# Predictors of Test Performance in English for Consumer Product Marketing

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## Abstract

This study aimed to investigate (1) the relationships between three selected variables (formal content study, English language attainment, and overall academic achievement) and performance in the Reading Test of English for Consumer Product Marketing (RT-ECPM), (2) the extent to which the three variables can predict the RT-ECPM scores, and (3) the test takers' attitudes towards the test. The two research instruments employed were the RT-ECPM and an attitude questionnaire for test takers. The subjects were 133 fourth-year university students from the Faculty of Commerce and Accountancy majoring in Business Administration at Chulalongkorn University. The study revealed that all selected variables had significant relationships with the RT-ECPM scores at the 0.01 level. However, only English language attainment was a significant predictor of success in the RT-ECPM. An attitude questionnaire indicated that the test takers had positive attitudes towards the test. The results provided more insights into the predictors of success in reading test performance in English for Business Purposes.

## Introduction

English for Business Purposes (EBP) has long been known to be one of the most dynamic areas among all areas of English for Specific Purposes. English for Consumer Product Marketing was chosen in this study due to the fact that the  consumer product marketing industry represents a huge and growing business in Thailand.   It includes businesses involved in marketing and distributing Fast Moving Consumer Goods (FMCG) which cover a notably wide range of products, such as automotive goods, children's products, computers, confectionery products, food, drinks, electronic appliance, fashion, furniture, and telecommunications (FMCG Brands Directory, 2004).  According to ACNielsen, the world's leading marketing information provider, FMCG in Southeast Asia enjoyed  very high growth in 2004, even higher than the rest of Asia except China.   In 2004, Thailand experienced a significant sales expansion as high as eight per cent in FMCG sales (AcNielsen, 2005).  In terms of human resources, the companies in these industries hire a lot of people in their business undertakings. Since the main players in these industries are world brands from multinational companies, English plays a highly important role in their operations.  Fast moving consumer goods offer fast moving careers since salaries and benefits are quite attractive particularly in multinational companies.  Meeting language requirements is essential in countries such as China, Taiwan, Hong Kong, and Thailand, where marketing managers are expected to speak and write English as well as the local language (Santos-Dizon, 2006).

However, to date, the English used in this area is not well explored.   Similarly, a test tailored to measure English language proficiency in the field does not exist. Currently, companies use more general tests such as TOEFL, IELTS, or TOEIC to judge the language ability of job applicants and their existing staff.  A test constructed to address specifically the language used in the industry could be useful in the recruitment process as well as the current work force's language development.  In addition, the test could contribute pedagogical implications and positive washback for EBP teaching and learning in universities.   The subjects of this study were university students in the Faculty of Business

Administration who, upon graduation, planned a career in the industry as Product Executives, Marketing Trainees, Assistant Brand Managers, to name a few.

As a result of interviews with ten senior executives in leading marketing firms in Thailand from October to December 2004, it was found that the reading skill was used the most by their staff in entry level to junior management positions which were the positions the new university graduates were likely to be assigned. Hence, in order to make the test fit its ultimate use, a reading test of English for Consumer Product Marketing was developed.

A recent concern among researchers in the field of language testing has been the identification of the test takers' characteristics that influence performance on language tests. Three selected variables were investigated in this study. They are 1) formal content study, 2) English language attainment, and 3) overall academic achievement. The rationale for selecting these independent variables are as follows:

1. Formal content study or background knowledge is widely known to be a key variable affecting performance in language tests particularly in English for Specific Purposes (ESP). As mentioned by Douglas (2000), in ESP testing, background knowledge is a necessary, integral part of the concept of specific purpose language ability. In this study, it is the subject-matter knowledge in marketing. Therefore, the level of formal content study is operationally defined as the subjects' grade achieved in the Principles of Marketing course which all subjects needed to take in their university study.

2. English language attainment is not surprisingly expected to have a significant relationship with English test scores. The level of English language attainment might also be reasonably expected to have a powerful predictive power on reading test performance. In this study, it is operationally defined as the average grade of the last three Business English courses taken by the subjects.

3.  Overall academic achievement seems to be closely related to one's level of cognitive ability. Prior research works (Thorndike, 1917; Carver, 1974; and Berman, 1991) reveal that there is a significant relationship between scores in reading tests and reasoning tests, and test takers' ability to reason could facilitate their performance in language test tasks. Genesee (1976) also found that performance on reading tests correlates with intelligence level and scores in intelligence tests, in turn, correlate highly with those of academic achievement tests. For Oller and Perkins (1978), the general intelligence factor of cognitive ability is viewed as identical to the general intelligence factor of language ability. Finally, Kattan (1990) reports a correlation between the results of the test for English majors and the students' grade point average. Based on these research studies, overall academic achievement which may be taken as a manifestation of cognitive ability could be a potential predictor of performance in reading tests and is defined as the subjects' cumulative Grade Point Average or GPAX in this study.

The study investigated whether the above variables could be the predictors of the performance in the Reading Test in English for Consumer Product Marketing (RT-ECPM).

**Objectives of the Study**

This study attempted to investigate the relationships between each of the selected test taker variables and the scores in the Reading Test in English for Consumer Product Marketing (RT-ECPM) and the predictive ability of the selected variables on the RT-ECPM scores. In addition, the study aimed to explore the test takers' attitudes towards the RT-ECPM.

## Research Method and Procedure

### Population and Sample

The population was 237 fourth-year university students from the Faculty of Commerce and Accountancy majoring in Business Administration at Chulalongkorn University in the 2005 academic year. The sample was made up of 133 students from this population.

### Research Instruments

Research instruments consisted of the Reading Test of English for Consumer Product Marketing (RT-ECPM) and an attitude questionnaire.

The RT-ECPM was developed using a combination of (1) face-to-face interviews with ten senior executives in leading marketing firms in Thailand, (2) a 114,582-word corpus study, and (3) content analysis of related textbooks. The data collected from the interviews indicated the text types commonly encountered by the staff in entry level to junior management positions. The data from the corpus study provided the list of words frequently found in English reading in the field. Subsequently, data collected from content analysis provided the themes and contents of the test paper. The RT-ECPM had two parts in multiple-choice format and paper-and-pencil mode. The first part tested the technical words and vocabulary generally used in the field, comprising 15 questions. The second part attempted to measure reading comprehension and consisted of six specific text types: product labels, incoming emails, business news, marketing plans, advertising awareness reviews, and monthly sales reports. The time allotment was 60 minutes.

The attitude questionnaire asked for test takers' responses in eleven areas of concern related to the RT-ECPM such as the clarity of presentation, the number of questions, time allotment, level of difficulty, and perceived usefulness. A four-point attitude scale was employed in the questionnaire. The reason for using a four-point scale was that by having no middle option of "neither agree nor disagree," central tendency bias could be minimized. In addition, research work done by Stanford University has indicated

that an equal number of items and even-point scales provide higher reliability estimates than odd-point scales (Rungson Chomya, 2005).

Both instruments went through a validation process with five university lecturers and three content specialists. A pilot study was conducted with 52 fourth-year university students in the Faculty of Commerce and Accountancy majoring in Business Administration at Chulalongkorn University in November 2005. An item analysis was conducted and instruments were adjusted according to an analysis of the results. The Kuder-Richardson (KR-20) reliability estimate of the RT-ECPM was 0.747 and the Cronbach Alpha Reliability Estimate of the attitude questionnaire was 0.855.

## Data Collection

The main study was conducted during January 24 - February 7, 2006. The test was administered in the class hour of the two major required courses of the students so that a majority of the target population could be used as subjects. The 133 subjects represented 56.12% of the population.

## Data Analysis

1) Descriptive statistics and correlation analysis using Pearson product-moment coefficients were calculated to investigate the relationship between each of the selected test takers' variables and the RT-ECPM scores.

2) Multiple regression analysis was conducted to examine the extent that the three variables individually or in combination could predict the RT-ECPM scores.

3) Descriptive statistics, i.e. mean score and grand mean score of the attitude scale, were computed to investigate the attitudes of the test takers towards the RT-ECPM.

## Results

The results of the study are presented based on the three hypotheses.

**Hypothesis 1:  There is a significant relationship between each independent variable and the RT-ECPM scores.**

Descriptive Statistics of each variable were calculated and are presented in Table 1.

**Table 1**

Descriptive Statistics of the Data

| Variables | Mean | SD | Min | Max | Range |
|-----------|------|-----|------|------|-------|
| T-SCORE | 32.02 | 5.39 | 18.00 | 42.00 | 24.00 |
| PM | 3.48 | 0.52 | 1.50 | 4.00 | 2.50 |
| ENG-AVE | 2.92 | 0.55 | 1.33 | 4.00 | 2.67 |
| GPAX | 3.12 | 0.36 | 2.26 | 3.80 | 1.54 |

N = 133

Note:  T-SCORE  =  RT-ECPM reading test scores
       PM  =  Grade achieved in the Principles of Marketing course
       ENG-AVE  =  Average grade of English courses
       GPAX  =  Cumulative Grade Point Average

The mean of the reading test scores was 32.02 with a standard deviation of 5.39.  The range was 24 with maximum and minimum scores of 42 and 18, respectively.

The mean of the grade achieved in the Principles of Marketing course (PM) was 3.48 with the standard deviation of 0.52.  The mean of the average grade of English courses (ENG-AVE) was 2.92 with a standard deviation of 0.55.  For cumulative Grade Point Average (GPAX), the mean was 3.12 and the standard deviation was 0.36.  Pearson product-moment correlation coefficients were calculated and are presented in Table 2.

**Table 2**

Correlation Matrix of the Variables

|         | T-SCORE | PM      | ENG-AVE | GPAX    |
|---------|---------|---------|---------|---------|
| T-SCORE | 1.000   | 0.246** | 0.537** | 0.335** |
| PM      |         | 1.000   | 0.291** | 0.593** |
| ENG-AVE |         |         | 1.000   | 0.534** |
| GPAX    |         |         |         | 1.000   |

** Correlation is significant at the 0.01 level (two-tailed).

The T-SCOREs had a significant relationship with each of the independent variables at the 0.01 level. The strongest relationship was between T-SCORE and ENG-AVE ($r = 0.537$, $p<0.01$). The next strongest relationship was between T-SCORE and GPAX ($r = 0.335$, $p<0.01$). The relationship between T-SCOREs and PM ranked last ($r = 0.246$, $p<0.01$).

A correlation between independent variables could also be observed. ENG-AVE had a significant relationship with PM and GPAX at the 0.01 level with a correlation of 0.291 and 0.534, respectively. Similarly, GPAX and PM had a significant relationship at the 0.01 level with a correlation of 0.593.

Therefore, Hypothesis 1 was accepted. There was a significant relationship between each independent variable and the RT-ECPM scores at the 0.01 level.

**Hypothesis 2:** **The three selected independent variables can individually or in combination significantly predict the RT-ECPM scores at the 0.05 level.**

Table 3 illustrates the model summary when the multiple regression analysis was carried out.

**Table 3**

Model Summary of the Multiple Regression Analysis

| Model | R | R-Square | Adjusted R-Square | Std. Error of the Estimate | Change Statistics | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | R-Square Change | F Change | df1 | df2 | Sig. F Change |
| 1 | 0.545 | 0.297 | 0.281 | 4.5882 | 0.297 | 18.184 | 3 | 129 | 0.001 |

a  Predictors: (Constant), GPAX, ENG-AVE, PM

b  Dependent Variable: T-SCORE

An R coefficient of 0.545 is shown in Table 3, indicating that the relationship between T-SCORE and the independent variables was positive at a moderate level.  The R-Square valve was 0.297 which meant that the independent variables could explain 29.7% of the variance in the T-SCORE.  The standard error of the estimate was 4.5882.

Table 4 demonstrates the analysis of variance or ANOVA which tested the overall significance of the regression model.

**Table 4**

ANOVA Table

| Model | | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|---|
| 1 | Regression | 1148.371 | 3 | 382.790 | 18.184 | .001 |
| | Residual | 2715.599 | 129 | 21.051 | | |
| | Total | 3863.970 | 132 | | | |

a  Predictors: (Constant), GPAX, ENG-AVE, PM

b  Dependent Variable: T-SCORE

In the ANOVA table, the F-value was computed to analyze the variations within and between each group of variables.  From Table 4, the F-value was 18.184, yielding a p-value of 0.001, indicating

that the regression model was statistically significant at the 0.05 significance level.  Therefore, it suggested that there was at least one independent variable that was statistically significant in its relationship with the dependent variable.  Table 5 illustrates the coefficients of the regression model.

**Table 5**

Coefficients of the Regression Model

| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|---|---|---|---|---|
| | | B | Std.Error | Beta | | |
| 1 | (Constant) | 13.773 | 3.577 | | 3.850 | .001 |
| | PM | .962 | .948 | .093 | 1.015 | .312 |
| | ENG-AVE | 4.924 | .853 | .504 | 5.774 | .001 |
| | GPAX | .158 | 1.558 | .010 | .101 | .920 |

a  Dependent Variable: T-SCORE

The unstandardized coefficient B was the increase or decrease in the dependent variable when an independent variable increased by one unit and the other independent variables ware held constant.  The plus or minus sign for B indicated the direction of the amount change in the dependent variable.  The t-test was used to calculate the significance level of each individual B coefficient.  ENG-AVE was the only predictor variable where the t-value was statistically significant at the 0.05 level (B = 4.924, t = 5.774, p = 0.001).  The constant was also found statistically significant at the 0.05 level (B = 13.773, t = 3.85, p = 0.001).  PM was not a significant predictor variable at the 0.05 level (B = 0.962, t = 1.015, p = 0.312).  Similarly, GPAX was not a significant predictor variable at the 0.05 level (B = 0.158, t = 0.101, p = 0.920).  PM and GPAX would, therefore, not be included in the prediction equation.  The regression equation used to predict the T-SCORE could then be written as follows:

T-SCORE = 13.773 + 4.924 (ENG-AVE)

According to the above equation, ENG-AVE could be used to predict T-SCORE. With a unit increase in ENG-AVE, the T-SCORE would increase by 4.924 with a standard error of 0.853. As a result, Hypothesis 2 which states that the three selected independent variables can individually or in combination significantly predict the reading test scores in the RT-ECPM at the 0.05 level was accepted.

Table 6 shows partial and part correlation as well as the collinearity statistics of the data.

**Table 6**

Partial and Part Correlation of the Predictors

| Model | Correlations | | | Collinearity Statistics | |
|---|---|---|---|---|---|
| 1 | Zero-order | Partial | Part | Tolerance | VIF |
| PM | 0.246 | 0.089 | 0.075 | 0.647 | 1.545 |
| ENG-AVE | 0.537 | 0.453 | 0.426 | 0.714 | 1.400 |
| GPAX | 0.335 | 0.009 | 0.007 | 0.506 | 1.977 |

a Dependent Variable: T-SCORE

The partial correlation in its squared form was the percentage of variance in the dependent variable explained by the given independent variable, not counting jointly explained variance (Garson, 2004). While the partial correlation for ENG-AVE was 0.453, those for PM and GPAX were 0.089 and 0.009, respectively, which were clearly not significant. The part correlation in its square form represented the percentage of variance in the dependent variable uniquely attributable to the given independent variable when other variables in the equation were not allowed to vary (Garson, 2004). The part correlation for ENG-AVE was 0.426 and those of the other two independent variables were again insignificant, i.e. 0.075 for PM and 0.007 for GPAX. The above information helped explain why the two variables were not included in the regression model.

To test whether a multicollinearity problem existed, tolerance values and Variance Inflation Factor (VIF) were computed. A multicollinearity problem took place when there was a high degree of intercorrelation between independent variables.  Garson (2004) suggested that tolerances that fell below 0.20 or VIF values were above 4 may suffer from a multicollinearity problem.  In Table 6, the tolerance values and VIF indicate that we need not be concerned about a multicollinearity problem in this study.

**Hypothesis 3: The test-takers have positive attitudes towards the RT-ECPM.**

$(H_3$:  Mean of attitude scale  $\geq$  2.5 from the four-point scale on the questionnaire)

The mean scores of the attitude scale for each item and the grand mean score in the test takers' questionnaire were calculated. Table 7 shows the results.

## Table 7

### Scales from the Test Takers' Questionnaire

| Item | Statement | Scale 4 | 3 | 2 | 1 | Mean |
|------|-----------|---------|---|---|---|------|
| 1 | I am satisfied with the test in general. | 48 | 84 | 1 | | *3.35* |
| 2 | Typeface and size of characters in the test are appropriate. | 77 | 52 | 4 | | *3.55* |
| 3 | Graphs and tables in the test are clear. | 83 | 46 | 4 | | *3.59* |
| 4 | Graphs and tables in the test are appropriate. | 77 | 49 | 7 | | *3.53* |
| 5 | The number of questions in the test is appropriate. | 58 | 67 | 6 | 2 | *3.36* |
| 6 | Time allotment for the test is appropriate. | 54 | 66 | 11 | 2 | *3.29* |
| 7 | Level of difficulty of the test is appropriate. | 35 | 83 | 15 | | *3.15* |
| 8 | The test is useful for my English language learning and development. | 62 | 50 | 21 | | *3.31* |
| 9 | The test is useful for my future career. | 64 | 51 | 17 | 1 | *3.34* |
| 10 | The content of the test is similar to the content of reading of English for Consumer Product Marketing in real situations. | 61 | 62 | 8 | 2 | *3.37* |
| 11 | The format of the test is similar to the format of reading of English for Consumer Product Marketing in real situations. | 51 | 72 | 10 | | *3.31* |
| | Grand mean score | | *3.38* | | | |

N = 133

Note: **4** = Strongly agree, **3** = Agree, **2** = Disagree, **1**= Strongly disagree

The mean scores for each item were all higher than 3, producing a grand mean score of 3.38. Hypothesis 3 stipulates that 2.5 points from a four-point scale indicated a positive attitude of test takers towards the test. Therefore, hypothesis 3 was accepted.

**Discussions**

The purposes of this study were to investigate the relationship between each of the selected independent variables which were 1) formal content study, 2) English language attainment, and 3) overall academic achievement and the reading test scores in the Reading Test of English for Consumer Product Marketing (RT-ECPM) and the predictive ability of the independent variables of the RT-ECPM scores.  In addition, the test takers' attitudes towards the test were investigated.  A discussion of each of these relationships follows.

## The relationship between formal content study and the RT-ECPM scores

Formal content study has long been studied with regard to its effect on the performance of the language learners in the testing situations particularly in the English for Specific Purposes area. Prior research by Rumelhart (1980), Carrell (1984 a, b), and Alderson and Urquhart (1983, 1985a and 1985b) indicate that content study or background knowledge of students in related disciplines has effects on reading test scores.  In this study, formal content study in the Principles of Marketing course correlated significantly with the RT-ECPM scores. However, the strength of the relationship between the two variables was not strong since the Pearson product-moment correlation coefficient (r) was 0.246 (p < 0.01).  To a certain extent, the findings support previous research studies findings that subject matter familiarity can be expected to have a facilitating effect on reading comprehension.  As correlation studies do not aim to explain the cause-effect relationship, the conclusion that can be drawn is that formal content study was found to covary with reading test scores at a moderate level.

## The relationship between English language attainment and the RT-ECPM scores

It was found that English language attainment correlated significantly with the RT-ECPM scores at the 0.01 level.  The correlation coefficient of 0.537 indicated a moderate level of association between English language attainment and RT-ECPM

scores. This finding concured with previous findings by Tan (1990) and Clapham (1996).

## The relationship between overall academic achievement and the RT-ECPM scores

The findings revealed that overall academic achievement had a significant relationship with the RT-ECPM scores at the 0.01 level. The correlation coefficient of 0.335 suggested that there was a moderate relationship between overall academic achievement and the RT-ECPM scores. The results from this study were consistent with the findings of prior studies (Chastain, 1969; Genesee, 1976; Ekstrand, 1977). They also lent support to a study done by Kattan (1990) which indicated that language test scores related significantly to grade point averages.

According to Coady's classic work (1979), the Psycholinguistic Model could be used to explain the significant relationships found in findings. In the Psycholinguistic Model, three components are activated in successful reading comprehension. They are background knowledge, conceptual abilities, and process strategies. By background knowledge, Coady means prior knowledge acquired by readers. By conceptual abilities, he refers to general intellectual or cognitive capacity. He defines processing strategies, as language processing skills, e.g. syntactic information, and lexical and contextual meaning. The three selected variables, i.e. formal content study, overall academic achievement, and English language attainment overlapped largely in many attributes with Coady's three components. This study's finding that its independent variables had significant relationships with a reading test score supported Coady's contention that the three components came into play in successful reading comprehension.

In summary, the results from the analysis showed that each of the three selected independent variables had a statistically significant relationship with the RT-ECPM scores at the 0.01 level. The correlation, however, did not indicate a cause-effect relationship. Further research studies employing experimental designs might provide more information on the causes of this phenomenon.

### The predictors of performance in the RT-ECPM

The results from multiple regression analysis indicated that English language attainment was the only significant predictor of the RT-ECPM scores. Although the bivariate correlation between each independent variable and the RT-ECPM scores showed a positive and significant relationship, the multivariate analysis suggested that the best regression equation to predict the RT-ECPM scores should include only English language attainment as the predictor variable. Formal content study and overall academic achievement were excluded from the model since adding any one of them into the equation would not significantly increase the predictive ability of the equation.

The data from the correlation matrix in Table 2 could be employed to explain this occurrence. The hypothesized explanation is that there were moderate and significant intercorrelations among formal content study, English language attainment, and overall academic achievement. According to the correlation matrix, formal content study had a significant relationship with English language attainment ($r = 0.291$, $p < 0.01$). Overall academic achievement was also found to be significantly correlated with English language attainment ($r = 0.534$, $p < 0.01$). Formal content study and overall academic achievement were, in turn, significantly correlated with each other ($r = 0.593$, $p < 0.01$). Partial and part correlation in Table 6 illustrates that partial correlation of the English language attainment was 0.453 which was much higher than those of formal content study and overall academic achievement which were 0.089 and 0.009, respectively. The findings suggested that the variance explained by the formal content study and overall academic achievement was shared largely by English language attainment. Therefore, when the three independent variables were simultaneously studied, the variance was best explained by English language attainment.

The findings confirmed the results from previous research studies conducted by a number of researchers such as Tan (1990) and Clapham (1996) who found that language proficiency level is a better predictor than knowledge of subject area. Conversely, the findings did not appear to agree with those in the prior works of Johnson (1981) and Floyd and Carrell (1987) who found that

background knowledge had more effect on reading test scores than the level of syntactic and lexical knowledge. Clapham (1996: 197) raises two cautions concerning the study of the comparative importance of the two variables. First of all, there is a clear difficulty in assessing the extent of learners' background knowledge. Secondly, the effect of the background knowledge on reading comprehension depends on the specificity of the reading passages. The more specific the passages are, the greater the effect background knowledge might be expected to have. It is conceivable that in English for Business Purposes, highly technical or scientific words are rare and text specificity is relatively moderate. As Pickett (1986) points out, English for business is much closer to general English than any other ESP. This could help explain why formal content study did not assume a key predictor role in this study.

In summary, RT-ECPM scores could be best predicted by level of English language attainment. The magnitude of the predictive ability was, however, limited to approximately 30% (29.7%). The other two variables may indirectly contribute to the variance observed in the RT-ECPM scores, and the remaining variance may be explained by other variables not included in this study.

## The test takers' attitudes towards the RT-ECPM

The results indicated that the test takers had positive attitudes towards the RT-ECPM. The mean score for each question was clearly higher than three points, well above 2.5 points from the four-point scale on the questionnaire which was used as the benchmark in the hypothesis testing. The researchers' observation was that the test takers were quite motivated to take the test after the researchers explained the development, the significance, the use of the test, as well as the opportunity for self-assessment the test could provide. This research question aimed to find out if the procedures followed in this study could stimulate the test takers' motivation and generate positive attitudes towards the test. The findings showed that the steps employed could help bring about positive attitudes among test takers towards the test.

## Conclusions

Better understanding of the factors that account for performance in language tests is of obvious interest to parties concerned in the field of language learning and testing. This study attempted to explore the relationship between three selected independent variables and reading test scores in the English for Specific Purposes (ESP) area.

The findings indicated a significant relationship between each independent variable and the RT-ECPM scores. However, English language attainment was the only variable that could predict success in the RT-ECPM. Based on the findings, performance in ESP tests was largely related to candidates' level of English language proficiency. Thus, emphasis should be placed on enhancing students' English language ability to help them perform well in ESP tests. However, English language attainment which was the best predictor suggested by the regression model accounted for approximately 30% of the variance in the reading test scores. The other two variables may indirectly contribute to the variance in the RT-ECPM scores, and the remaining variance may be explained by other variables not included in this study.

The results provided additional empirical evidence in support of research conducted by Tan (1990) and Clapham (1996). Even though there were some significant results found in this study, it was far from being conclusive. There are some limitations in generalizing the results of this study. These limitations involve the limited variables included in the study-only reading skills were tested, so generalization must be carefully done with the students in a similar context only.

RT-ECPM could also serve as an instrument for graduating students' self-assessment or as a work readiness test. In addition, since the test was developed based on data gathered in the field, it could provide educational institutions with target language used in the Consumer Product Marketing industry which has not been available before. As voiced by Alderson and Bachman (cited in Douglas, 2000), there are not many research studies or publications for those who need to assess language for specific purposes. Teachers and testers have had to take what has been produced for

teaching purposes, and seek to convert and adapt it for assessment. This research study aimed to contribute an empirical piece of work to fill some of this void. It was also aimed at bringing about a positive washback in language learning and testing in universities, particularly in the business area.

## The Authors

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## References

AcNielsen. (2005). *Southeast Asia Outgrew North Asia in 2004 FMCG Sales.* Available from: http://www.acnielsen.co.th/news.asp?newsID=95

Alderson, J. C., & Urquhart, A. H. (1983). The effect of student background discipline on comprehension: a pilot study. In A. Hughes, & D. Porter (Eds.). *Current developments in language testing.* London: Academic Press.

Alderson, J. C., & Urquhart, A. H. (1985a). The effect of students' academic discipline on their performance on ESP reading tests. *Language Testing, 2,* 192-204.

Alderson, J. C., & Urquhart, A. H.. (1985b). This test is unfair: I'm not an economist. In P. C. Hauptman, R. Le Blanc, & M. B. Wesche (Eds.). *Second language performance testing.* Ottawa: University of Ottawa Press.

Berman, I. (1991). *Can we test L2 reading comprehension without testing reasoning?* Paper presented at the Thirteenth Annual Language Testing Research Colloquium, ETS, Princeton, New Jersey.

Carrell, P.L. (1984a). The effects of rhetorical organization on ESL readers. *TESOL Quarterly, 18,* 441-469.

Carrell, P.L. (1984b). Evidence of a formal schema in second language comprehension. *Language Learning, 34,* 87-112.

Carver, R.P. (1974). Reading as reasoning: implications for measurement. In W. MacGinitie (Ed.) *Assessment problems in reading.* Delaware: International Reading Association.

Chastain, K. (1969). The audiolingual habit theory versus cognitive code-learning theory: some theoretical considerations. *International Review of Applied Linguistics, 11,* 97-106.

Clapham, C. (1996). *The development of IELTS: a study of the effect of background knowledge on reading comprehension.* Cambridge: Cambridge University Press.

Coady, J. (1979). A psycholinguistic model of the ESL reader. In R. Mackay, B. Barkman & R. R. Jordan (Eds.) *Reading in a second language: Hypotheses, organization and practice.* Rowley, MA: Newbury House.

Douglas, D. (2000). *Assessing language for specific purposes.* Cambridge: Cambridge University Press.

Ekstrand, L. (1977). Social and individual frame factors in second language learning: comparative aspects. In T. Skutnabb-Kangas (Ed.). *Paper from the First Nordic Conference on Bilingualism.* Helsingsfors Universistat.

Floyd, P., & Carrel, P. L. (1987). Effects on ESL reading of teaching cultural content schemata. *Language Learning, 37,* 89-108.

FMCG Brands Directory. (2004). *FMCG companies.* Available from: http://www.fmcgbrands.com

Garson, G.D. (2004). *Multiple regression.* Available from: http://www2.chass.ncsu.edu/garson/pa765/regress.htm

Genesee, F. (1976). The role of intelligence in second language learning. *Language Learning, 26,* 267-80.

Johnson, P. (1981). Effects on reading comprehension of language complexity and cultural background of a text. *TESOL quarterly, 15,* 169-81.

Kattan, J. (1990). *The Construction and validation of an EAP test for second-year English and nursing majors at Bethlehem University.* Unpublished Ph.D. thesis. Lancaster University, UK.

Oller, J. W., & Perkins, K. (1978). A further comment on language proficiency as a source of variance in certain affective measures. *Language Learning, 28,* 417-23.

Rungson Chomya (2005). Four-point Likert type scale or six-point Likert type scale. Available from : http://www.edu.msu.ac.th/newweb/news/Likert.pdf

Rumelhart, D. E. (1980). Schemata: the building blocks of cognition. In R. J. Spiro, B. C. Bruce, & W. F. Brewer (Eds.) *Theoretical issues in reading comprehension.* Hillsdale, NJ: Lawrence Erlbaum Associates.

Santos-Dizon, D. (2006). *Retail, Fast Moving Consumer Goods and Logistics.* Available from: http://www.asia.hobsons.com/industry_profiles / retail_fast_moving_consum er_goods_and_logistics

Tan, S. H. (1990). The role of prior knowledge and language proficiency as predictors of reading comprehension among undergraduates. In J.H.A.L. de Jong & D. K. Stevensons (Eds.) *Individualizing the assessment of language abilities.* Clevedon, PA: Multilingual Matters.

Thorndike, R. L. (1917). Reading as reasoning. *Reading Research Quarterly, 9,* 135-147.