

Comparison Study in College Students Learning English with Self-Efficacy, Self-Directed Learning, Motivation and Learning Activities in Yunnan and Taiwan of China

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Abstract—English as a foreign language (EFL) has adopted the concept and implemented in both China and Taiwan teaching, however, the general impression is college students in English performance is not well in both sides of Taiwan Strait. Of significant factors influencing learning English learning factors, individual learner differences may be the most crucial. It was the aim of this study to investigate the relationships among self-directed learning in the domain of English as Foreign Language self-efficacy, and motivation in Taiwan and Yunnan respectively. The Self-Directed English Learning Survey used in this study was a researcher-constructed survey. 604 college students from college in Taiwan and Teacher Education in Yunnan participated in the study. The analysis of One Way ANOVA and Dennett's test indicated that gender, academic, and English all had significant effects on students in the constructs of self-directed English learning, self-efficacy, and motivation. In addition, results indicated that the difference between lower and higher score participating groups were more related to self-directed learning, self-efficacy than motivation. Implications are to increase effective instruction activities, students needed to do more English learning activities. The more positive individuals' attitudes, the more intrinsically motivated individual, which can further increase their perseverance in pursuit of English learning.

Index Terms—motivation, self-directed learning, self-efficacy

I. INTRODUCTION

Since the 1980s increasing numbers of practitioners in English as a Foreign Language (EFL) have adopted the concept and implemented it in their teaching. This means that students start to receive formal English as a Foreign Language (EFL) education earlier than before. Now, students in Taiwan receive formal English education from their elementary schools. A report about the English Ability Survey of Taiwan's University Students, conducted by the Global Education Association in Taiwan (GEAT) found that the average paper-based TOEFL score of Taiwan's university students was 456. A

total of 2755 university students from 20 universities in Taiwan participated in this English ability survey from June 10 to October 10, 2010. Of the students tested, 32.2 percent scored below 410, a score equivalent to intermediate-level English, while 8.8 percent of the students scored below 350, which is equivalent to beginning level English competency. According to the Educational Testing Service (ETS), the TOEFL score expected of a university graduate should be at least 490. This is an indicator that the English ability of Taiwanese students is not satisfactory

In Mainland China, English is taught as a formal requirement from elementary school to tertiary level. Since the subject of English forms a major component of a variety of gate-keeping and high-stakes examinations, students are typically instrumentally motivated to succeed in English examinations. A nation-wide survey showed about 90% of students spend the whole of their last year in junior and senior middle schools preparing for these examinations through repeatedly practicing potential test items and doing mock test papers [1]. In fact, this test-oriented instruction considerably diminishes students' interest in learning English, which consequently weakens their enjoyment of learning in both sides of Taiwan Strait, China and Taiwan. Some research state that students' intrinsic desire for learning English as a foreign language (EFL) tends to decline as they proceed from low to higher grades at school [2]-[3]. Likewise, Busser and Walter (2013) found a substantial decrease in intrinsic motivation, learning effort and self-efficacy among German as a foreign language learners in the United Kingdom, in spite of their increasing wish to become proficient in German [4]. Thus, this study was to investigate the relationships among self-efficacy, motivation, learning behaviors outside classrooms, and self-directed learning in the domain of English as Foreign Language.

II. REVIEW OF SELF-EFFICACY, SELF-DIRECTED LEARNING AND MOTIVATION IN ENGLISH

Among all English learning factors, individual learner differences are the most crucial [5]-[9]. A literature

review reveals that extensive studies of learners' beliefs, attitudes, motivation, learning strategies and the autonomy of English as Second Language (ESL) learning have been conducted during the last decade. For example, E. K. Horwitz (1988) and S. Cotterall (1995) explored language learner beliefs, and D. J. Palmer & E.T. Goetz (1988), as well as N. D. Yang (1999) further studied the relationship between EFL learners' beliefs and their use of learning strategies [10]-[13]. In addition, many studies explored students' motivation [14]-[26] or motivation with other variables, such as achievement [27]-[28], attitude [29]-[30], personality [31]-[32] or learning strategies [33]-[34]. The topic of learning strategies has also been intensely investigated in the field of second/foreign language learning [35]-[44]. Some studies have tried to determine how the variables of personality, learning styles, motivation, learning strategy and other factors relate to learner autonomy [45]-[48].

III. METHODOLOGY

A. Aim of This Study

This study focuses on the relationships among self-efficacy, motivation, and self-directed learning in the domain of English as Foreign Language between Taiwan and Yunnan in China. Specifically, the research question was: what is the relationship between individual's factors (self-efficacy, motivation, out-of-classroom English learning activities, self-directed English learning) and English scores at colleges in China?

B. Participants

The study, 278 participants in college of Business and 326 participants Teacher Education college randomly selected to choose one comprehensive English class consisted of reading, writing, listening and speaking union lasting a semester of 18weeks, was conducted in Taiwan and Yunnan in China, see in Table I.

TABLE I. PARTICIPANTS IN THE STUDY

University Location	Female	Male	Total
Taiwan	170	108	278
Yunnan	316	10	326
Total	486	118	604

C. Research Design

This study is descriptive and relational. Characteristics of students who experienced English learning and students who did not were included in this study along with a variety of other variables. ANOVA and Dunnett analyses were used to determine which factors were related to student performance. Survey consisted of 30 items in the questionnaire as instrument with 3 sessions:

motivation, self-efficacy in English learning, self-directed English learning responses from the learning group were analyzed to determine characteristics of and relationships among those variables. Each question in the survey allowed for five different levels of agreement by respondents about various aspects of self-directed learning, self-efficacy, and motivation, including: 1 – strongly agree, 2 - agree, 3 - neutral, 4-disagree, 5 - strongly disagree.

To determine if the sections of the original questionnaire were highly related, a correlation analysis was conducted for the 3 sections of the questionnaire. The results show a high correlation among all of the sections, see in Table II.

TABLE II. CORRELATIONS AMONG MOTIVATION, SELF-DIRECTED LEARNING, SELF-EFFICACY

Variables	Motivation	Self-directed Learning	Self-efficacy
Motivation	1.000	***	***
Self-directed Learning	.858*	1.000	.278
Self-efficacy	.803*	.814	1.000

Note: * = significant at 0.01 level (2-tailed)

IV. RESULTS AND DISCUSSION

Results obtained from the analysis of participants' gender and self-directed learning, self-efficacy, motivation are summarized in Table III, which includes mean scores, standard deviation; the analysis of participants' English achievement and self-directed learning, self-efficacy, motivation are summarized in Table IV, which includes group number, mean scores, *p value*; the analysis of the strength in participants' self-directed learning, self-efficacy, motivation are summarized in Table V, which includes mean scores, standard deviation, Dunnett statistics; the degree analysis of self-directed learning, self-efficacy, motivation in English achievement are summarized in Table VI.

TABLE III. RELATION BETWEEN GENDER AND SELF-DIRECTED LEARNING, SELF-EFFICACY, MOTIVATION

Variables	Gender	Mean	SD
Self-efficacy	Male	3.08	.82
	Female	3.30*	.77
	Total	3.19	.80
Self-directed Learning	Male	3.18	.73
	Female	3.54*	.67
	Total	3.36	.72
Motivation	Male	2.18	.81
	Female	2.52*	.74
	Total	2.35	.79

* p < .05

In Table III, it shows the relation between gender and Self-efficacy, Self-directed learning, Motivation.

Actually, the univariate ANOVA for the 3 variables were all significant, as in (1),(2), (3). The analysis of this outcome is primarily a listing of the female students in both Taiwan and Yunnan who responded to a rating of more strongly agree than male students in both Taiwan and Yunnan.

Self-efficacy scores:

$$F(2, 629) = 46.38, p < .01, \eta^2 = .13 \quad (1)$$

Self-directed learning scores:

$$F(2, 629) = 75.70, p < .01, \eta^2 = .19 \quad (2)$$

Motivation scores:

$$F(2, 629) = 47.89, p < .01, \eta^2 = .13 \quad (3)$$

Gender was identified as a significant factor affecting students' self-directed attitude, self-efficacy, and motivation in learning English. This is particularly important because of the relation of English performance to future career choices increases stress on female participants more than male ones in occupations, see in Table III.

TABLE IV. RELATION BETWEEN ENGLISH PERFORMANCE AND SELF-DIRECTED LEARNING, SELF-EFFICACY, MOTIVATION

English Performance	Self-directed Learning Self-efficacy Motivation	Student Number	Mean Score	p-value
Taiwan		278	77.1	.015*
Yunnan		326	80.8	.035*

* p < .05

In Table IV, the outcome not only shows all participants' average scores in Taiwan and Yunnan, 77.1 and 80.8, but also the p-values 0.015 and 0.035 respectively, see in Table IV. Those mean scores were significant for those participants' attitudes in English learning such as self-directing learning, self-efficacy, and motivation though the participants from different region could have similar curriculum and instruction in English learning.

Furthermore, Dunnett's test conducts the study for Self-directed learning, Self-efficacy, and motivation consisted of participants in Taiwan and Yunnan as find which group most strongly affected. In Table V, the outcome of participants' Self-directed learning, Self-efficacy, and Motivation session mean in Taiwan and Yunnan is 2.31 v.s.2.01, 3.13 v.s.2.96, 3.08 v.s.3.36 respectively with the p-values being less than 0.001. Although the differences in both cases were significant, they were quite small; they could have had several possible causes, and were probably not of practical importance, see in Table V.

TABLE V. DUNNETT TEST IN SELF-DIRECTED LEARNING, SELF-EFFICACY, MOTIVATION BETWEEN TAIWAN AND YUNNAN

	Self-directed Learning			Self-efficacy			Motivation		
Taiwan	Mean	SD	Dunnett's t	Mean	SD	Dunnett's t	Mean	SD	Dunnett's t
	2.31	.75	2.59*	3.13	.76	2.61*	3.08	.69	2.59*
Yunnan	Mean	SD	Dunnett's t	Mean	SD	Dunnett's t	Mean	SD	Dunnett's t
	2.01	.72	2.61*	2.96	.80	2.60*	3.36	.69	2.58*

* p < .01

TABLE VI. RELATION OF ACHIEVEMENT AND SELF-DIRECTED LEARNING, SELF-EFFICACY, MOTIVATION IN ENGLISH

English Score	Self-directed Learning			
	Mean	SD	N	Significant
Below 60	1.77	.64	135	*
Above 90	4.64	.72	114	*
Self-efficacy				
Below 60	2.44	.65	135	*
Above 90	3.94	.69	114	*
Motivation				
Below 60	3.20	.73	135	
Above 90	3.66	.61	114	

* p < .01

Table VI shows relation of Self-directed learning, Self-efficacy, and Motivation and comparisons groups in English achievement. The outcome is a measure of the strength of the relationship in experiments based on English score. This indicates significant in Self-directed learning and Self-efficacy between English score lower 60 and higher 90. Consequently, it is considered practically important or significant in this study. Self-directed learning and Self-efficacy affect the participating student's academic performance, see in Table VI. In fact, Self-directed learning is defined as requiring the ability to sense the relevant and important and to solve problems and awareness of source of information and ability to use them. Self-efficacy is defined as the extent or strength of one's belief in one's own ability to complete tasks and reach goals. In this study, Self-directed learning and Self-efficacy influence each participant's choice of English learning activities, effort expended persistence in English learning, and English learning task accomplishment, and, obviously, those participants' score above 90 has been unlauding English learning style to postulate at the outset of learning endeavor differ from those ones' score below 60 in both Taiwan and Yunnan. Yet, the measure of the strength of the relationship in motivation between those participants' score above 90 and those ones' score below 60 is not significant. This implies effective ways to enhance students' motivation in English learning.

V. CONCLUSION

The evidence in this study has provided empirical support for self-directed learning, self-efficacy and motivation of English learning preference. Also, it indicates that self-directed learning and self-efficacy were related to lower achievement participants. Instructionally speaking, this finding reveals that instructors in both sides of Taiwan Strait can improve learners' skills in English learning by enhancing their motivation and inspiring their positive training in the curriculum, such as building up group cohesiveness and having positive learning experiences. The more positive individuals' attitudes, the more they see themselves as being intrinsically motivated, which can further increase their perseverance in pursuit of goals, joint efficacy, desire for success and joy of learning [49].

ACKNOWLEDGMENT

This research is support by Yunnan Province Core Subject Grant.

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