative motivation (travel overseas). Both of these questions did not clearly load on either factor. Factor one, therefore, was confidently labeled as the instrumental motivation.
The second factor included questions 8, 10, 9, and 7. These questions were all from the required motivation, pass an elective class (question 8), complete education (question 10), pass a job exam (question 9), pass a required class (question 7). This factor was labeled as the required motivation. Questions 12, 13, and 14 dealt with the integration motivation, but did not clearly load on either factor, social contacts (question 12), social prestige (question 13), and understand books, magazines and movies (question 14).

Table 1. Factor analysis of criterion set (N=442)

<table>
<thead>
<tr>
<th>Survey Questions</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2 Obtain a raise</td>
<td>.86</td>
<td>.30</td>
</tr>
<tr>
<td>Q4 Higher job security</td>
<td>.81</td>
<td>.38</td>
</tr>
<tr>
<td>Q3 Change job easily</td>
<td>.81</td>
<td>.34</td>
</tr>
<tr>
<td>Q1 Higher paying job</td>
<td>.80</td>
<td>.28</td>
</tr>
<tr>
<td>Q5 Part-time consulting jobs</td>
<td>.69</td>
<td>.48</td>
</tr>
<tr>
<td>Q6 Pass university exam</td>
<td>.61</td>
<td>.55</td>
</tr>
<tr>
<td>Q11 Travel overseas</td>
<td>.58</td>
<td>.57</td>
</tr>
<tr>
<td>Q8 Pass elective class</td>
<td>.24</td>
<td>.81</td>
</tr>
<tr>
<td>Q10 Complete education</td>
<td>.23</td>
<td>.77</td>
</tr>
<tr>
<td>Q9 Job exam</td>
<td>.41</td>
<td>.77</td>
</tr>
<tr>
<td>Q7 Pass required class</td>
<td>.39</td>
<td>.75</td>
</tr>
<tr>
<td>Q12 Social contacts</td>
<td>.42</td>
<td>.63</td>
</tr>
<tr>
<td>Q13 Social prestige</td>
<td>.48</td>
<td>.61</td>
</tr>
<tr>
<td>Q14 Understand books, magazines &amp; movies</td>
<td>.50</td>
<td>.58</td>
</tr>
</tbody>
</table>

Questions not clearly loading on either of the two factors were discarded from further analysis. The remaining questions were re-tested with factor analysis. Purified VARIMAX rotated results can be seen in Table 2. Eigenvalues for the two factors were 6.47 for the instrumental factor and 1.02 for the required factor with a total explained variance of .75. This result clearly shows that an integration motivation is not as important to these students as a required motivation or an instrumental motivation. Most important in this finding is the high value of the instrumental motives for these students in their English studies (the higher level of variance accounted for as shown in the eigenvalue). They perceive their studies as related to career improvement or at least
having the potential to improve their careers. This analysis, however, only shows what these students perceive as important for their English studies, not what they actually have done. In other words, it may be clear that many people in Taiwan see English as useful for career improvement, but it does not automatically follow that everyone will then study English or take advantage of their opportunities. There are many paths to career improvement and this one may not be sufficiently rewarding for students to actually sacrifice their time and effort.

Table 2. Purified factors of criterion set (N=442)

<table>
<thead>
<tr>
<th>Survey Questions</th>
<th>Instrumental</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2 Obtain a raise</td>
<td>.87</td>
<td>.29</td>
</tr>
<tr>
<td>Q4 Higher job security</td>
<td>.83</td>
<td>.37</td>
</tr>
<tr>
<td>Q3 Change job easily</td>
<td>.82</td>
<td>.34</td>
</tr>
<tr>
<td>Q1 Higher paying job</td>
<td>.82</td>
<td>.29</td>
</tr>
<tr>
<td>Q5 Part-time consulting jobs</td>
<td>.69</td>
<td>.47</td>
</tr>
<tr>
<td>Q8 Pass elective class</td>
<td>.26</td>
<td>.85</td>
</tr>
<tr>
<td>Q10 Complete education</td>
<td>.25</td>
<td>.84</td>
</tr>
<tr>
<td>Q7 Pass required class</td>
<td>.40</td>
<td>.77</td>
</tr>
<tr>
<td>Q9 Job exam</td>
<td>.43</td>
<td>.75</td>
</tr>
<tr>
<td>Q12 Social contacts</td>
<td>.44</td>
<td>.60</td>
</tr>
</tbody>
</table>

The predictor set was also factor analyzed and the resulting factors tested for correlation with the criterion set factors in order to understand the possible links instrumental and required motivations have with actual behavior and intentions. The predictor set included four questions on environmental use of English with each question having separate past, present, and future orientations. Environmental use revealed three factors, as seen in Table 3, but these factors did not align perfectly with the three temporal dimensions of the questions. Only questions concerning the past and present loaded on factor 1 (eigenvalue of 5.9), while only questions concerning the future loaded on factor 3 (eigenvalue of 1.1). Loading onto factor 2 (eigenvalue of 1.5) are the three temporal versions of the same question: To what extent do you think you have used these
skills with English speaking friends, family, and/or associates (question 24 concerns the past, question 25 concerns the present, and question 26 concerns the future). It would appear that this question does not reflect any temporal relationship. The reason for this question creating its own factor may be that the opportunity for the respondents to actually use English with real people is highly limited in Taiwan, irregardless of past, present, or future. Questions not aligning with either of the temporal factors were eliminated from further consideration.

Table 3. Factor analysis of environment use set (N=442)

<table>
<thead>
<tr>
<th>Survey Questions</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q15 Previous use of Eng. Skills</td>
<td>.83</td>
<td>.16</td>
<td>.12</td>
</tr>
<tr>
<td>Q16 Present use of Eng. Skills</td>
<td>.83</td>
<td>.10</td>
<td>.27</td>
</tr>
<tr>
<td>Q18 Previously study these skills in a cram school</td>
<td>.74</td>
<td>.27</td>
<td>.21</td>
</tr>
<tr>
<td>Q21 Previously study these skills in an elective class</td>
<td>.69</td>
<td>.24</td>
<td>.40</td>
</tr>
<tr>
<td>Q19 Presently study these skills in a cram school</td>
<td>.67</td>
<td>.27</td>
<td>.15</td>
</tr>
<tr>
<td>Q22 Presently study these skills in an elective class</td>
<td>.70</td>
<td>.24</td>
<td>.42</td>
</tr>
<tr>
<td>Q25 Presently used these skills with people</td>
<td>.30</td>
<td>.91</td>
<td>.08</td>
</tr>
<tr>
<td>Q24 Previously used these skills with people</td>
<td>.31</td>
<td>.88</td>
<td>.04</td>
</tr>
<tr>
<td>Q26 Future will use these skills with people</td>
<td>.12</td>
<td>.80</td>
<td>.36</td>
</tr>
<tr>
<td>Q23 Future will study these skills in an elective class</td>
<td>.22</td>
<td>.19</td>
<td>.80</td>
</tr>
<tr>
<td>Q17 Future use of Eng. Skills</td>
<td>.20</td>
<td>.00</td>
<td>.75</td>
</tr>
<tr>
<td>Q20 Future will study these skills in a cram school</td>
<td>.27</td>
<td>.19</td>
<td>.67</td>
</tr>
</tbody>
</table>

After purification two factors emerged, accounting for .66 of total variance; factor 1 (eigenvalue of 4.85) was labeled as past/present orientation while factor 2 (eigenvalue of 1.05) was labeled future orientation (see Table 4). Expectancy measures represented by the three temporal orientations of the question *how successful are you . . .* formed a single factor only. This result would suggest that students do not see the past, present, or future differently when viewing their success with the English language. Skill was a single measure and therefore not factor analyzed.
Table 4. Purified factor analysis of environment use set (N=442)

<table>
<thead>
<tr>
<th>Q</th>
<th>Past/ Present</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q15 Previous use of Eng. Skills</td>
<td>.81</td>
<td>.18</td>
</tr>
<tr>
<td>Q16 Present use of Eng. Skills</td>
<td>.79</td>
<td>.30</td>
</tr>
<tr>
<td>Q18 Previously study these skills in a cram school</td>
<td>.78</td>
<td>.25</td>
</tr>
<tr>
<td>Q19 Presently study these skills in a cram school</td>
<td>.74</td>
<td>.14</td>
</tr>
<tr>
<td>Q21 Previously study these skills in an elective class</td>
<td>.73</td>
<td>.40</td>
</tr>
<tr>
<td>Q22 Presently study these skills in an elective class</td>
<td>.68</td>
<td>.45</td>
</tr>
<tr>
<td>Q23 Future will study these skills in an elective class</td>
<td>.22</td>
<td>.84</td>
</tr>
<tr>
<td>Q17 Future use of Eng. skills</td>
<td>.20</td>
<td>.80</td>
</tr>
<tr>
<td>Q20 Future will study these skills in a cram school</td>
<td>.30</td>
<td>.69</td>
</tr>
</tbody>
</table>

**Factor Correlation**

After factor purification correlation analysis was run to test the relationships among the resulting factors. Table 5 shows the summated means of the survey questions and the correlation matrix of the factor scores. All significant correlation measures were positive in direction of interaction. The highest correlation was between expectancy and skill. This relationship makes sense in the context of students with higher self rated skill levels tend to also have high expectancy of success with the language. The required variable did not correlate positively or negatively with the instrumental measure. This is due to the fact that these were the only two factors derived from the criterion data. Required did, however, correlate highly with the future orientation (.42, p < .01). This finding was somewhat of a surprise as future orientation intuitively would seem to correlate with an instrumental motivation, i.e., study English now and make more money in the future. Future orientation and the instrumental motivation did have a lower correlation at .20 (p < .01).
Table 5. Criterion set-predictor set linkage: Pearson correlation coefficient

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Instrumental</td>
<td>5.37</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Required</td>
<td>5.35</td>
<td>1.09</td>
<td>.00</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Future</td>
<td>4.98</td>
<td>1.16</td>
<td>.20**</td>
<td>.42**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Past/Present</td>
<td>3.85</td>
<td>1.14</td>
<td>-.09</td>
<td>.14**</td>
<td>.00</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Expect</td>
<td>4.19</td>
<td>1.17</td>
<td>.04</td>
<td>.22**</td>
<td>.46**</td>
<td>.46**</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>6. Skill</td>
<td>3.43</td>
<td>1.26</td>
<td>-.03</td>
<td>.10*</td>
<td>.24**</td>
<td>.41**</td>
<td>.68**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*p < .05  ** p < .01

To better understand the relationships between the two sets of data, the criterion set and the predictor set, canonical correlation analysis was undertaken. This procedure assesses the relationship between multiple independent variables and multiple dependent variables (Hair et al. 1995). Unlike multiple regression techniques, which measure the predictive ability of independent variables on a single dependent variable, canonical correlation assesses the predictive power of the independent variables on numerous dependent variables. In this analysis the predictor set resulting factors were the independent variables, while the criterion set resulting factors made up the dependent variables (see Table 6).
Table 6. Criterion set-predictor set linkage: Canonical analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Canonical correlation function 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Raw. Coeff.</td>
</tr>
<tr>
<td>Criterion set</td>
<td></td>
</tr>
<tr>
<td>Instrumental</td>
<td>.34</td>
</tr>
<tr>
<td>Required</td>
<td>.93</td>
</tr>
<tr>
<td>Predictor set</td>
<td></td>
</tr>
<tr>
<td>Future orientation</td>
<td>1.02</td>
</tr>
<tr>
<td>Past/present orientation</td>
<td>.31</td>
</tr>
<tr>
<td>Expectancy</td>
<td>.01</td>
</tr>
<tr>
<td>Skill</td>
<td>-.28</td>
</tr>
<tr>
<td>Chi-squared</td>
<td>101.2</td>
</tr>
<tr>
<td>p&lt;</td>
<td>.001</td>
</tr>
<tr>
<td>Canonical correlation</td>
<td>.48</td>
</tr>
</tbody>
</table>

Loadings with the same sign, from the different sets, show a direct relationship, while different signs show an inverse relationship. All loading scores showed variables from both sets exhibit influence in the same direction. From the criterion set the required motivation showed the strongest relationship with the predictor set (.94). In the predictor set the future orientation showed the strongest relationship with the criterion set (.95). Expectancy also played an important role in predicting the criterion set (.43), while past/present orientation and skill showed little predictive power. This result informs us that the motivational groups can be influenced through increased future orientation and higher levels of success in learning English (expectancy). Of the two motivational groups the required group clearly is more strongly influenced by the predictor set. It appears that the required motivation is forward looking in that the benefits from English studies are to be accrued at some future time. This is also the case for the instrumental motivation only to a lesser degree. Most teachers and students would agree that the nature of required courses is such that the payoff is at a future time. From this perspective this result makes perfect sense. The direction of this relationship, however, is
much less clear. Is the required motivation one that is based on students’ cognitive understanding that English courses will only have utility in as far as they assist in fulfilling requirements for graduation, or does the course content and teacher’s influence convince students that the required course has a future utility? Since the motivational groups of instrumental and required clearly loaded on different factors, we can assume that the required motivational group does not see English as having a role outside of its fulfilling graduation, entrance exam, or job exam requirements. For this group previous success in English does play a role, as students who have not succeed in the past may not see any possibility in the future for success.

**Discussion**

This preliminary study has shown the existence of two motivational groups and two temporal orientations (see Figure3) in the Taiwan EFL environment. Most notable is the absence of an integration group. This finding is significant in that EFL instruction in Taiwan is highly informed by imported ESL theory. Teachers returning from ESL education and training in the West may actually be missing the central motivation of their students.
There are two major questions raised by this finding. First, are students ill served by the integration orientation used in EFL education? The environment in many Asian EFL settings precludes any meaningful opportunities for English use with native speakers of English. This does not mean that the language is not important, but that the importance is not centered on social interaction with Westerners. Students who enter an English class in Taiwan inevitably learn social conversations from colorful magazine-like textbooks. Among young people it is a fashionable joke to repeat some of the English conversations learned, such as dating, renting a car, or going to a picnic (all very unlikely events in Taiwan). Required English classes often seem very removed from the reality students live in and will graduate into.

Second, does a requirement motivation qualify as a motivation that can be taken advantage of in EFL teaching? If this motivation is simply a default that appears in the absence of other more effective forms of motivation, then this study’s findings would indicate that Taiwan schools and teachers have not been effective in their efforts to motivate students or show the importance of motivation. On the other hand, if this is a
true motivation that can be effectively used to improve learning, then this study points to
a direction very different than that generally accepted in the West. It is plausible that the
cultural background of students in Taiwan have oriented them towards an appreciation, or
at least some type of conditioning, that predisposes them to being sensitive to
requirements. In an English class these students may be motivated more effectively by
teachers who emphasize the integration of the class material with future requirements,
such as entrance and employment exams.

Of equal importance is the confirmed existence of an instrumental group. This
group is influenced by the same factors as the required group, i.e., a future orientation
and expectancy, but clearly this group will be more effectively motivated by a different
emphasis. In class teachers could more effectively motivate these students with an
emphasis on how class material can lead to future success at professional endeavors and
increased monetary rewards.

We can observe the implementation of these two directions within Taiwan’s private
sector. Cram schools are popular with students preparing for entrance exams. These
private institutions advertise their effectiveness in percentages of their students passing
university entrance exams. Other popular classes include applied classes for professional
improvement, such as English for business writing, business negotiation, international
trade documentation, etc. However, to date, there are no institutions devoted to an
integration objective. While many kindergartens advertise immersion English programs,
the reality falls far short and often involves hiring a small number of Western expatriates
who teach students while Chinese teaching assistants standing by for interpretation. It is
mostly within the official education system, and then mostly at the college and university
level, where teachers assume students’ motivation is an integrative one. Further understanding of exactly what motivates EFL students can improve results and reduce misdirected effort as well as the resulting frustration felt by both students and teachers.
References


Appendix A

Survey form example

Each question in the survey was followed by the following sub topics (the average score of the five topics was then used as the question’s resulting score).

<table>
<thead>
<tr>
<th></th>
<th>very little</th>
<th>about middle</th>
<th>very much</th>
</tr>
</thead>
<tbody>
<tr>
<td>English writing</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English reading</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English listening</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English speaking</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>English grammar</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For skill related questions the sub topics were identical with the seven point scale changed as:

<table>
<thead>
<tr>
<th></th>
<th>far below average</th>
<th>about average</th>
<th>far above average</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I Criterion Set Benefit Section

Monetary

One part of this study is your opportunity to gain monetary benefit from your English skill. These questions concern only your own opinion about yourself.

1. To what extent do you think you need these skills to help you obtain a higher paying job?

2. To what extent do you think you need these skills to help you obtain a raise?

3. To what extent do you think you need these skills to help you change jobs more easily?

4. To what extent do you think you need these skills to help you have higher job security?

5. To what extent do you think you need these skills to help you obtain outside (part-time/consulting) job opportunities?

Qualification/Requirement

One part of this study is your opportunity to satisfy requirements that require your English skill. These questions concern only your own opinion about yourself.

6. To what extent do you think you need these skills to help you pass an exam for further study at a university?

7. To what extent do you think you need these skills to help you pass a required class?
8. To what extent do you think you need these skills to help you pass an elective class?

9. To what extent do you think you need these skills to help you pass an exam for a job position?

10. To what extent do you think you need these skills to help you complete your present education?

Culture:
One part of this study is your opportunity to gain cultural integration from your English skill. These questions concern only your own opinion about yourself.

11. To what extent do you think you need these skills to help you travel overseas?

12. To what extent do you think you need these skills to help you make social contacts?

13. To what extent do you think you need these skills to help you gain social prestige?

14. To what extent do you think you need these skills to help you understand foreign movies, books and magazines?

II Equity
Environment Use
One part of this study is your usage of English. These questions concern only your own opinion about yourself.

15. To what extent do you think you have previously used these skills?

16. To what extent do you think you have presently use these skills?

17. To what extent do you think you will (in the future) use these skills?

18. To what extent do you think you have studied these skills at a cram school (past)?

19. To what extent do you think you study these skills at a cram school (present)?

20. To what extent do you think you will study these skills at a cram school (future)?

21. To what extent do you think you have studied these skills in an elective class in school (past)?

22. To what extent do you think you study these skills in an elective class in school (present)?
23. To what extent do you think you will study these skills in an elective class in school (future)?

24. To what extent do you think you have used these skills with English speaking friends, family, and/or associates (past)?

25. To what extent do you think you use these skills with English speaking friends, family, and/or associates (present)?

26. To what extent do you think you will use these skills with English speaking friends, family, and/or associates (future)?

III Expectancy
One part of this study is your expectation and experience of studying English. These questions concern only your own opinion about yourself.

27. How much effort did you previously make to improve these skills (in the past)?

28. How much effort do you presently make to improve these skills (present)?

29. How much effort do you need to make to improve these skills in the future (future)?

30. How successful were you previously at improving these skills (in the past)?

31. How successful are you now at improving these skills (present)?

32. How successful will you be at improving these skills in the future (future)?

IV Skill
One part of this study is your actual English skill levels. This question concerns only your own opinion about yourself.

33. How do you rate your present ability in these skills?