

# The Relationship between EFL Student Academic Self–Concept and Language Performance

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## **Abstract**

This study investigates the relationship between domain specific self–concept and academic performance in English among EFL students. The sample comprised 174 first–year college students, who were placed into three different levels of English classes according to proficiency. Statistical methods are used to address: (1) whether academic self–concept has significant correlation with English listening and reading proficiency scores, (2) whether academic self–concept can significantly predict students’ English performance and vice versa, and (3) whether the correlation between academic self–concept and English proficiency is statistically significant for both males and females. Analysis of the full sample indicates that academic self–concept not only has significant correlations with students’ listening and reading performances but also is a significant predictor of students’ English proficiency. Students’ listening proficiency scores serve as a better predictor of academic self–concept than their reading scores. Moreover, female students have higher correlations for all pairs of variables than males, and the correlations are highly significant. It should be noted that these subjects were tested immediately after the start of the homogenous placement program. The findings demonstrate that academic self–concept is formed at least in part as a consequence of prior academic achievement.

**Keywords:** language performance, self–concept, gender differences

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## I. Introduction

Self-concept has been the focus of a great deal of research in many different disciplines, including psychology and education. Researchers generally use the word “self” to refer to one’s conscious reflection of his or her own identity. Different terms such as self-concept, self-esteem, self-efficacy and so on are often used “interchangeably and inconsistently” in the literature because they may refer to different ideas about how people think about themselves (Strein, 1995).<sup>1</sup>

Although self-concept is one of the most popular ideas in psychological research, there is no universally accepted definition of this term (De Fraine, Van Damme, & Onghena, 2007).<sup>2</sup> Some researchers view self-concept and self-efficacy as the same construct, but others view them as two different constructs (Bong & Clark, 1999; Choi, 2005).<sup>3</sup> Bong & Clark (1999) stated that self-concept has two facets: cognitive and affective. In contrast, self-efficacy is unidimensional and has only a cognitive component. Huitt (2004) distinguished the two terms self-concept and self-esteem by stating that self-concept is the cognitive aspect of self, and self-esteem is the affective aspect of self, which refers to one’s feelings of self-worth.<sup>4</sup> De Fraine, Van Damme, and Onghena (2007) compared three constructs, self-concept, self-esteem, and self-efficacy, and suggested that they vary in their specificity level. Self-esteem represents a person’s general perceptions of his or her self-worth. Self-concept is domain-specific, whereas self-efficacy is regarded as a person’s expectations of his or her competence in a given task. Before the mid-1970s, self-concept was considered as having a unidimensional nature (Liu, Wang, & Parkins, 2005).<sup>5</sup> In recent years, more and more researchers have reached the consensus that self-concept is multifaceted (Bong and Clark, 1999; Marsh, 1989, 1990; Marsh & Shavelson, 1985;

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<sup>1</sup> Strein, W. “Advances in research on academic self-concept: Implications for school psychology.” *School Psychology Review*, Vol. 22, No.2 (1993), pp.273-284.

<sup>2</sup> De Fraine, B., Van Damme, J. & Onghena, P. “A longitudinal analysis of gender differences in academic self-concept and language achievement: A multivariate multilevel latent growth approach.” *Contemporary Educational Psychology*, Vol.32, No.1 (2007), pp.132-150.

<sup>3</sup> Bong, M. & Clark, R. E. “Comparison between self-concept and self-efficacy in academic motivation research,” *Educational Psychologist*, Vol.34 No.3 (1999), pp.139-153; Choi, N. “Self-efficacy and self-concept as predictors of college students’ academic performance,” *Psychology in the Schools*, Vol.42, No.2 (2005), pp.197-205.

<sup>4</sup> Huitt, W. “Self-concept and self-esteem.” *Educational Psychology Interactive*, (2004), Retrieved from <http://chiron.valdosta.edu/whuitt/col/regsys/self.html>

<sup>5</sup> Liu, W. C., Wang, C. K. J. & Parkins, E. J. “A longitudinal study of students’ academic self-concept in a streamed setting: The Singapore context.” *British Journal of Educational Psychology*, Vol.75 (2005), pp.567-586.

Marsh, Byrne & Shavelson, 1988; Shavelson, Hubner, & Stanton, 1976).<sup>6</sup> According to Huitt (2004), self-concept has several components: physical, academic, social, and transpersonal.<sup>7</sup>

The present study focuses on the aspect of self-concept in the academic domain, that is, the way students perceive themselves as learners. Bong and Skaalvik (2003) defined academic self-concept as student perceptions of their academic capability.<sup>8</sup> Marsh, Relich, & Smith (1983) maintained that perception of one's ability level is a key aspect of academic self-concept.<sup>9</sup> Strein (1993) indicated that academic self-concept can be subdivided into different domain-specific school self-concepts such as verbal self-concept and mathematical self-concept.<sup>10</sup> The operational definition of academic self-concept used in this study is defined by Liu and Wang (2005) as "students' perceived academic competence and their commitment to, and involvement and interest in schoolwork."<sup>11</sup> The academic performance assessed in the research refers to students' achievement outcomes, particularly with regard to English language proficiency.

Most research studies on self-concept have been conducted with samples of elementary school children or adolescents. Few research studies have addressed the relation between academic self-concept and academic achievement among college students. Also, little work in this area has been done in the Taiwanese EFL context. The purpose of the study is to address the following research questions:

1. Is there any significant correlation between EFL students' academic self-concept and their English listening and reading proficiencies?

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<sup>6</sup> Marsh, H. W. "Age and sex effects in multiple dimensions of self-concept: Preadolescence to early adulthood," *Journal of Educational Psychology*, Vol.81 (1989), pp.417-430; Marsh, H. W. "The structure of academic self-concept: The Marsh/Shavelson model," *Journal of Educational Psychology*, Vol.82, No.4 (1990), pp.623-636; Marsh, H. W. & Shavelson, R. J. "Self-concept: Its multifaceted, hierarchical structure," *Educational Psychologist*, Vol.20, No.3 (1985), pp.107-123; Marsh, H. W., Byrne, B. M. & Shavelson, R. J. "A multifaceted academic self-concept: Its hierarchical structure and its relation to academic achievement," *Journal of Educational Psychology*, Vol.80 (1988), pp.366-380; Shavelson, R. J., Hubner, J. J. & Stanton, G. C. "Self-concept: Validation of construct interpretations," *Review of Educational Research*, Vol.46 (1976), pp.407-441.

<sup>7</sup> Huitt, W. op. cit.

<sup>8</sup> Bong, M., & Skaalvik, E. M. "Academic self-concept and self-efficacy: How different are they really?" *Educational Psychology Review*, Vol.15, No.1 (2003), pp.1-34.

<sup>9</sup> Marsh, H. W., Relich, J. D., & Smith, I. D. "Self-concept: The construct validity of interpretations based upon the SDQ." *Journal of Personality and Social Psychology*, Vol.45, No.1 (1983), pp.173-187.

<sup>10</sup> Strein, W. op. cit.

<sup>11</sup> Liu, W. C. & Wang, C. K. J. "Academic self-concept: A cross-sectional study of grade and gender differences in a Singapore secondary school," *Asia Pacific Education Review*, Vol.6, No.1 (2005), pp.20-27.

2. Is it possible to use academic self-concept scores to predict students' English performance and vice versa?

3. Is there a significant relationship between English self-concept and language proficiency for both males and females?

## II. Review of Related Literature

The causal ordering of academic self-concept and achievement has continued to be the subject of considerable research in educational psychology. Researchers found that the formation of students' self-concepts is mainly based on their academic achievement and the feedback they receive from significant people about their school performance (Marsh & Yeung, 1997; Redd, Brooks, & McGarvey, 2001; Rost, Sparfeldt, Dickhäuser, & Schilling, 2005).<sup>12</sup> However, whether academic achievement influences academic self-concept or academic self-concept influences achievement remains a question of interest.

De Fraine et al. (2007) used three models to describe the self-concept/achievement relation: the skill-development model, the self-enhancement model, and the reciprocal effects model.<sup>13</sup> The skill-development model describes academic achievement as the primary determinant of self-concept. It postulates that self-concept represents the consequence of prior academic achievement, as indicated by test scores and grades. On the other hand, the self-enhancement model suggests that self-concept determines a student's later academic performance. The third model of causal relationship proposes that self-concept is both a cause and an effect of academic achievement. The relationship is not uni-directional, but rather, it has a reciprocal nature. This model is supported by the majority of researchers (Marsh, Hau & Kong, 2002; Marsh & Yeung, 1997; Marsh, Trautwein, Lüdtke, Köller & Baumert, 2005; Muijs, 1997).<sup>14</sup> Nevertheless, there are

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<sup>12</sup>Marsh, H. W. & Yeung, A. S. "Causal effects of academic self-concept on academic achievement: Structural Equation models of longitudinal data," *Journal of Educational Psychology*, Vol.89, No.1 (1997), pp.41-54; Redd, Z., Brooks, J. & McGarvey, A. M. "Background for community level work on educational adjustment in adolescence: Reviewing the literature on contributing factors," *Child Trends*, (2001), pp.1-102; Rost, D. H., Sparfeldt, J. R., Dickhäuser, O. & Schilling, S. R. "Dimensional comparisons in subject-specific academic self-concepts and achievements: A quasi-experimental approach," *Learning and Instruction*, Vol.15 (2005), pp.557-570;

<sup>13</sup>De Fraine, B., Van Damme, J. & Onghena, P. op. cit.

<sup>14</sup>Marsh, H. W., Hau, K.-T. & Kong, C.-K. "Multilevel causal ordering of academic self-concept and achievement: Influence of language of instruction (English compared with Chinese) for Hong Kong students." *American Educational Research Journal*, Vol.39, No.3 (2002), pp.727-763; Marsh, H. W. & Yeung, A. S. op cit; Marsh, H. W., Trautwein, U., Lüdtke, O., Köller, O. & Baumert, J. "Academic self-concept, interest, grades, and standardized test scores: reciprocal effects models of

conflicting findings of whether the influence of self-concept on academic performance is stronger than the influence of academic performance on self-concept (De Fraine et al., 2007; Guay, Marsh, & Boivin, 2003).<sup>15</sup>

Using longitudinal data collected from a large sample of German 7th grade students, the findings of Marsh et al. (2005) supported the reciprocal effects model, which shows that self-concept and academic achievement affect and determine one another.<sup>16</sup> They found clear evidence that academic self-concept not only significantly predicts academic achievement, but also significantly predicts subsequent math interest, school grades, and standardized test scores. However, the causal effect of academic interest on self-concept and subsequent achievement is either very small or non-significant.

Marsh, Kong, and Hau (2001) analyzed the math, Chinese, and English scores of a large sample of Hong Kong high school students and found substantial positive effect of English achievement on English self-concept, with path coefficients ranging from .55 to .61.<sup>17</sup> In this five-year longitudinal study, students' achievements in different school subjects had substantial positive effects on the corresponding academic self-concepts but negative effects on the self-concepts in nonmatching subject domains (e.g. achievement in English had a positive effect on English self-concept but small negative effect on math and Chinese self-concepts). It is also interesting to note that the prior achievement scores collected before these students entered high school had strong positive effects on their self-concepts two to four years after the start of high school.

Sanchez and Roda (2003) administered the Self-Description Questionnaire (SDQ), which is designed to measure seven facets of self-concept (Marsh, Relich, & Smith, 1983), to a sample of 6th year primary school students in Spain.<sup>18</sup> They reported a strongly significant predictive relationship between academic self-concept and school performance. On the other hand, non-academic self-concept and academic

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causal ordering," *Child Development*, Vol.76, No.2 (2005), pp.397-416; Muijs, R. D. "Predictors of academic achievement and academic self-concept: A longitudinal perspective," *British Journal of Educational Psychology*, Vol.67 (1997), pp.263-277.

<sup>15</sup>De Fraine, B., Van Damme, J. & Onghena, P. op cit; Guay, F., Marsh, H. W. & Boivin, M. "Academic self-concept and academic achievement: developmental perspectives on their causal ordering," *Journal of Educational Psychology*, Vol.95 (2003), pp.124-136.

<sup>16</sup>Marsh et al. op. cit.

<sup>17</sup>Marsh, H. W., Kong, C.-K. & Hau, K.-T. "Extension of the internal/external frame of reference model of self-concept formation: Importance of native and nonnative languages for Chinese students," *Journal of Educational Psychology*, Vol.93, No.3 (2001), pp.543-553.

<sup>18</sup>Sanchez, F. J. P. & Roda, M. D. S. "Relationships between self-concept and academic achievement in primary students." *Electronic Journal of Research in Educational Psychology and Psychopedagogy*, Vol.1 (2003), pp.95-120; Marsh, H. W., Relich, J. D. & Smith, I. D. op. cit.

achievement had a negative association. In the study, Sanchez and Roda used the marks given by the teacher to these students as measures of their school performance. The broadly used instrument in Marsh and his colleagues' self-concept research, SDQ, measures not only factors of non-academic self-concept but also factors of academic self-concept, including self-concept in mathematics and reading.

### III. Method

#### A. Subjects

The subjects of the study were 174 freshman students from one university in central Taiwan, including 76 (44%) male students and 98 (56%) females. Table 1 presents the number of subjects of each sex in each ability group.

Table 1  
Number of Participants of Each Sex from Different Ability Levels

	Basic	Intermediate	Advanced	Total
Male	24	34	18	76
Female	26	24	48	98
Total	50	58	66	174

They were all organized into different proficiency levels for English instruction based on their performance in the elementary level GEPT listening and reading tests immediately after they entered the school. Two classes of freshmen from each proficiency level, namely basic, intermediate, and advanced, were selected to participate in the study. The original number of participants in this study was 182. After eliminating data from students who had missing values in their responses to the questionnaire or missed one of the GEPT tests, the remaining number of subjects was 174.

#### B. Instrument

The questionnaire used in the study was adapted from Liu, Wang and Parkins's (2005) academic self-concept (ASC) scale.<sup>19</sup> It comprises two subscales, the academic confidence subscale (9 items) and the academic effort subscale (10 items).

<sup>19</sup>Liu, W. C. Wang, C. K. J. & Parkins, E. J. op. cit.

According to Liu et al. (2005), students' confidence and effort are two first-order factors of ASC scale. The AC subscale was used to measure "students' feelings and perceptions about their academic competence", and the AE subscale was used to assess "students' commitment to, and involvement and interest in schoolwork" (Liu and Wang, 2005).<sup>20</sup> The internal consistency reliability coefficients for the 19-item ASC scale, the AC subscale, and the AE subscale in the present study were .89, .87 and .83, respectively.

The self-concept questionnaire was translated into Chinese by the researcher to be administered to the college students. Responses for the items in the original questionnaire were given on a 4-point Likert scale, while the one used in the study was built on a 6-point Likert form to more precisely measure students' perceived confidence and effort. Eight of them were negatively worded items.

The other instruments used in the study were the intermediate level General English Proficiency Test (GEPT) reading and listening tests. All of the students were given the questionnaire and GEPTs at the beginning of their first school year to avoid the grouping effect.

### C. Data Analysis

To ascertain the research questions concerning the relation between subject-specific academic self-concept and English proficiency, statistical methods were employed to analyze the data collected from the EFL students. First, to investigate whether there is significant correlation between academic self-concept and academic performance, Pearson product-moment correlation coefficients for each pair of the self-concept scale, subscales, and students' GEPT listening and reading scores were calculated. Second, multiple regression analysis was conducted to test whether self-concept could be a significant predictor of English performance and vice versa.

## IV. Results and Discussion

### A. Correlational Analysis

The means and standard deviations of the self-concept scores and GEPT test scores for each proficiency group are presented in Table 2. The GEPT total scores were obtained by adding students' GEPT listening scores and GEPT reading scores.

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<sup>20</sup>Liu, W. C. & Wang, C. K. J. op. cit.

Table 2

Descriptive Statistics of Students' Self-Concept Scale Scores, Subscale Scores, and GEPT Test Scores

	<u>Basic Level</u>		<u>Intermediate Level</u>		<u>Advanced Level</u>	
	Male	Female	Male	Female	Male	Female
GEPT listening						
Mean	40.54	43.31	40.00	50.17	81.78	80.54
SD	11.59	13.58	10.19	12.97	14.65	10.74
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GEPT reading						
Mean	41.50	38.19	33.35	40.12	73.00	73.25
SD	11.96	11.02	9.93	12.03	17.34	14.55
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GEPT total						
Mean	82.04	81.50	73.35	90.29	154.78	153.79
SD	19.68	19.89	15.11	15.94	28.04	20.27
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AC subscale						
Mean	26.38	28.50	32.21	31.92	33.89	34.48
SD	6.69	8.42	7.39	5.51	7.35	6.84
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AE subscale						
Mean	36.67	40.65	41.97	44.00	44.11	45.98
SD	7.65	7.56	6.63	5.32	6.89	6.11
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ASC scale						
Mean	63.04	69.15	74.18	75.92	78.00	80.46
SD	11.98	14.30	13.02	8.16	12.61	11.52

Note. AC = Academic Confidence; AE = Academic Effort; ASC = Academic Self-Concept

In order to examine whether there is significant correlation between students' academic self-concept and their English performance, Pearson product-moment correlation coefficients for each pair of self-concept scale scores, subscale scores, and GEPT listening and reading scores were calculated. Since no significant difference is found between low- and average-ability students' performance in the intermediate level GEPT test (see Appendix A), subjects from these two groups were combined for the correlational analysis. The findings are presented in Table 3.

For students grouped into the lower-proficiency level, their academic performance has a little stronger correlation with academic confidence (.24) than with overall self-concept (.20), while the correlations between academic effort and other academic performance variables are low and non-significant.



As for students in advanced level, results show moderate correlations between their academic confidence and the other two variables, reading and overall GEPT scores (.43 and .49, respectively), and between their overall self-concept and GEPT total scores (.40). Similar to the findings for students of lower proficiency level, the correlations between students' perceived academic effort and their GEPT scores are weak and non-significant.

Table 3  
Pearson Correlations between Students' Academic Self-Concept Scale Scores, Subscale Scores and GEPT Test Scores for Each Proficiency Level

Variable	Listening	Reading	GEPT Total	AC	AE	ASC
<b>Lower-Proficiency Level</b>						
1. Listening	—					
2. Reading	.18	—				
3. GEPT Total	.79**	.75**	—			
4. AC	.25**	.11	.24**	—		
5. AE	.15	.02	.11	.57**	—	
6. ASC	.23*	.07	.20**	.89**	.88**	—
<b>Higher-Proficiency Level</b>						
1. Listening	—					
2. Reading	.37**	—				
3. GEPT Total	.78**	.87**	—			
4. AC	.37**	.43**	.49**	—		
5. AE	.15	.20	.22	.58**	—	
6. ASC	.30*	.36**	.40**	.90**	.88**	—
<b>Full Sample</b>						
1. Listening	—					
2. Reading	.75**	—				
3. GEPT Total	.94**	.93**	—			
4. AC	.39**	.36**	.40**	—		
5. AE	.33**	.30**	.34**	.61**	—	
6. ASC	.40**	.37**	.41**	.90**	.89**	—

Note. Listening = GEPT listening; Reading = GEPT reading  
\* p < .05, \*\* p < .01

It should be noted that the results obtained for both lower- and higher-performing students only represent the correlation between language

performance and academic self-concept within a limited range of scores. To avoid the effect of range restriction, a correlational analysis was also conducted on the data from the full sample. Findings show that all of the pairs of the variables are significantly correlated. Students' academic self-concept has moderate correlation with their listening and overall GEPT scores (.40 and .41, respectively) and weaker correlation with their reading scores (.37). Academic confidence appears to have higher correlation with the other variables than academic effort.

Table 4  
Pearson Correlations for Students' Academic Self-Concept Scale Scores, Subscale Scores and GEPT Test Scores for Each Sex

Variable	Listening	Reading	GEPT Total	AC	AE	ASC
<b>Males</b>						
Listening	—					
Reading	.77**	—				
GEPT Total	.94**	.94**	—			
AC	.30**	.26*	.30**	—		
AE	.28*	.16	.23*	.64**	—	
ASC	.32**	.23*	.30**	.91**	.90**	—
<b>Females</b>						
Listening	—					
Reading	.71**	—				
GEPT total	.92**	.93**	—			
AC	.44**	.42**	.47**	—		
AE	.30**	.34**	.35**	.57**	—	
ASC	.42**	.43**	.46**	.90**	.87**	—

Note. Listening = GEPT listening; Reading = GEPT reading

\*  $p < .05$ , \*\*  $p < .01$

Table 4 shows the correlation coefficients for the full sample of each sex. Female students have higher correlations for all of the pairs of variables than their male counterparts. Their academic confidence and overall academic self-concept are moderately correlated with all of the English proficiency scores, including listening and reading scores (all above .40). Even their perceived academic effort scores are significantly correlated with their GEPT scores, albeit correlation coefficients are lower than those for the other self-concept variables. The only insignificant

correlation coefficient (.16) was found for the relation between male students' perceived academic effort and their English reading proficiency.

## B. Multiple Regression Analysis

Multiple regression analysis was also used to examine students' data to determine whether academic self-concept is a significant predictor of students' English proficiency. Findings are shown in Table 5. When both academic confidence and academic effort are used in the model to predict students' overall GEPT scores using the enter method, the two predictors account for 17.6 percent of the variance of dependent variable. The F value for the regression model is 18.25,  $p < .001$ . Whereas academic confidence is a significant predictor of students' English proficiency, academic effort is not.

Table 5  
Multiple Regression Analysis of Students' Academic Self-Concept

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	Sig.
1	.419	.176	.166	37.23	.176	18.25	.000

a. Predictors: (Constant), academic effort, academic confidence

Further multiple regression analysis using the stepwise method was conducted to determine whether students' listening and reading performances can predict academic self-concept. The results reveal that students' listening scores alone account for 16.3 percent of the variance of the dependent variable, with an F value of 33.47 ( $p < .001$ ). Students' reading proficiency, as one of the independent variables, was excluded from the regression model due to lack of statistical significance.

## V. Summary and Conclusion

This study mainly explores the relationship between subject-specific self-concept and EFL students' language proficiency. Analysis of the data collected from the full sample demonstrates that all of the correlations among the variables, including three variables related to academic self-concept and three related to academic performance, are statistically significant. Academic self-concept has higher correlation with students' language proficiency than the other two related variables. All three variables related to subject-specific self-concept have higher correlations

with students' English listening proficiency than with their reading proficiency. Other major findings are summarized as follows:

First, students' language performance has higher correlation with their academic confidence than with perceived academic effort for both lower- and higher-proficiency levels. Academic confidence and overall self-concept are significantly correlated with students' listening and reading proficiencies. The results of multiple regression analysis show that academic confidence is a significant predictor of students' overall language performance, whereas academic effort is not.

Second, students' English self-concept has weaker correlation with their English reading proficiency than with their listening proficiency, except among higher-proficiency students that show higher correlation between their reading proficiency and academic self-concept (.36) than between their English listening and self-concept scores (.30). The multiple regression analysis results reveal that students' listening proficiency serves as a significant predictor of their English self-concept, while their reading proficiency does not.

Third, the findings concerning gender differences show that females have higher correlations, ranging .30 to .47, for all pairs of variables than male students. All of the correlations are highly significant. The only correlation found to be non-significant is between male students' perceived academic effort and their reading proficiency scores. Female participants have moderate correlation coefficients between their English proficiency scores and academic confidence and overall academic self-concept (all above .40), while the correlations between their language proficiency scores and perceived academic effort are weaker. Males not only have lower correlations for all pairs of variables but also lower mean values for their language proficiency and academic self-concept as compared with their female counterparts.

Overall, this study provides clear evidence that specific academic self-concept does form a relationship in the positive direction with academic performance, which is congruent with the findings of numerous research studies (Chapman & Tunmer, 1997; Choi, 2005; De Fraine, Van Damme, & Onghena, 2007; Kurtz-Costes, & Schneider, 1994; Marsh, 1990; Marsh & Yeung, 1998).<sup>21</sup> Results of this investigation agree with

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<sup>21</sup>Chapman, J. W. & Tunmer, W. E. "A longitudinal study of beginning reading achievement and reading self-concept." *British Journal of Educational Psychology*, Vol.67 (1997), pp.279-291; Choi, N. op. cit. De Fraine, B., Van Damme, J. & Onghena, P. op. cit. Kurtz-Costes, B. E. & Schneider, W. "Self-concept, attributional beliefs, and school achievement: A longitudinal analysis," *Contemporary Educational Psychology*, Vol.19 (1994), pp.199-216. Marsh, H. W. "The structure of academic self-concept: The Marsh/Shavelson model," *Journal of Educational Psychology*, Vol.82 No.4 (1990), pp.623-636; Marsh, H. W. & Yeung, A. S. "Longitudinal structural equation models of academic self-concept and achievement: Gender differences in the development of math and English constructs," *American Educational Research Journal*, Vol.35 (1998), pp.705-738.

Marsh, Kong and Hau's (2001) contention that English achievement has a positive effect on English self-concept.<sup>22</sup> This is also consistent with Marsh et al.'s finding (1988) that English achievement is significantly correlated with English self-concept.<sup>23</sup> As suggested by Helmke and Aken (1995), although there is no agreement about the direction of causal ordering between academic self-concept and academic achievement, one thing is certain that academic self-concept is formed at least in part as a consequence of prior academic achievement.<sup>24</sup> Academic self-concept has been proved to be an important variable that contributes to desirable achievement outcome. Enhancing EFL students' English self-concept may lead to better English achievement or the other way around. Teachers should not only focus on enhancing students' school performance, but they should also help them construct positive views of themselves, particularly in the academic domains in which they are teaching. Besides providing students with more carefully planned curriculum that suits their proficiency levels, teachers may help students set reasonable academic goals and constantly give encouragement when they are making improvements in their academic performance. Only when students have more positive perceptions of self in the domain of English will they be more motivated to learn in English classes.

One limitation of the study is that the "intermediate" level participants' language proficiency scores, including their reading and listening performance, did not significantly differ from those of lower level students. The students were therefore regrouped into the lower-performing level for the correlational analysis in the present study. The reason why these "intermediate" level students did not outperform their lower level counterparts on the intermediate level GEPT tests is an interesting question that is worth further investigation. Various factors may account for their poor performance in the tests.

As previously mentioned, all freshman students were administered the elementary level GEPT listening and reading tests immediately after they entered the university and placed into different levels of English classes. Compared with the advanced level students' performance in the intermediate level GEPT tests, these "intermediate" level students' English proficiency should actually be regarded as "lower-intermediate" level. Results showed that the tests turned out to be relatively difficult for these students. Taking the GEPT listening test as an example, the average

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<sup>22</sup>Marsh, H. W. Kong, C.-K. & Hau, K.-T. op. cit.

<sup>23</sup>Marsh, H. W., Byrne, B. M. & Shavelson, R. J. op. cit.

<sup>24</sup>Helmke, K. G. & van Aken, M. A. G. "The causal ordering of academic achievement and self-concept of ability during elementary school: A longitudinal study," *Journal of Educational Psychology*, Vol.87, (1995), pp.624-637.

score of these students was only about 40 when the total score of the test is 120. According to Mehrens and Lehmann (1991), when test items are so difficult that only a few examinees can answer them correctly, the items have very low discrimination power.<sup>25</sup> Whether the elementary level or intermediate level GEPT test is a better test to differentiate the proficiency levels of the lower ability students and the lower–intermediate level students is beyond the scope of this investigation. Nevertheless, it is worth noting that students' English proficiency scores show a distinct discrepancy between the performance of lower achievers and high achievers. The advanced level participants have English proficiency scores almost twice as high as their lower–ability peers. Improving the performance of lower–performing students has definitely been a great challenge for many teachers. It is recommended that in future research, more representative samples of different proficiency levels should be included.

The second limitation of the study is concerned with the use of GEPT test to measure students' academic performance. Students were less motivated to answer the test questions because the results had no relation to their final grades. Marsh and Yeung (1998) suggested that the academic self–concept/achievement relation should be stronger when school grades are used instead of standardized test scores because school grades provide more direct and important feedback to students and are more easily affected by students' effort.<sup>26</sup> Using school grades tends to reflect better motivational properties to encourage students to perform better. This may explain why no strong correlation is found in the present study. However, there is still a moderate correlation between English self–concept and students' overall English proficiency scores (.41) for the full sample. Higher correlation may be expected if students' school grades are used instead of their English proficiency scores. The reason that the GEPT test is used in this research is because it is widely recognized as a useful instrument to objectively reflect students' English proficiency in Taiwan, and further it is used as a graduation threshold for these subjects. It is difficult for school grades to serve as an objective measure of students' English performance when students are grouped into different proficiency levels. Although these students were administered the same final exam, different teachers may have different standards to determine the final grades of their students.

Finally, it should be noted that these freshman students were only at the beginning of the grouping practice when the present study was conducted. In Liu,

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<sup>25</sup>Mehrens, W. A., & Lehmann, I. J. *Measurement and Evaluation in Education and Psychology*, (Orlando, Florida: Holt, Rinehart and Winston, 1991).

<sup>26</sup>Marsh, H. W. & Yeung, A. S. op. cit.

Wang, and Parkins's (2005) study of the Secondary 1 (approximately aged 13) students in Singapore, lower level students had more negative academic self-concept than the higher-ability students immediately after grouping.<sup>27</sup> Nonetheless, these lower-ability students had more positive academic self-concept than their own previous results three years later. The academic self-concept of those students in high ability classes suffered a greater decline over time due to more competition from peers and higher expectations from teachers. There are mixed results in research studies regarding whether the correlation between academic self-concept and achievement increases or decreases with age (De Fraine, Van Damme, & Onghena, 2007).<sup>28</sup> According to De Fraine et al., most studies show stronger correlation in the higher grades for elementary school students; however, for students in the secondary schools, the correlation may become weaker with age (Marsh & Yeung, 1997) or become stronger with age (Marsh, Hau, & Kong, 2002).<sup>29</sup> Future studies should not only continue to look into the self-concept/achievement relation for college students using longitudinal data, but also have to assess the change in academic self-concept over time for these young adults.

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<sup>27</sup>Liu, W. C. Wang, C. K. J. & Parkins, E. J. op. cit.

<sup>28</sup>De Fraine, B., Van Damme, J. & Onghena, P. op. cit.

<sup>29</sup>Marsh, H. W. & Yeung, A. S. op. cit., Marsh, H. W., Hau, K.-T. & Kong, C.-K., op. cit.

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## Appendix A

### ■ Descriptive Statistics for English Proficiency Scores

	Basic Level	Intermediate Level	Advanced Level
GEPT Listening			
Mean	41.98	44.21	80.88
SD	12.61	12.39	11.83
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GEPT Reading			
Mean	39.78	36.16	73.18
SD	11.48	11.26	15.22
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GEPT Total			
Mean	81.76	80.36	154.06
SD	19.59	17.48	22.43

### ■ Independent T-Test Results of English Proficiency Scores for Basic Level and Intermediate Level Students

	Mean		t statistic	df	p
	Basic	Intermediate			
GEPT Listening	41.98	44.21	-.924	106	.358
GEPT Reading	39.78	36.16	1.653	106	.101
GEPT Total	81.76	80.36	.392	106	.696

# EFL 學生學業自我概念與其語言表現的相關分析

劉慧如\*

## 摘 要

本研究主要是分析 EFL 學生在學業自我概念與其英語學業表現之間的關係。研究樣本包括 174 位大學一年級的學生，這些學生在參與本研究前就已依據其英語能力被編入不同能力等級的班級。統計方法的使用是在探究下列三個問題：(1) 學業自我概念與學生的英語聽力與閱讀能力的表現是否有顯著的相關？(2) 學業自我概念是否能有效地預測學生的英語表現？反之亦然？與 (3) 是否不同性別的學生的學業自我概念與英語能力都存在顯著的相關？分析結果顯示英語學業自我概念不僅與學生的英語聽力與閱讀能力的表現有著顯著相關，而且可以作為學生英語能力的預測變項。學生的英語聽力比閱讀能力更能預測學生的學業自我概念。此外，女性學生的學業自我概念與英語能力之間的相關係數都高於男性，且具有高度的顯著性。值得注意的是，本研究施測時間緊接在這些學生能力分班之後，研究結果可確認學業自我概念的形成乃是先前學業成就所造成的部份結果。

**關鍵詞：**語言表現、自我概念、性別差異

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