This study investigated the relationship between attitudinal/motivational factors and English second language proficiency among student teachers. Subjects were 198 full-time, first-year teacher trainees in a Hong Kong college of education, of traditional college age and enrolled in both 2- and 3-year English-medium and Chinese-medium instructional programs. Some also participated in an English immersion course during their educational program. Seven participant sub-groups were identified based on program of study. The students were tested with a standardized English proficiency test on program entry, at program mid-point, and at program end. Subjects were also administered an attitude and motivation questionnaire that addressed these factors: parental encouragement; need achievement; degree of integrativeness; degree of instrumentality; attitudes toward learning English; English class anxiety; foreign language interest; ethnocentrism; attitudes toward westerners, English and cultural identity; motivational intensity; desire to learn English; and attitudes toward self, Hong Kong Chinese people, and westerners in general. Analysis of these data indicate an overall decline in both the students' English language proficiency over the period of the study and their attitudes toward English and the language learning situation. Subgroup differences were also found. (MSE)
Crew (1994) sought to investigate changes, both relative and absolute, occurring in the English language proficiency and attitudes towards the English language of a notional complete year group of Hong Kong Chinese full-time teacher trainees as it progressed through Grantham College of Education between September 1990 and June 1993. In so doing, the English proficiency of the students was tested three times (on entry to the College, at mid-course and on exit from the College), using parallel versions of an established standardised placement test (Allan 1984). Attitudes were similarly and simultaneously tested, using a modified Gardner and Lambert (1972) Attitude and Motivation Index (AMI) based on Gliksman, Gardner and Smythe's 1982 version, together with additional sections based on the work of Pierson and Fu (1982) and Spolsky (1969)/Oller et al (1977).

Prior to 1959, when Gardner and Lambert's seminal study had found that motivation, in addition to linguistic aptitude, was relevant to second language achievement, there had been little systematic research into the specific functions and interaction of affective factors in second language acquisition. Subsequently, a large body of work has been carried out in this field, frequently focussing on the relationship between attitudinal and motivational factors and proficiency in a second language. It is to this research paradigm that the present study belongs. At the design stage it was not known which factors would correlate most closely with proficiency and therefore a reasonably wide selection was made, which will be described shortly. In a longitudinal study of this nature, it is of course impossible (and, indeed, irrelevant) to control the multitude of influences which may bear on the variables being investigated. It was assumed that all or some of the variables selected would vary in
some way in their relationships with the acquisition/proficiency factor and the \textit{cause} of any such fluctuation would not be directly germane to the findings, interesting though it might be to speculate thereon.

It was accepted that as the subjects of the study were aware that they were participating in a research project, their responses may not be as "natural" or "true" as one would wish. This is perhaps more the case with the attitude and motivation segment of the study than with the proficiency testing, as the latter was carried out to all intents and purposes as part of normal College assessment procedures. Insofar as test results are usually affected to some extent by the mental stress perceived by the testees, scores may not have reflected "normal" proficiency, but as this factor affected the entire sample equally and as the test selected was not a highly-refined instrument, it is not felt that this was in any way crucial. Responses to attitude and motivation questions may have been influenced by students being aware of the fact that they were participating in a research project and/or by repeated (3) applications of the same (format) test - boredom, mischievousness, unthinking responses etc.. In such a large sample, it is very difficult to control for such reactions beyond attempting to design the questionnaire items in such a way that contradictory responses to similar items can be statistically noted and adjusted. Again, as the propensity for such behaviour affects the whole group equally, this is not felt to be an unacceptable factor in reaching conclusions regarding that group.

Although certain results were anticipated, it is not felt that the study suffered to any significant degree from subjectivity problems. The focus of investigation (language proficiency measured against an array of attitudinal and motivational factors) was clear and factors were included rather than excluded in order to minimise researcher judgement bias in the initial stages and in fact to delay the stage of interpretative judgement until as late as possible in the research process. Furthermore, the instruments selected for the sampling were objective and replication using identical
instruments and similar samples would not present any difficulty for someone seeking to question reliability and validity. Interpretation of the data is, of course, more subjective, particularly in terms of which items/factors should be ignored or taken into account and to what degree, but decisions in such matters were taken solely on statistical grounds, rather than from any desire, either conscious or unconscious, to bias the findings in some way.

Analysis of the data collated, comprising in its final raw form three sets of responses by 198 subjects to 190 attitude questionnaire items, together with their related English proficiency (placement) test scores, was carried out using Statistical Package for the Social Sciences (SPSS) software. Before moving on to the findings, however, it is first appropriate to discuss in rather more detail the sample and test instruments employed.

**The Sample**

The design-stage sample for the study comprised the entire first year full-time student intake of Grantham College of Education for the academic year commencing in September 1990. Ages of subjects on entry to the College and therefore at first questionnaire and test completion varied between 17 and 23, with the vast majority in the 18-20 range. As there is little variation in age across the sample, this was not felt to be a significant factor. Obviously, for the purposes of the study it was essential that all subjects included in the final sample database should have completed all three phases of the data collection process. This requirement resulted in an initial total sample population of 303 declining due to absence from one or other phase of the data collection process to a final total of 198, or approximately two-thirds of the original figure (65.35%). Most of the fall-off occurred due to occasional absences by students. The size of the final sample is felt to be perfectly adequate to enable conclusions to be drawn from the data collected.
The sample population subdivides for analysis purposes into several groups, as follows:

**Group 1:** The entire sample (198), both two-year English-medium and three-year Chinese-medium students

**Group 2:** All two-year English-medium students (129)

**Group 3:** All two-year English-medium students not taking English as an Elective subject i.e. those theoretically studying through the medium of English, but not intending to specialise as teachers of English and therefore not taking English as an Elective subject (105)

**Group 4:** All two-year English-medium English Elective students (24) i.e. those studying English as an Elective subject for teaching specialisation purposes.

**Group 5:** All two-year English-medium English Elective students who attended a six-week immersion course in English in Britain (17) at the mid-point of their College course (August-September 1991). That this would take place was not known at the design stage of the study, nor in fact until three months before the students' departure for Britain, but in view of the likelihood that this sub-group may, as a result of their visit to Britain, have developed different attitudes and/or levels of proficiency from the students who were not selected to go, it was essential to consider them as a discrete entity at some stage.

**Group 6:** All two-year English-medium English Elective students who did not attend the six-week immersion course (7).

**Group 7:** All three-year Chinese-medium students (69).

**The Proficiency Test**

The test used to establish students' initial proficiency level and to monitor their progress in English proficiency through their College careers was the Oxford Placement Test (Allan 1984). In view of the large number of subjects involved it
was decided at an early stage in the design of the study that tests with time-consuming interview, tape-recording or other oral components were not practical with the limited resources available to the researcher. In addition, it was felt that a highly precise measure of English proficiency was not strictly necessary as the study took a broad approach to the concept of changes in proficiency level and in essence was concerned only with relative changes, not absolute determination of proficiency against external norms.

Three parallel (alternate form) versions of the Oxford Placement Test exist (1, 2 & 3), which were used in order with the subjects i.e. OPT 1 on entry, OPT 2 at mid-point and OPT 3 on exit. Each test comprised two main sections, each of 100 items, the first part being primarily a test of reading and listening skills involving knowledge and application of the sound and writing systems of English in order to select the correct utterances (from alternatives provided relating to a cassette recording) for inclusion in written sentences containing appropriate blanks. The second part, again in written, multi-choice format, tested students' knowledge and application of grammatical function and structure. Both sections aimed to provide for a range of ability from beginner to near-native speaker and were designed to be completed concurrently, with ten minutes recommended for Part A and fifty minutes for Part B. In practice these recommendations proved quite satisfactory - although time limits were never overtly given during test administration, even the slowest students never took longer than 55 minutes to complete the whole test on each occasion.

Administration of the tests was carried out on a year-group basis i.e. all two-year students took the tests as a group, with three-year students as a separate group.

*The Attitude and Motivation Questionnaire*

As previously stated, this instrument was modelled on the Language Research Group National Test Battery as presented by Gliksman, Gardner and Smythe, with additional
content influenced by the work of Pierson and Fu and Spolsky/Oller et al.

Effectively, the questionnaire may be divided into the initial Gardner-type direct measure test battery (subdivided into the Likert scale items - the majority - and the multiple-choice items) and the Spolsky-type indirect measure section which follows it.

Despite the tried and tested nature of the National Test Battery (vide, inter alia, Gardner and Smythe 1981 for a thorough treatment of its development process) in the French-Canadian and (to some extent) other settings, it was appreciated that its validity in the Hong Kong context could not be assumed, even though most modifications to the content were essentially very minor, largely involving the substitution of "English" for "French", "Westerners" for "French-Canadians", "Hong Kong" for "Canada" etc.. In addition to this, it was wished to introduce an additional section investigating the notion of "English and Cultural Identity", a concept touched upon by Pierson and Fu in several of their studies and which seemed likely to prove fruitful.

A draft version of the questionnaire was prepared, therefore, and piloted extensively, as a result of which it was then reworked and took its final form, as below:

**Direct Measures (Likert Scale +3....-3)**

Scale A - Parental Encouragement (10 items)
Scale B - Need Achievement (10)
Scale C - Degree of Integrativeness (5)
Scale D - Degree of Instrumentality (5)
Scale E - Attitudes towards learning English (10)
Scale F - English Class Anxiety (5)
Scale G - Interest in Foreign Languages (10)
Scale H - Ethnocentrism (10)
Scale J - Attitudes towards Westerners (10)
Scale K - English and Cultural Identity (5) (Total 80 items)

Multiple Choice Scales (1-3)
Scale L - Motivational Intensity (10)
Scale M - Desire to Learn English (10) (Total 20 items)

Indirect Attitude Measures (Very well... Not at all)
Scale N - Self (30) (15 positive/15 negative)
Scale O - Hong Kong (Chinese) people (30) (15 positive/15 negative)
Scale P - Westerners generally (30) (15 positive/15 negative)
(Total 90 items)

Total of all items: 190

Items 1-100 (the direct measures) were randomised within the questionnaire rather than appearing as blocks of obviously related statements. Items 101-190 (the indirect measures) were randomised in terms of "positive" and "negative" within the first block of 30 traits (applicable to Self), with the same item order then repeated for the second and third blocks i.e. Hong Kong Chinese and Westerners.

The AMI/OPT was then completed by the subjects of the study as follows:

Two-year English-medium students:
1. September 1990
2. September 1991
3. June 1992

Three-year Chinese-medium students:
1. September 1990
2. January 1992
3. June 1993
Due to the constraints of the paper format, it is not possible here to enter into matters of reliability, validity etc..

Findings

A vast amount of data was generated by this study, resulting in a considerable number of findings. For the purposes of the current paper it is obviously not necessary to report all these findings, only those relevant to the specific focus. Similarly, great detail is unnecessary as general trends are most appropriate. Attention is directed, therefore to Table 1, which illustrates the overall points being made.

(i) The Proficiency Test (OPT)

Table 1

Changes in English Proficiency Means as Measured by OPT1-3

<table>
<thead>
<tr>
<th>Group</th>
<th>OPT1</th>
<th>OPT2</th>
<th>OPT3</th>
<th>OPT1-2</th>
<th>OPT2-3</th>
<th>OPT1-3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Whole sample</td>
<td>142.1</td>
<td>144.8</td>
<td>137.1</td>
<td>+ 1.8</td>
<td>- 5.3</td>
<td>- 3.4</td>
</tr>
<tr>
<td>2 All English-medium</td>
<td>146.5</td>
<td>147.2</td>
<td>141.4</td>
<td>+ 0.4</td>
<td>- 3.9</td>
<td>- 3.5</td>
</tr>
<tr>
<td>3 English-medium non-Elective</td>
<td>144.7</td>
<td>144.4</td>
<td>139.1</td>
<td>- 0.1</td>
<td>- 3.7</td>
<td>- 3.9</td>
</tr>
<tr>
<td>4 English Elective</td>
<td>154.6</td>
<td>159.5</td>
<td>151.5</td>
<td>+ 3.1</td>
<td>- 4.9</td>
<td>- 1.8</td>
</tr>
<tr>
<td>5 English Elective immersion</td>
<td>153.7</td>
<td>160.2</td>
<td>153.1</td>
<td>+ 4.2</td>
<td>- 4.4</td>
<td>- 0.2</td>
</tr>
<tr>
<td>6 English Elective non-immersion</td>
<td>156.8</td>
<td>157.5</td>
<td>147.8</td>
<td>+ 0.4</td>
<td>- 6.1</td>
<td>- 5.7</td>
</tr>
<tr>
<td>7 All Chinese-medium</td>
<td>133.9</td>
<td>140.3</td>
<td>129.1</td>
<td>+ 4.7</td>
<td>- 7.9</td>
<td>- 3.2</td>
</tr>
</tbody>
</table>

To summarise:

- The OPT scale varies between 0-200. The scores achieved by the students in the sample indicated, as expected, that the general level of English language proficiency varied between Lower and Upper Intermediate.
Relative rankings between groups were maintained throughout the period of the study, but the degree of differentiation was variable.

There was a general pattern of slight gain, followed by marked decline and overall loss of English proficiency.

Group 7 did not follow the expected pattern of continuous decline and in fact the performance of these students in the proficiency tests exhibited several unexpected elements, not least the relatively higher gains in proficiency than English-medium groups at OPT2 stage.

The proficiency level findings for Groups 5 and 6 were volatile, possibly in response to the influence of immersion course factors.

(ii) AMI and Overall Findings

The histogram representations of the findings (Appendix) illustrate the overall points being made. Please note that for OPT histograms, upward movement of histogram blocks is positive, whilst the reverse is true of attitude scale histogram blocks. I would direct your attention in particular to variations between Groups 5 and 6, to Group 7 OPT performance, and to changes in the F (English Class Anxiety) scale and in the N (Self), O (Hong Kong people) and P (Westerners) scales.

It will be recalled that English language proficiency as measured by the OPT on entry generally followed the expected pattern i.e. Chinese-medium students lower than English-medium students, English Elective students highest. This ranking set was maintained throughout the period of the study, though there were movements within the established rankings at various stages. There was a general pattern of slight gain
in proficiency at mid-point, followed by marked decline and overall loss, to varying degrees.

It is evident that reported attitudinal change varied considerably between groups AMI1-2. No single scale became more positively oriented over all groups and only one (Cultural Identity) became consistently more negative. English Class Anxiety improved for all except Group 7, Parental Encouragement for all except Group 6. Desire to learn English for Groups 2-5 also improved. Group 5 showed improvement in more scales than any other group (9, compared with 6 for Group 6) and was the only group to register overall (net) positive change over the set of 15 attitude scales. The OPT gain for Group 5 was also highest, tempting a hasty conclusion that changes in proficiency may easily and proportionately be related to changes in attitude. Group 7, however, only became more positive on three scales yet achieved approximately the same OPT gain.

All groups declined in proficiency OPT/AMI2-3, but those declining least (Group 3, Group 2) registered improvement in most attitude scales. However, even a cursory examination of the data for other groups reveals that this is fallacious e.g. Group 7, which recorded the greatest OPT loss, became more positive on five scales: Group 4, falling only 7.8 OPT points compared with 11.1 for Group 7, only made gains on two scales. Again, there is little consistency in response change: Cultural Identity, the most consistently (negatively) performing scale AMI1-2, became the most consistent positively performing scale AMI2-3.

Overall - AMI/OPT1-3, groups displayed even greater variety of change. English Class Anxiety being the only scale to show positive movement and Cultural Identity, despite a positive trend at AMI2, showing an overall negative trend. Self-rating improved for most groups, as did perceptions of Hong Kong people. Westerners were viewed less positively by all.
(iv) Summary

It is clear from the data findings that students' English language proficiency as measured by the OPT declines over the period of the study.

Equally clearly, the findings show that students' professed attitudes towards English and the language learning situation, as measured by the repeated administrations of the AMI, become more negative overall in the vast majority of cases, the most notable and consistent exception being the group of students who attended the U.K. immersion course, though even here, positive shift was limited and inconsistent.

In summary, then, it appears that after initial gains students on the whole decline in English language proficiency, registering as net loss by the time they exit the College. Similarly, overall, attitudes become more negative, exceptions being English Class Anxiety, Self and Hong Kong people. Self and Hong Kong people were not, however, shown to be markedly relevant (in correlation terms) to OPT score. English Elective students attending the U.K. immersion course declined least in proficiency, contrasting with those English Elective students rejected for the immersion course, whose proficiency suffered most. Students in the latter group frequently registered greatest negative attitude change, particularly so in the second half of their course, raising obvious questions regarding the advisability of competitive selection for such courses.

Discussion

Given that the limitations of the Oxford Placement Test are accepted and therefore that the scores resulting from administration of the OPT do represent in adequately valid form the English language proficiency of the sample population, the most
clearly notable finding is the marked decline in proficiency of Group 6 during the period of the study, together with marked attitudinal changes (e.g. a shift towards more negative attitudes towards Westerners, but an increasingly positive trend in terms of Self-image). Although it may be technically unsafe from the data available to ascribe a cause and effect relationship to rejection from the U.K. immersion course and decline in proficiency/attitudinal change, it is, nevertheless, an obvious conclusion to move towards. If the assumption is made that the immersion course is a major causative agent (i.e. a "stick" rather than a "carrot"), a number of further, currently unanswerable points inevitably arise with respect to the relative roles of attitude and proficiency. For example, do worsening attitudes professed by Group 6 after AMI2 lead to worse performance, or does non-selection for the immersion course due to worse performance result in worsening attitudes which in turn lead to even poorer performance etc., etc.? Is there a negative spiral in existence in which cause and effect are indistinguishable but in which attitudes and proficiency appear to drive each other - a "chicken and egg" situation?

Whatever the truth of this, in principle the remedial measures necessary appear relatively simple i.e. inclusion of all English Elective students on the immersion course, though there are, of course, practical limitations on this as a course of action, not least the financial constraints involved. The converse aspect, that Group 5 students performed best in language proficiency terms, a finding from which it seems intuitively reasonable to assume that the immersion course experience was influential, is not without its complications. Whilst the positive performance of Group 5 at OPT2 can be accounted for in this way, it is interesting that the beneficial effects of the immersion course appear to have dissipated quickly, as evidenced by the sharp decline in proficiency registered between OPT2 and OPT3. Plainly, this raises the issue of the intrinsic value of the course itself, but perhaps more importantly, of the attitudes towards the course and follow-up action taken by the administration. The present researcher is aware from personal experience that upon students' return from the U.K.
an emphasis has sometimes been placed by the authorities on "making up for lost
time" (sic) (the course overlaps the beginning of the academic year by two weeks) and
on keeping attendance on the course and, by extension, what has been learned, low-
profile in order not to arouse jealousy and/or complaints by other students or College
Departments not eligible for such courses. Essentially, this appears to constitute
suppression of the effects of the course, with consequent negative influence on
language proficiency gains. It would be interesting (if somewhat unfair) to investigate
this as an experimental study, using two immersion course groups, one of which on
return was treated in a high-profile, encouraging fashion and the other in the current
manner.

The remaining major and rather disturbing finding in terms of language proficiency is
that, against all predictions, Chinese-medium students (Group 7) gained more in
proficiency at OPT2 than any other group with the exception of Group 5, the English
Elective immersion course students. This is an unanticipated finding which gives rise
to speculation regarding the reasons for this highly positive showing, particularly in
comparison with Group 2 and Group 3, both of which might with some confidence
have been expected to out-perform the Chinese-medium students. The situation is
further complicated by the additional finding that proficiency declines markedly in the
second half of the study period. The degree of decline at this stage is quite consistent
across all groups and three major questions present themselves, therefore:

1. Why does the English language proficiency of Chinese-medium students improve
   more than that of English-medium students in the first half of the course?

2. Why is this specific Group 7 trend reversed in the second half of the course?

3. Why does the English language proficiency of all students decline in the second
   half of the course?
It is natural to seek answers to these questions in terms of attitude change. In so doing, however, it is useful to point out that multiple regression analysis estimated that attitudes and motivation as measured by the AMI could only account for 25-30% of "static" OPT variation. It is entirely possible, if not probable, therefore, that factors not included in this study may be responsible in part or in whole for the language proficiency trends observed.

From the findings one can move tentatively towards a conclusion that English Class Anxiety is likely to be a comparatively strong inherent factor in language proficiency, but cause and effect is much more uncertain, of course, as the presence of a correlational relationship does not denote anything other than a link.

This conclusion corresponds with overall findings indicative of a motivational dimension which is significant in the context of the language proficiency of the sample population. As all groups suffered language proficiency loss in the second half of the study and direction and degree of attitude change for all except English Elective students was similar at this stage, it is perhaps justifiable to project the importance of English Classroom Anxiety. Again, in principle this may be acceptable, lacking evidence to the contrary, but in strictly practical terms there are obvious extensions to these questions which attract answers only of a conjectural nature. Given, for example, that attitudes become more negative, especially during the second phase, and that certain of those attitudes are influential in (and/or are influenced by) language proficiency, why does this happen? In the case of Group 6 students, it is relatively easy to put forward intuitively appealing reasons for disaffection, but this is far more difficult for the other groups, which have no readily apparent single cause or causes. It is also reasonably simple to indulge in supposition, which may or may not have some basis in fact e.g. that students' motivation declines in the latter stages of their College careers as it becomes increasingly evident to them
that an enhanced degree of proficiency in English is not necessarily a key factor - and in fact may well be marginal - in their future careers; that students' motivation in English language study merely reflects a general loss of motivation in all or a majority of College subjects as they become more and more cynical about a range of educational and vocational issues; that the approach of the 1997 change of sovereignty is affecting Hong Kong increasingly and by no means all of the ways in which this is so would be apparent to non-Chinese people or, indeed, to anyone, in an overt sense.

In short, at this stage firm answers to the questions raised earlier are few and far between.

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Crew, V. (1994); *English Language Proficiency and Attitudes towards the English Language of Hong Kong Chinese Student Teachers*; unpublished Ph.D. thesis; Colchester, England; University of Essex.


APPENDICES