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Perceived Usefulness and Attitudes Toward ESP Among College Students in Korea

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ABSTRACT

The current study aims to examine the students' affective aspects toward English language learning after having taken ESP courses. Based on the five factors that the researcher identified as the measures of learners' interest and motivation (in the form of perceived future utility and usefulness), and attitudes, a multi-faceted questionnaire was developed and carried out. The participants were 150 university students from Busan, Korea, divided into the EGP group (48 mechanical engineering students) and the ESP group (102 biomedical engineering students). The key findings were that first, the ESP group demonstrated more positive responses than the EGP group on four out of five factors; second, there were no differences among the students' academic year within the ESP group regarding the five factors. The results from the current study are in line with the previous study (Shin, 2014) that reported the increase in learners' interest, motivation, and positive attitudes toward English language learning among the ESP group. The study also supports Ardeo (2016) which claims that English learning motivation or instrumental ELM in the ESP group is positively and significantly correlated with affective factors, thus promoting English language learning when instruction taps into learners' identities (i.e. professional identities in their respective disciplines). Based on the results from the study, suggestions were made on ways in which the quality of ESP programs in Korea can be improved. Insights from the study will shed light on current challenges within the ESP field in EFL contexts where learners have to deal with obtaining both adequate English language proficiency and optimal level of expertise in their respective disciplines.

Keywords: EGP (English for General purposes), ESP (English for Specific Purposes), motivation, future utility, usefulness, attitudes

Introduction

The use of English for communication is vital at both universities and workplaces around the globe. Thus, teaching English for Specific Purposes (ESP hereafter) at the tertiary level seems to be recognized as a field of crucial importance to young Korean students these days, given the increasing competitiveness of our globalized society. In order to equip these learners with the necessary English communicative competence in their fields of study, English teaching professionals and researchers need to pay close attention to learners' specific needs considering the context of discourse and the features of the discourse community.

The purpose of the current study is to see whether affective factors such as interest, motivation and attitudes toward ESP can help low-proficiency university students in EFL contexts to do better in their ESP studies. Typically, university students in Korea do not have clear objectives in their minds regarding what to do when entering the university. However, soon they realize that they are faced with challenges of having to improve both

their English language proficiency and their communicative and functional competence in English in their respective disciplines in order to enter a competitive global job market. In fact, the reality is rather disappointing because not many universities in Korea are ready to meet their immediate needs and offer them optimal ESP programs. Thus, it is English teaching professionals' job to think about what would help these students most in achieving their goals.

Based on the reality of the Korean tertiary English teaching, the following research questions are formulated:

- 1) Do students who take only EGP courses differ from students who take ESP courses with regard to their English language learning?
- 2) Does motivation toward ESP courses change as ESP students advance in academic year?

Theoretical Background

Definition and Characteristics of ESP

From the early 1960's, English for Specific Purposes has grown to become one of the most prominent areas of EFL teaching today. Thus, we would expect the ESP community to have a clear idea about what ESP means. Strangely, this does not seem to be the case. Some scholars described ESP as simply being the teaching of English for any purpose that could be specified while others describe it as the teaching of English used in academic studies or the teaching of English for vocational or professional purposes.

According to Dudley-Evans and St John (1998, pp.4-5), ESP includes the absolute characteristics and variable characteristics as in the following:

Absolute characteristics are that ESP is designed to meet specific needs of the learner; ESP makes use of the underlying methodology and activities of the discipline it serves; ESP is centred on the language (grammar, lexis, register), skills, discourse and genres appropriate to these activities.

Variable characteristics are that ESP may be related to or designed for specific disciplines; ESP may use, in specific teaching situations, a different methodology from that of general English; ESP is likely to be designed for adult learners, either at a tertiary level institution or in a professional work situation. It could, however, be used for learners at secondary school level; finally, ESP is generally designed for intermediate or advanced students. Most ESP courses assume some basic knowledge of the language system, but it can be used with beginners.

The division of ESP into absolute and variable characteristics, in particular, is very helpful in resolving arguments about what is and is not ESP. From the definition, we can see that ESP can but is not necessarily concerned with a specific discipline, nor does it have to be aimed at a certain age group or ability range. Rather, ESP should be seen simply as an 'approach' to teaching, or what Dudley-Evans describes as an 'attitude of mind.' This is a similar conclusion to that made by Hutchinson and Waters (1987, p.19) who state, "ESP is an approach to language teaching in which all decisions as to content and method are based on the learner's reason for learning."

In the present study, ESP is defined as an approach to language teaching where learners' needs and clear purposes should be considered as priorities. Thus, ESP can differ from EGP where the goals and the relationship between English and their respective disciplines are not considered at all, but rather English is taught to students with the same topics and methods regardless of their respective fields of studies.

Motivation, Attitudes, and ESP

Educators have long recognized that students' beliefs about their academic capabilities play an essential role in their motivation to achieve. Motivation is one of the crucial factors that influence the success of language (Dörnyei, 2001a). The significance of motivation in enhancing foreign language learning is undeniable. We can easily assume that the students with higher level of motivation would succeed much better in learning the language. In addition, they would engage in more elaborated activities, put much effort in improving all the skills related to language learning, and apply them in their speciality.

Stevens (1988), among others, gives four implications for higher motivation in ESP courses: first, being focused on the learners' needs, they waste no time; second, they are relevant to learners; third, they are successful in imparting learning; lastly, they are more cost-effective than general English courses. Lorenzo (2005, p.1) reminds us that ESP 'concentrates more on language in context than on teaching grammar and language structures.' He also points out that as ESP courses are usually taught to adult students, frequently in a work-related setting, that motivation to learn is higher than in usual EFL general English courses. Thus, including general English alongside ESP would be beneficial due to increased interest and motivation, and acquisition of technical vocabulary required in a particular field, among others.

Another affective factor closely related to ESP is learners' attitudes. The relationship between motivation and learner attitudes has been considered a predominant concern in language learning research (Crookes & Schmidt, 1991; Dörnyei, 1994, 2001b; Masgoret & Gardner, 2003; Spolsky, 2000). Teaching ESP at the tertiary level is relatively new in Korea, so it is often teacher-centred and aims to develop English learning skills while equipping learners with relevant job skills for their chosen field under the premise that interest in the content of ESP courses would motivate learners.

Previous Studies on Affective Factors and ESP

There are only a few studies that examined the relationship between affective variables and ESP (Alhuqbani, 2014; Ardeo, 2016; Arslan & Akbarov, 2012; Brunton, 2009; Makrami, 2010; Shin, 2014; Zimmerman, 2000).

Brunton (2009) claims that although satisfaction with the ESP component was high in his study of hotel employees in Thailand, it was found that the majority of participants wanted to learn general English because they appreciated the broader range of topics studied in the general English component. It also supports the view that general English empowers students within the EOP domain and that courses should be designed with not just the stakeholders' narrower view of their employees' immediate perceived needs, but also the inclusion of needs analysis and student interviews in order to ensure that course design successfully meets a broad range of wants and needs.

Makrami (2010) examines the affective factors that intervene in learning English for Specific Purposes (ESP) or General Purposes (EGP) for Saudi university students, and how these affective factors might relate to achievements of the EFL learners. In his study, the findings were as follows: first, there were no within-subject significant changes in motivation, attitude, and anxiety at the time of the post-test for either group except for the ESP group's attitude, which ended up significantly lower than the attitude of the EGP group. The learners' achievement on English, measured by their scores on the final English test, correlated more with the attitude, motivation, and anxiety of the EGP group than the ESP group. The ESP group achieved significantly better on English final exams, compared to the EGP group. Across majors, there were significant differences on all three affective factors. The EGP group was more instrumentally and integratively motivated than the ESP group for instrumentality and integrative motive, compared to those of the

ESP group. Overall, the results seem somewhat intriguing as we would, under the usual circumstances, expect that the ESP group would demonstrate a better (instrumental) motivation, a more positive attitude toward English studies, and a lesser degree of anxiety.

Arslan and Akbarov (2012) investigate Turkish learners' perception and attitudes toward English for specific purposes at the tertiary level. They found that the students have a positive attitude toward English and wanted to have courses where they study English that is connected with their study field (i.e. ESP). These university students further believed that taking ESP courses would be helpful in their future careers.

In a similar vein, Shin (2014) reports the results of her study on the college of economics students in Korea and it shows that the students who took ESP courses had a higher motivation and interest in studying English related to their major courses as the test results were higher than before they had taken the ESP program.

Ardeo (2016) studies the relationship between learning motivation and strategies of ESP university students from Spain and he claims that English learning motivation or instrumental ELM in the ESP group is positively correlated with the use of learning strategies.

Thus, it is necessary to see whether the EGP group and ESP group in the current study show any difference in this regard. In addition, the researcher wants to see whether the time the ESP group has spent on their ESP studies would influence their motivation. It should be noted that in this study, motivation was not further divided into instrumental motivation and integrative motivation as was in Makrami (2010). Rather, motivation in the current study was considered in the form of 'perceived future utility' and 'perceived usefulness' from the learners' perspective, both suggesting instrumental motivation.

Method

Participants

The participants of this study were university students at a university located in Busan, South Korea. For the purpose of this study, the researcher recruited two groups of students, an ESP group and an EGP group. The EGP group consists of freshmen students majoring in mechanical engineering. They took Conversational English 1 and 2 as the university requirements, two hours per week each semester, taught by native English speaking teachers. On the other hand, the ESP group consists of freshmen, sophomore, and junior students majoring in biomedical engineering. In addition to taking Conversational English 1 and 2 as the university requirements, biomedical engineering majors take EAP courses during the first year, Medical English courses during the second year, and Engineering English courses during the third year, four hours per week each semester from native English speaking teachers. Since the students in the ESP group continuously take English courses for three years, the researcher took a survey from freshmen to junior (102 students). Among the 150 participants, 64.7% (97 students) was male and 35.3% (53 students) was female. The gender distribution in the mechanical engineering department was male dominant, whereas the biomedical engineering did not have a significant gender bias. Table 1 shows the demographics of the participants.

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Table 1
Participant demographics

Major	Year	Male/Female	Total
Mechanical Engineering	1	44/4	48
	1	22/16	38
Biomedical Engineering	2	15/18	33
	3	16/15	31
Total			150

Instruments

The questionnaire used in this study was designed to obtain information about the learners' interest, motivation, and attitudes. The researcher identified five subcategories to measure learners' interest, motivation, and attitudes in reference to previous studies: perceived future utility of the courses, perceived usefulness of the courses, attitudes toward the courses, attitudes toward English language learning, and attitudes toward the course materials. The questionnaire contained a total of 26 questions, each subcategory measured with 5 or 6 questions, and included 3 reverse-coded questions to make sure the participants read and answer all the questions. The participants were asked to read each question and choose a response among 'strongly disagree (1)', 'disagree (2)', 'neutral (3)', 'agree (4)', 'strongly agree (5)'. Table 2 shows the number of question in each subcategory.

Table 2
The Subcategories and the Number of Questions in the Questionnaire

Subcategories	Number of Question
Perceived future utility of the courses	6
Perceived usefulness of the courses	5
Attitudes towards the courses	5
Attitudes towards English language learning	5
Attitudes towards the course materials	5
Total	26

The researcher performed the Kaiser-Meyer-Olkin measure of sampling adequacy and the Bartlett's test for sphericity to check whether the data obtained from the participants is appropriate for factor analysis and satisfies the sphericity assumption. The results of the tests indicated in Table 3 shows that the sample is suitable for factor analysis with a KMO value higher than 0.8, and the p-value of the Bartlett's test is significantly small, making it suitable for factor analysis.

Table 3
The Results of KMO and Bartlett's Tests

Kaiser-Meyer-Olkin	Bartlett's test for sphericity		
	χ^2	df	p
.855	1964.546	325	.000

p < .05

The researcher then performed factor analysis to check the adequacy of questions to be grouped under the corresponding subcategories. Among the 26 questions, 4 questions that showed small correlations with other items were eliminated from the further analysis.

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This seemed to result from some students' incomplete response to the questionnaire. Principal component analysis (PCA) was used to identify the factors, and maximum possible variance was inferred using orthogonal rotations. Table 4 shows the results of PCA.

Table 4
The Results of PCA

	Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
1	This course will help me to improve my English skills.	.712				
2	This course will help me to have my job.	.716				
3	This course will help me to raise self-confidence.	.674				
4	This course will help me to improve my English ability which is necessary in my job.	.819				
5	This course will help that I choose the field as an area of expertise in the future.	.841				
6	This course will help me to study my major.	.718				
1	I think listening and speaking are useful in the course.		.757			
2	I think reading and writing are useful in the course.		.781			
3	I think vocabulary is useful in the course.		.771			
4	I think grammar is useful in the course.		.760			
5	I think themes and contents are useful in the course.		.567			
1	I preview for the class.				.764	
2	I concentrate on the class.				.855	
3	I review after the class.				.554	
4	I take notes that I learned in the class.				.551	
1	I enjoy learning English.					.625
2	English is one of the important parts of curriculum in the university.					.833
3	I hope to learn English as much as possible.					.769
1	I'm satisfied with the course material.			.586		
2	The content of the course			.695		

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Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
material is useful and helpful.					
3 The course material is useful and helpful to improve my English skills.			.815		
4 I like to study English using this course material.			.719		
Eigenvalue	10.059	3.071	1.871	1.609	1.283
Explained Variance (%)	38.69	11.81	7.19	6.19	4.93
Cumulative Variance (%)	38.69	50.50	57.70	63.89	68.82

The factors seemed adequately grouped since the factor loadings of factors 1 through 5 were larger than 0.5. The eigenvalues indicated that all 5 factors were valid since they are larger than 1 as in Table 4 above. The results of the PCA show that the 5 subcategories identified by the researcher can be regarded as 5 different factors.

Also, the researcher obtained Cronbach's alphas to check the internal consistency of the questions in each subcategory. The results are summarized in Table 5 below.

Table 5
Reliability: Cronbach's Alpha

Factor	Category	# of Item	N	Cronbach's Alpha
1	Perceived Future Utility of the Course	6	150	0.92
2	Perceived Usefulness of the Course	5	150	0.91
3	Attitudes Toward the Course	4	150	0.81
4	Attitudes Toward English Language Learning	3	150	0.75
5	Attitudes Toward the Course Materials	4	150	0.89

As the Table 5 above shows, the Cronbach's alpha for each factor was higher than 0.8 except of that for attitudes toward English language learning, which had only three test items. The internal consistency was observed to be high especially for perceived future utility of the course and perceived usefulness of the course, which had more test items. Overall, the Cronbach's alphas suggest that the questionnaire has high internal consistency.

Results and Discussion

Comparison between EGP and ESP Groups

To answer the first research question, the researcher compared the responses obtained from the EGP group and ESP group, which is shown in Table 6 below.

Table 6
The Result of *t*-test

	Factor	Group	Mean	SD	SE	<i>t</i>	<i>p</i>
1.	Perceived Future Utility of the Course	ESP	3.17	.76	.11	3.39	.001
		EGP	3.71	.68	.11		
2.	Perceived Usefulness of the Course	ESP	3.22	.75	.11	3.31	.001
		EGP	3.72	.64	.10		
3.	Attitudes Toward the Course	ESP	2.58	.81	.12	1.18	.242
		EGP	2.78	.74	.12		
4.	Attitudes Toward English Language Learning	ESP	3.29	.69	.10	2.28	.004
		EGP	3.77	.79	.13		
5.	Attitudes Toward the Course Material	ESP	2.86	.68	.10	2.22	.029
		EGP	3.18	.60	.10		

$p < .05$

According to the descriptive statistics, the biomedical engineering students in the ESP group showed a more positive response to all factors, compared to the EGP group. The ESP group demonstrated especially more positive responses to perceived future utility of the course (ESP: 3.71 > EGP: 3.17), perceived usefulness of the course (ESP: 3.72 > EGP: 3.22), and attitudes toward English language learning (ESP: 3.77 > EGP: 3.29). The *t*-test was performed to test the statistical significance of the differences. The results showed that the differences in factors 1, 2, and 4 were statistically significant between the ESP and EGP groups at the alpha level of .005, and factor 5 at the alpha level of .05. In short, the differences in learner interest, motivation, and attitudes were statistically significant between ESP and EGP groups observed from 4 out of 5 factors. This is in line with Shin (2014), in which the researcher found higher motivation and interest in studying English related to their major courses. Taken together, the current study and Shin (2014) both support Dörnyei's (2001a) argument that motivation to learn language can increase when language learning and use tap into learners' identity (i.e. professional identity related to their major, in this case).

The factor that was not found to be statistically different from the two groups was factor 3, students' attitudes toward the course. The means of factor 3 in both groups were lowest among the 5 factors, and indicated negative attitudes (EGP: 2.28, ESP: 2.78, both smaller than 3 (neutral)). This seems to be due to the different nature of questions included in the category. The questions included in the factor 3 asked behavioural aspects (e.g. "I preview for the class.", "I review after the class.") rather than affective aspects (e.g. "I think ~", "I feel ~"). The researcher thinks that extraneous factors might have been involved when students were answering the behavioural questions such as studying strategies. Since there are individual differences in studying strategies, we cannot say that those who do preview and review, for example, necessarily have higher motivation for language learning. Therefore, the behavioural questions might not have been adequate questions to measure students' interest and motivation.

Comparison by Academic Year within the ESP Group

To answer the second research question, we further divided the ESP group into the freshmen, sophomore, and junior groups, and compared the responses. According to the descriptive statistics, the means of the groups for each factor were higher than 3 (neutral), showing the overall positive response at all year levels, except for factor 3 (attitudes toward the course). For factors 2 and 5, the most positive response was observed at Year 3, for factors 3 and 4, at Year 2, and for factor 1, at Year 1. Table 7 below lists the results of the factor analysis.

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Table 7
Descriptive Statistics by ESP Year

Factor	Year	N	Mean	SD	SE
Perceived Future Utility of the Course	1	38	3.7061	.67610	.10968
	2	33	3.5859	.67844	.11810
	3	35	3.6429	.71417	.12072
Perceived Usefulness of the Course	1	38	3.7263	.64166	.10409
	2	33	3.7030	.69843	.12158
	3	35	3.8857	.59068	.09984
Attitudes Toward the Course	1	38	2.5614	.84222	.13663
	2	33	2.9495	.77335	.13462
	3	35	2.6952	.73374	.12402
Attitudes Toward English Language Learning	1	38	3.7719	.78692	.12766
	2	33	3.9192	.75934	.13218
	3	35	3.8857	.52358	.08850
Attitudes Toward the Course Materials	1	38	3.1776	.60098	.09749
	2	33	3.2045	.67446	.11741
	3	35	3.3571	.68139	.11518

One-way ANOVA was performed to see whether there is any statistically significant difference among the three groups. As shown in Table 8 below, the p-values were larger than the alpha ($\alpha = .05$). Thus, we did not have sufficient evidence to reject the null hypothesis that the three groups are the same. This suggests that the learners' interest, motivation, and attitudes in the ESP group do not change according to the academic year, but rather remain constant. Table 8 shows the result of ANOVA.

Table 8
The Result of ANOVA

Factor		SS	df	MS	F	p
Perceived Future Utility of the Course	Between Groups	.257	2	.128	.270	.764
	Within Group	48.983	103	.476		
	Total	49.240	105			
Perceived Usefulness of the Course	Between Groups	.689	2	.344	.831	.439
	Within Group	42.706	103	.415		
	Total	43.395	105			
Attitudes Toward the Course	Between Groups	2.711	2	1.355	2.192	.117
	Within Group	63.688	103	.618		
	Total	66.399	105			
Attitudes Toward English Language Learning	Between Groups	.431	2	.216	.438	.646
	Within Group	50.684	103	.492		
	Total	51.115	105			
Attitudes Toward the	Between Groups	.667	2	.333	.785	.459

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Course Materials	Within Group	43.706	103	.424
	Total	44.373	105	

$p < .05$

We need to be cautious not to interpret the results as evidence suggesting that there is no longitudinal increase in learners' interest, motivation, and attitudes. The current study is a cross-sectional one showing how three groups of students who have taken ESP courses for different durations of time responded differently to each factor. With a more elaborate and extended questionnaire, we may be able to see the effect of the year level more clearly.

In sum, the results of our analysis suggest that the ESP group demonstrated more positive responses in terms of their interest, motivation, and attitudes toward English language learning than the EGP group. There was no statistically significant effect of academic year within the ESP group, but students tended to show more positive responses as they advanced in academic year.

Conclusions and Implications

Conclusions

Since the introduction of English as a regular subject in Grade 3 in Korea, the overall proficiency in English has improved, which is a positive sign, but that does not automatically mean that all the high school graduates satisfy the achievement standards of the English subject stipulated by the Ministry of Korean Education. Thus, beginning university students in Korea do not have clear objectives as to how to prepare for their future.

The findings of the current study show that first, the differences in learner interest, motivation, and attitudes were statistically significant between ESP and EGP groups observed from 4 out of 5 factors. That is, the ESP group demonstrated more positive responses in terms of their interest, motivation, and attitudes toward English language learning than the EGP group. Second, although there was no statistically significant effect of the time spent on their ESP studies within the ESP group, the more time students spent on their ESP studies, the more positive response they yielded. The ESP group was fully aware of the needs for ESP courses for their future career choices and the importance of specialized English for their chosen field.

Still, it is fair to say that the results obtained from the current study seem to show that college students are more motivated to study ESP courses for usefulness and future utility once they are exposed to the opportunity. Recent studies on corpus-based approach claim that students who were given specialized vocabulary instruction "gained significant progress in both content and language knowledge" (Hou, 2014, p. 26). These students reported that they could improve not only the content knowledge but also their overall language skills.

Implications

The field of ESP will continue to grow due to the existing demand among students in Korea as finding their future career in their chosen field upon graduation is imminent. The results obtained from the study will be of some use in attempting to develop diversified curricula and materials where individual schools' or learners' needs and/or lack of them must be met in the future.

Perhaps the needs of students might differ, depending on their major areas of expertise, their future goals, their English proficiency level or other affective variables. The first step is to identify what the needs of students in each field of ESP are and how to motivate them to go on with their English studies. We as English teaching professionals can help them achieve what they truly want from college in this way.

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