



Grammar and Academic Writing Acts in English for Academic Purposes (EAP) at a Turkish University

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Abstract

The study aimed to examine students' competencies related to English for academic purposes (EAP). The research questions included the relationships between students' interest in academic writing, their level of English proficiency, as well as subjective and objective measures of their EAP competencies. 152 Turkish students participated in this study in this Mediterranean city university, out of which 80 were females and 72 were males. All of them were asked to take a short test which measures their EAP knowledge and to estimate their level of EAP competencies and interest in academic writing. Correlational analysis, chi-square test and independent samples t-test were used to answer the research questions. The findings revealed positive correlations between the objective measure of EAP knowledge, self-reports of EAP competencies and interest in academic writing. EAP test showed to be difficult for students. Some statistically significant gender differences were found only in the English proficiency levels where females outperformed males.

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Keywords: English as a foreign language; English for academic purposes; academic writing; competencies

1. Introduction

The main aim of the present study was the investigation of the relationship among students' subjective estimates of their EAP competencies, their scores on an objective measure of EAP, the level of English proficiency and their interest in academic writing. English could be used for various purposes. One of them includes engagement in various academic activities such as in academic writing. Accordingly, English for specific purposes (ESP) in an academic environment is called English for academic purposes (EAP), as was stated, for example, by Dudley-Evans and St John (2012). Jordan (1997) made a distinction between English for general and specific academic purposes (EGAP

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and ESAP, respectively). The first concept includes using English for various academic fields whereas the second concept is, in fact, EAP applied to a specific academic field.

Nowadays, EAP is closely linked to academic writing, especially when authors (researchers, students...) want to share their work with a broad academic community. Academic writing is a complex socio-cognitive process (Benesch, 2001; Green, 2013). It is associated with both formal and scientific (unbiased) usage of language. However, Walker (2012) found that, in general, academic language development is not planned systematically. Furthermore, Sajid and Siddiqui (2015) found significant limitations in EFL students' academic writing skills in Pakistan. These issues included: poor expression, problems with punctuation, the misuse of prepositions, problems with verb tenses, etc. Al Fadda (2012) analyzed students' difficulties in using English for academic purposes in Saudi Arabia. Most of them were related to the proper use of English grammar and distinguishing between written and spoken style of using English. Novices can also have problems with the usage of language registers in speech and writing. Academic registers are closely linked to grammatical parties such as the correct usage of conjunctions (Schleppegrell, 1997). Moreover, Simpson (2000) discovered (in his analysis of paragraphs in scientific papers) that articles of academic writers had some features and writing pattern typical for immature writers (children and adolescents). Additionally, Amano, Gonzales-Varo and Sutherland (2016) highlighted the fact that for some non-native English speakers this language is still a major barrier which could negatively impact the development of global science. Therefore, academic writing and EAP are very delicate sets of skills that should be adequately learned and acquired by both junior and senior academicians.

1.1. Relevant scholarship

According to Van de Poel and Gasiorek (2012), students should acquire standards, norms, procedures and linguistic forms of academic discourse in order to share and exchange their knowledge and other relevant information with the members of their academic community. In other words, junior researchers have to learn the organizational, rhetorical and linguistic features of scholarly writing within their own discipline (Buckingham, 2008). For instance, students should learn some common lexical bundles used in EAP and academic writing. The most frequent lexical bundles or collocations are: "on the basis of", "on the other hand", "as a result of", "the end of the", and "at the end of" (Byrd & Coxhead, 2010).

In an Australian study, a program designed to enhance the academic writing skills of medical professionals significantly improved these skills (Salamonson et al., 2010). Hence, workshops, pieces of training and other programs of education in the field of EAP could be beneficial for their attendees. According to Akowuah, Patniak, Kyei and Hale (2018), the process of teaching English should incorporate student-centred approaches along with relational (collaborative) learning strategies. The same recommendation, in light of overcoming poor English performance among students, was highlighted by Ali

(2019). Of course, EFL (English as a foreign language) students should be asked about their writing needs and perceptions of EAP writing instructions within their foreign language courses (Leki & Carson, 1994).

1.2. Research Questions

This study attempted to answer the following research questions:

1. Do students' subjective estimates of EAP competencies correlate with their scores in an EAP test as an objective measure of this variable?
2. Are subjective and objective measures of EAP associated with students' interests and their level of English proficiency?
3. What are students' performances on an objective measure of using English for academic purposes (EAP test)?
4. Are there any gender differences in students' subjective estimates, objective scores in an EAP test, interests and level of English use.

Method

2.1. Research Design

The study qualitatively explored Turkish EFL students' competencies related to English for academic purposes of perspectives on paradigms of EAP aiming to penetrate into the depth alongside the length of the anticipated data and to submit proper interpretations besides discussion of the data. The research questions cover the relationships between students' interests in academic writing, their level of English proficiency, as well as subjective and objective measures of their EAP competencies. For this purpose, correlational analysis, chi-square test and independent samples t-test were used to answer the research questions.

2.2. Participant characteristics

The participants of the study consisted of 152 students at a university in Turkey. There were more females ($N = 80$ or 52.6% of the sample) than males ($N = 72$ or 47.4% of our sample). Their mean age was $M = 19.09$ ($SD = 1.07$). The youngest participant was 18 and the eldest one was 22 years old.

2.3. Collection and Analysis of Data

A questionnaire which included an aptitude test was administered to students in order to obtain data for the second (empirical) part of this article. First, students were asked to provide their age, gender, level of English proficiency (Elementary – A1, Pre-intermediate – A2, Intermediate – B1, Upper intermediate – B2, Advanced – C1, and Proficient – C2). Second, students estimated their competencies with regard to English

for academic purposes on a five-point Likert scale (1 – "I consider myself totally incompetent in this area" to 5 – "I consider myself very competent in this area"). This was a subjective (self-report) measure of their knowledge and skills related to EAP. Thirdly, they were asked to assess the level of their interests in academic writing on a five-point Likert scale, where the answering options ranged from 1 – "not at all" to 5 – "very interested").

Finally, students took a short aptitude test which covered several phrases, abbreviations and stylistic features of academic writing in English. This test included 10 questions, each with four answering options. Only one answer to each question was correct. The theoretical range of the total number of points (i.e. total scores) was zero to 10 because each correct answer was worth one point.

2.4. Research and Data Analysis Procedure

Participants had 15 minutes to complete the aptitude test regarding EAP along with the first five questions. The researchers told them that their scores would not affect their English or other grades. Additionally, the researchers clearly underlined that all their answers would be used for scientific purposes only.

After data had been gathered, they were recoded (e.g. English level proficiency was recoded into a six-point scale, from Elementary – 1 to Proficient – 6; for correct answers on the EAP test students were awarded one point, and other answers were entered as zeroes). Next, the collected data were entered into SPSS for Windows (23.0), where appropriate data analyses were conducted (the calculation of descriptive statistical values, correlation analysis, chi-square test and independent samples t-test)

2. Results

Results of the study are presented via tables and their explanations as in the following.

Table 1: Descriptive statistical values of the main variables

Variables	N	Min	Max	M	SD
Self-reported competencies with regard to EAP	15	1	5	3.42	0.84
Interest in academic writing	15	1	5	3.14	1.11
Levels of English proficiency	15	1	6	3.18	0.96
Total scores on EAP test	15	0	8	3.51	1.76

Looking at the figures in Table 1, several patterns in this portion of results can be spotted. Students estimated their EAP competencies as slightly greater than the theoretical average of the five-point scale used in this case ($M = 3.42$). Furthermore, their interest in academic writing was moderate ($M = 3.14$) and they reported moderate levels of English proficiency ($M = 3.18$). In other words, they estimated (on average) their

English knowledge and skills as belonging to Intermediate (B1) and Upper-intermediate (B2) level.

Finally, their total scores on the short EAP test were low (the mean value of students' scores was $M = 3.51$, whereas the theoretical mean of this test was five). Hence, the English for academic purposes test was difficult for them based on their achievements on this objective measure of EAP competences (knowledge). Additionally, the range of their total scores was narrower compared to the theoretical range (zero to eight vs. zero to 10).

As shown in Table 2, self-reported competencies with regard to EAP were in a small, positive and statistically significant correlation with participants' total scores on the EAP test ($r = .226$, $p < .01$). Participants' interests in academic writing were in a similar correlation with their scores on the EAP test ($r = .228$, $p < .01$). However, students' level of English proficiency was in a small and non-significant relationship with their performance on the mentioned test.

Table 2: The relationships between the four main variables:

	Self-reported competencies with regard to EAP	Interest in academic writing	Levels of English proficiency	Total scores on EAP test
Self-reported competencies with regard to EAP	1	.318**	.490**	.226*
Interest in academic writing		1	.288**	.228*
Levels of English Proficiency			1	.033
Total scores on EAP test				1

* $p < .01$, ** $p < .001$

On the other hand, students' level of English proficiency was in a moderate, positive and statistically significant correlation with self-reported EAP competencies ($r = .490$, $p < .001$) and in a small, positive and statistically significant correlation with their interest in academic writing ($r = .288$, $p < .001$). Lastly, the relationship between the subjective measure of EAP competencies and students' interest in academic writing was small, positive and statistically significant ($r = .318$, $p < .001$).

By looking at Table 3, it can be noticed that all the questions of the EAP test were (mostly) answered incorrectly. Eight out of 10 questions revealed statistically significant differences between the number of correct and incorrect answers, in favor of the later ones (the value of χ^2 -statistic ranged from 6.737 for the 10th question to $\chi^2 = 97.921$ for the third question). Only in two cases (questions no. 7 and 10), the difference between the number of correct and incorrect answers was not statistically significant.

Table 3: The number (and percentage) of correct and incorrect answers to each question of the EAP test

Question	Correct		Incorrect f (%)	χ^2
	f	(%)		
What is the correct phrase for the <i>literature review</i> of an academic paper/essay/ report...? The correct answer: "Previous studies have reported..."	38 (25.0)		114 (75.0)	38.000**
What is the correct form of the following phrase? The correct answer: "Data were analyzed..."	33 (21.8)		119 (78.2)	48.658**
Which phrase is the correct one? The correct answer: "This article intends to determine the extent to which..."	15 (9.9)		137 (90.1)	97.921**
If you want to conclude something in an academic paper, you can use the following phrase: The correct answer: "All things considered, ..."	99 (65.1)		53 (34.9)	13.921**
<i>I. e.</i> is the abbreviation for: The correct answer: "Id est"	31 (20.4)		121 (79.6)	53.289**
"Brown <i>et al.</i> " is the same as: The correct answer: "Brown with his colleagues"	48 31.6		104 (68.4)	20.632**
Which phrase is correct? The correct answer: "As explained earlier,..."	87 (57.2)		65 (42.8)	3.184
The phrase "it is comparable to..." has the same meaning as: The correct answer: "It is similar to..."	52 (34.2)		100 (65.8)	15.158**
Discrete means: The correct answer: "Separate"	60 (39.5)		92 (60.5)	6.737*
Which sentence is the correct one? Social factors affect our family life.	70 (46.1)		82 (53.9)	0.947

* $p < .01$; ** $p < .001$

The poorest performance was observed in the following cases: the meaning of the abbreviations *i. e.* (*id est* = that is) and *et al.* (*et alteri* = *et alii* = and colleagues), the grammatical category of number in the case of the noun *data* (originally, the plural of the word *datum*: "Data were analyzed...", and not "Data was analyzed..." or "Datas were analyzed..."), the phrase: "Previous studies have reported..."(the rest of the answering options included: "Previous researchs have reported...", "Previous study have reported...", and "Previous research have reported..."), and the idiom "the extent to which" (the other three answering options were: "...the extend of which...", "...the extent of which...", and "the extend to which").

Table 4: The results of independent samples t-test with regard to gender differences

Variable	Gender	N	M	SD	Mdiff	t
Self-reported competencies with regard to EAP	Male	72	3.36	0.97	-0.12	-0.832
	Female	80	3.48	0.71		
Interest in academic Writing	Male	72	3.11	1.09	-0.07	-0.354
	Female	80	3.18	1.12		
Levels of English proficiency	Male	72	2.97	1.06	-0.39	-2.557*
	Female	80	3.36	0.82		
Total scores on EAP test	Male	72	3.54	1.93	0.06	0.233
	Female	80	3.48	1.60		

* $p < .05$

When the statistical significance of gender differences was analyzed, independent samples t-test yielded only one significant result. This result revealed that females outpaced males with regard to their English proficiency levels ($M = 3.36$ vs. $M = 2.97$, $t = -2.557$, $p < .05$). Their average results on subjective and objective measures of EAP

competencies/ knowledge were similar as were the estimates of their interest in academic writing (thus, for all of them applied $p > .05$).

4. Discussion

This study dealt with students' skills and knowledge associated with one of the segments of English for specific purposes. That segment was English for academic purposes which is an important application of this language to the tertiary level of education.

Generally speaking, students from our sample estimated their EAP skills and knowledge as above the average. The level of their interest in academic writing was estimated as somewhat lower compared to their EAP competencies (but it was still of a moderate degree). On the other hand, the objective measure used to assess their EAP competencies revealed that students had poor skills regarding English for academic purposes. To be more specific, they were not skilled in academic writing in English. This finding was comparable to those obtained by Al Fadda (2012) and Simpson (2000). There are lots of factors that impact such performance. For example, Alami (2016) divided them into the following three categories: student-, teacher- and family-related factors. For instance, issues with English teaching methods, learning environment and curricula were identified in a study conducted in Bangladesh (Anwar, 2017). Banerjee and Lamb (2016) warned that lack of adequate support, negative learning environment as well as lower socioeconomic status could also be associated with not only level of academic writing skills but also with school/academic performance in general.

Self-reported EAP competencies were in a weak and positive relationship with students' EAP test scores. This was the answer to the first research question. The discrepancy (i.e. the small correlation that was obtained) of the results on subjective and objective measures was expected because people usually tend to present themselves in a more favorable light on self-report measures (Paulhus & Vezire, 2007). The social desirability bias accompanied by impression management is indeed a very important factor that could influence research or survey findings (Larson, 2019).

Next, the greater interest in academic writing is, the greater (subjective) estimates of students' EAP competencies and their scores on the EAP test are. Additionally, the greater level of English skills and knowledge are, the highest subjective (self-report) estimates and test scores of EAP competencies are. In contrast, students' level of English proficiency was not in a statistically significant relationship with their scores in the EAP test. These portion of findings corresponded to the second research question.

The answer to the next research question was negative due to participants' poor performance in the English for academic purposes test. A similar finding was obtained by Sajid and Siddiqui (2015).

Finally, there were not any statistically significant gender differences either in subjective and objective measures of students' EAP competencies or in their interest in academic writing. On the other hand, female students reported a higher level of English proficiency which was a statistically significant result. This was the answer to the last

research question. Our finding was concordant with that obtained by Glowka (2014) within an EFL environment in Poland. Higher English proficiency among female students could be explained by their attitudes towards learning this language (usually, they have more positive attitudes compared to male students) as well as their higher levels of self-confidence while learning it (Lasekan, 2018).

The present study had some shortcomings that can be expressed in the form of the following questions: Was the test with only ten questions good enough to examine EFL students' EAP competencies?, Was participants' interest in academic writing influenced by their age (i.e. maybe older participants would report greater levels of interest)?, and Were students honest while providing the estimates of their EAP competencies and interest in academic writing? Some practical implications of this study were listed and explained in the next section of the article.

5. Conclusions

On the basis of participants' scores in the EAP test applied in this study, it is recommended that the introduction of various EAP programs into the tertiary level of education should be done. Academic writing is an important course that should be taken seriously by both students and teachers. While teaching non-native English speakers who are college/university students, the academic staff has to incorporate English for academic purposes in that kind of courses.

In the end, students should be able to use academic language quite spontaneously and to easily understand scientific papers they come across while searching for references/literature for their essays, reports and other academic writings. Other researchers could examine the relationship of students' subjective estimates of their EAP skills on one side and grammar mistakes and improper use of vocabulary in academic writing on the other side. They can also investigate differences in EAP skills (assessed with the help of objective measures) among various fields of science and education (e.g. between psychology students and linguistics students, mathematicians and medical professionals, etc.).

All in all, students' academic writing skills along with their EAP skills can and should be developed with the assistance of their teachers and by their own effort while interacting with academic contents produced by other researchers in their academic field (and other scientific areas akin to their field of study and professional interest).

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