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# ENGLISH LANGUAGE AND ECONOMY IN THE DIGITAL WORLD

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Original scientific paper

UDK: 316.644-057.875:811.111

JEL classification: A12, A20

DOI: 10.17818/DIEM/2021/1.6

Accepted for publishing: July 8, 2021

## Abstract

*In the modern, globalised world English language has an important role as a means of communication. The use of language in business environment facilitates communication and economic efficiency. Global language survey, carried out in 2013 in 60 countries worldwide, links English language proficiency to economic and social development (ICEF Monitor, 2014). Results of the survey indicate that the countries with higher levels of English language proficiency have stronger economies and higher per capita income levels, and thus a better quality of life. Nevertheless, due to globalisation process and the Internet, the role of English has changed in so far as English proficiency is not only an economic advantage but also a basic skill needed for the entire workforce (ICEF Monitor, 2014). The aim of this paper is to give an insight into attitudes of students of economics and business economics on the significance of English in the business environment. The paper analyses differences in students' attitudes in relation to the gender and the year of study. For that purpose, the research was carried out among the students enrolled in undergraduate study programmes at the Department of Economics and Business Economics. As the research instrument, the Questionnaire "English in Business Environment" has been applied. The research results indicate that the participants consider English language to be an important factor in economy and their future business environment. There were no statistically significant differences relating to gender while some statistically significant differences for the year of study have been found. This paper suggests further research based on a context-specific approach, to be carried out in other educational contexts, encompassing different study programmes and levels of study.*

**Keywords:** *language proficiency, economy, business environment*

## 1. INTRODUCTION

There are few empirical studies on the link between English language and economy in the modern world. Nevertheless, there is no denial that communication is of utmost importance in all spheres of human activities worldwide. Less interaction, involving gestures or body language, has brought forward the necessity for more language precision, taking into consideration the process of globalisation and the current circumstances involving the pandemic that have fostered digitalisation in everyday professional

and personal activities all over the world. This means that language proficiency has become even more important in the modern digital world. Since language is always a part of a broader context and has a commercial potential, the use of language in business environment facilitates not only communication but economic efficiency as well. Globalisation is furthermore manifested by an increase in the share of international trade in world production, as well as a decline in the relative cost of travel (Grin, 2003, p. 2). English proficiency and economy are interrelated in multiple ways. In modern business environment in order to obtain as many potential business partners as possible, it is essential to learn English to facilitate communication and business operations. In addition, language skills may provide better income as a reward for those skills (Grin, 2003, p. 18). The digital economy is a networked economy (Colin 2016, pp.4). As economy becomes more networked it gets more and more digital. There is no alternative for those in the trade but to learn English, negotiate with the Silicon Valley companies, and ultimately convert their whole communication into some version of the English language (Colin 2016, pp.5). Global language survey, carried out in 2013 in 60 countries worldwide, links English language proficiency to economic and social development (ICEF Monitor, 2014). Results of the survey indicate that the countries with higher levels of English language proficiency have stronger economies and higher per capita income levels, and thus a better quality of life. Nevertheless, due to globalisation process and the Internet, the role of English has changed in so far as English proficiency is not only an economic advantage but also a basic skill needed for the entire workforce. The gains from knowing English is more important in some businesses/occupations than in others. It is interesting to note that improvement in English proficiency is particularly prominent in some Asian countries while more than half of the Latin American countries have the lowest proficiency. In Europe, smaller European nations are investing more effort to increase their English proficiency than some larger countries, e.g. France (ICEF Monitor, 2014). As far as Croatia is concerned, no data on the link between the level of English proficiency and social/economic development has been provided so far.

## 2. METHODOLOGY

The aim of the research is to obtain an insight into attitudes of students of economics and business economics on the significance of English proficiency in the business environment. Differences in students' attitudes in relation to the gender and the year of study are analysed.

### 2.1. Participants

The research was carried out among the students enrolled in undergraduate study programmes of Economics and Business Economics at the Department of Economics and Business Economics (N=45): 7 first year students, 23 second year students and 15 third year students. The average age of the students was 21. Most of the students were female (F=37, M=8).

### 2.2. Research instrument

The research instrument was a questionnaire that consisted of two parts. In the first part demographic data was collected: age, gender, the programme of study and the year of study. The second part was the questionnaire *English in Business Environment* containing 15 statements and exploring attitudes of students of economics and business economics on the significance of English in the business environment. The students were to specify their agreement with each of the statement on a five-point Likert scale in a range from strongly disagree (1) to strongly agree (5). The instrument, compiled by the authors, showed strong internal consistency and high reliability, with Cronbach's alpha coefficient  $\alpha = 0,888$ .

### 2.3. Data collection and analysis

The research was carried out at the University of Dubrovnik in the winter semester of the academic year 2020/2021. The questionnaire was administered online, due to the Covid-19 pandemic and

the fact that students were attending classes online. The participants were informed about the general purpose of the research and they were asked for sincere and accurate replies. All participants were granted anonymity.

Data analysis was performed using the statistical package *SPSS 20*, or more precisely, using t-test for independent samples (for finding differences according to the gender) and ANOVA (for finding differences according to the year of study).

### 3. RESULTS AND DISCUSSION

Descriptive statistics are shown in Table 1 below. The skewness of the distribution shows that the variables are distributed from moderate to right asymmetric. The kurtosis is from moderate to pronounced leptokurtic distributions, which indicates less dispersion.

Table 1 Descriptive statistics

	N Valid	Mean	Mode	$\sigma$	Skewness	Kurtosis	Range	Min	Max
Var.1	45	4,47	5	,815	-2,132	6,316	4	1	5
Var.2	45	4,51	5	,626	-,916	-,126	2	3	5
Var.3	45	3,93	4	,837	-,846	1,921	4	1	5
Var.4	45	4,20	5	,968	-1,210	1,357	4	1	5
Var.5	45	3,89	4	,910	-,719	,891	4	1	5
Var.6	45	4,84	5	,367	-1,967	1,954	1	4	5
Var.7	45	3,96	4	,796	-,766	,718	3	2	5
Var.8	45	4,51	5	,506	-,046	-2,093	1	4	5
Var.9	45	4,33	4	,707	-,987	1,299	3	2	5
Var.10	45	3,98	4	,812	-,226	-,786	3	2	5
Var.11	45	4,11	4	,775	-,504	-,229	3	2	5
Var.12	45	4,07	4	,986	-1,179	1,259	4	1	5
Var.13	45	4,33	5	,739	-,984	,870	3	2	5
Var.14	45	4,38	5	,747	-1,098	,973	3	2	5
Var.15	45	4,02	5	,917	-,416	-,926	3	2	5

*M* = Mean;  $\sigma$  = Standard Deviation

Source: authors

As shown in Table 1, the variable with the highest score is variable No. 6 – *M*= 4,84 (*English is the most important language in contemporary business communication worldwide*). The reasons for this result may lie in the fact that major part of business communication (and not only business) at present is being carried out online, via the Internet and English is the prevailing language online. English language proficiency is an important communication factor (Tainer, 2008, pp.109)

On the other side, the students showed the lowest degree of agreement with the statement No. 5 – *M*=3,89 (*English is the language of business management in Croatia*). This result is rather interesting, but it should be taken into consideration that the participants are students with limited experience in business management. Since there are no studies in Croatia confirming or refuting such a statement, this is an interesting point of view, to be further explored.

#### 3.1. Differences in students' attitudes in relation to gender

Since one of the aims of the research was to analyse differences in students' attitudes in relation to the gender, t-test for independent samples was used to determine if there are any differences in the attitudes in relation to the gender. The Table 2 shows the results of the t-test.

Table 2 T-test – differences in students' attitudes in relation to gender

Statement/Gender	N	t-test (df=43)	p	M	$\sigma$
1 Male	8			4,25	1,488
Female	37	-,49	0,63	4,51	,607
2 Male	8			4,50	,756
Female	37	-,05	0,95	4,51	,607
3 Male	8			4,00	,926
Female	37	,24	0,80	3,92	,829
4 Male	8			3,75	1,035
Female	37	-1,47	0,14	4,30	,939
5 Male	8			3,50	1,414
Female	37	-,91	0,38	3,97	,763
6 Male	8			4,88	,354
Female	37	,25	0,79	4,84	,374
7 Male	8			4,13	,641
Female	37	,65	0,51	3,92	,829
8 Male	8			4,50	,535
Female	37	-,06	0,94	4,51	,507
9 Male	8			4,63	,518
Female	37	1,29	0,20	4,27	,732
10 Male	8			4,25	,886
Female	37	1,04	0,30	3,92	,795
11 Male	8			4,00	,756
Female	37	-,44	0,66	4,14	,787
12 Male	8			4,25	1,165
Female	37	,57	0,56	4,03	,957
13 Male	8			4,63	,744
Female	37	1,23	0,22	4,27	,732
14 Male	8			4,75	,463
Female	37	1,58	0,12	4,30	,777
15 Male	8			4,13	,835
Female	37	,34	0,73	4,00	,943

*M = Mean;  $\sigma$  = Standard Deviation*

Source: authors

As indicated in Table 2 no statistically significant differences in students' attitudes in relation to gender have been found. The reason for this result may lie in the fact that the number of participants is rather small and in particular the number of male students. The future research should involve more students and try to engage more male students in the research. Nevertheless, there are no similar studies to enable the authors to make a comparison with reference to gender differences in students' attitudes on English language proficiency and economy. While there are a lot of studies on gender differences in learning English and English proficiency, there are no studies aiming to provide information on the link between English proficiency and economy. For example, Davies et al. (2005, pp. 30) mention the performance of males and females in an educational context in Australia, the USA and the UK. At the same time, they compare these results with the performance of genders in economics at school, i.e. they focus on gender differences by school subject.

### 3.2. Differences in students' attitudes in relation to the year of study

To obtain results on differences in students' attitudes in relation to the year of study ANOVA test was applied. Results of the test are shown in Table 3 and Table 4 (Multiple comparisons) below.

Table 3 ANOVA – students' attitudes in relation to the year of study

		ANOVA					
		Sum of Squares	df	Mean Square	F	Sig.	
Var.1	Between Groups	,560	2	,280	,410	,666	
	Within Groups	28,640	42	,682			
	Total	29,200	44				
Var.2	Between Groups	,477	2	,238	,597	,555	
	Within Groups	16,768	42	,399			
	Total	17,244	44				
Var.3	Between Groups	,438	2	,219	,303	,740	
	Within Groups	30,362	42	,723			
	Total	30,800	44				
Var.4	Between Groups	7,792	2	3,896	4,898	,012	
	Within Groups	33,408	42	,795			
	Total	41,200	44				
Var.5	Between Groups	1,987	2	,994	1,211	,308	
	Within Groups	34,457	42	,820			
	Total	36,444	44				
Var.6	Between Groups	,045	2	,023	,162	,851	
	Within Groups	5,866	42	,140			
	Total	5,911	44				
Var.7	Between Groups	1,959	2	,980	1,585	,217	
	Within Groups	25,952	42	,618			
	Total	27,911	44				
Var.8	Between Groups	,477	2	,238	,930	,403	
	Within Groups	10,768	42	,256			
	Total	11,244	44				
Var.9	Between Groups	,135	2	,067	,130	,879	
	Within Groups	21,865	42	,521			
	Total	22,000	44				
Var10	Between Groups	,044	2	,022	,032	,968	
	Within Groups	28,933	42	,689			
	Total	28,978	44				
Var11	Between Groups	,616	2	,308	,501	,610	
	Within Groups	25,829	42	,615			
	Total	26,444	44				
Var12	Between Groups	3,544	2	1,772	1,896	,163	
	Within Groups	39,256	42	,935			
	Total	42,800	44				
Var13	Between Groups	2,308	2	1,154	2,234	,120	
	Within Groups	21,692	42	,516			
	Total	24,000	44				
Var14	Between Groups	1,953	2	,976	1,812	,176	
	Within Groups	22,625	42	,539			
	Total	24,578	44				
Var15	Between Groups	5,381	2	2,691	3,576	,037	
	Within Groups	31,597	42	,752			
	Total	36,978	44				

Source: authors

Table 3 indicates statistically significant difference between groups for statement No. 4 ( $p=0,012$ ;  $df=44$ ) - *English proficiency is the most required when looking for a job.* and No. 15 ( $p=0,037$ ;  $df=44$ ). Statement 15 reads: *I'll earn a better salary if I am proficient in English.* Tainer (1988, pp. 111) cites that English language proficiency has significant positive influence on earnings. The fact that Croatia is a tourist country and member of the EU supports this attitude.

Table 4 ANOVA – students' attitudes in relation to the year of study  
Multiple comparisons

Bonferroni

Dependent Variable	(I) YEAR OF STUDY	(J) YEAR OF STUDY	Mean Difference (I-J)	Std. Error	Sig.
Var.1	FIRST YEAR	SECOND YEAR	,323	,356	1,000
		THIRD YEAR	,248	,378	1,000
	SECOND YEAR	FIRST YEAR	-,323	,356	1,000
		THIRD YEAR	-,075	,274	1,000
	THIRD YEAR	FIRST YEAR	-,248	,378	1,000
		SECOND YEAR	,075	,274	1,000
Var.2	FIRST YEAR	SECOND YEAR	,193	,273	1,000
		THIRD YEAR	,314	,289	,850
	SECOND YEAR	FIRST YEAR	-,193	,273	1,000
		THIRD YEAR	,122	,210	1,000
	THIRD YEAR	FIRST YEAR	-,314	,289	,850
		SECOND YEAR	-,122	,210	1,000
Var.3	FIRST YEAR	SECOND YEAR	-,286	,367	1,000
		THIRD YEAR	-,219	,389	1,000
	SECOND YEAR	FIRST YEAR	,286	,367	1,000
		THIRD YEAR	,067	,282	1,000
	THIRD YEAR	FIRST YEAR	,219	,389	1,000
		SECOND YEAR	-,067	,282	1,000
Var.4	FIRST YEAR	SECOND YEAR	,509	,385	,579
		THIRD YEAR	1,190*	,408	,017
	SECOND YEAR	FIRST YEAR	-,509	,385	,579
		THIRD YEAR	,681	,296	,079
	THIRD YEAR	FIRST YEAR	-1,190*	,408	,017
		SECOND YEAR	-,681	,296	,079
Var.5	FIRST YEAR	SECOND YEAR	,143	,391	1,000
		THIRD YEAR	,543	,415	,593
	SECOND YEAR	FIRST YEAR	-,143	,391	1,000
		THIRD YEAR	,400	,301	,571
	THIRD YEAR	FIRST YEAR	-,543	,415	,593
		SECOND YEAR	-,400	,301	,571
Var.6	FIRST YEAR	SECOND YEAR	-,012	,161	1,000
		THIRD YEAR	,057	,171	1,000
	SECOND YEAR	FIRST YEAR	,012	,161	1,000
		THIRD YEAR	,070	,124	1,000
	THIRD YEAR	FIRST YEAR	-,057	,171	1,000
		SECOND YEAR	-,070	,124	1,000
Var.7	FIRST YEAR	SECOND YEAR	,602	,339	,249
		THIRD YEAR	,495	,360	,528
	SECOND YEAR	FIRST YEAR	-,602	,339	,249
		THIRD YEAR	-,107	,261	1,000
	THIRD YEAR	FIRST YEAR	-,495	,360	,528
		SECOND YEAR	,107	,261	1,000
Var.8	FIRST YEAR	SECOND YEAR	,193	,219	1,000
		THIRD YEAR	,314	,232	,547
	SECOND YEAR	FIRST YEAR	-,193	,219	1,000
		THIRD YEAR	,122	,168	1,000
	THIRD YEAR	FIRST YEAR	-,314	,232	,547
		SECOND YEAR	-,122	,168	1,000
Var.9	FIRST YEAR	SECOND YEAR	,081	,311	1,000
		THIRD YEAR	,162	,330	1,000
	SECOND YEAR	FIRST YEAR	-,081	,311	1,000
		THIRD YEAR	,081	,239	1,000
	THIRD YEAR	FIRST YEAR	-,162	,330	1,000
		SECOND YEAR	-,081	,239	1,000

Var.10	FIRST YEAR	SECOND YEAR	,000	,358	1,000
		THIRD YEAR	,067	,380	1,000
		SECOND YEAR	FIRST YEAR	,000	,358
	THIRD YEAR	THIRD YEAR	,067	,275	1,000
		FIRST YEAR	-,067	,380	1,000
		SECOND YEAR	-,067	,275	1,000
Var.11	FIRST YEAR	SECOND YEAR	,286	,339	1,000
		THIRD YEAR	,086	,359	1,000
		SECOND YEAR	FIRST YEAR	-,286	,339
	THIRD YEAR	THIRD YEAR	-,200	,260	1,000
		FIRST YEAR	-,086	,359	1,000
		SECOND YEAR	,200	,260	1,000
Var.12	FIRST YEAR	SECOND YEAR	,441	,417	,890
		THIRD YEAR	,838	,443	,195
		SECOND YEAR	FIRST YEAR	-,441	,417
	THIRD YEAR	THIRD YEAR	,397	,321	,668
		FIRST YEAR	-,838	,443	,195
		SECOND YEAR	-,397	,321	,668
Var.13	FIRST YEAR	SECOND YEAR	,596	,310	,184
		THIRD YEAR	,657	,329	,157
		SECOND YEAR	FIRST YEAR	-,596	,310
	THIRD YEAR	THIRD YEAR	,061	,239	1,000
		FIRST YEAR	-,657	,329	,157
		SECOND YEAR	-,061	,239	1,000
Var.14	FIRST YEAR	SECOND YEAR	,596	,317	,200
		THIRD YEAR	,524	,336	,379
		SECOND YEAR	FIRST YEAR	-,596	,317
	THIRD YEAR	THIRD YEAR	-,072	,244	1,000
		FIRST YEAR	-,524	,336	,379
		SECOND YEAR	,072	,244	1,000
Var.15	FIRST YEAR	SECOND YEAR	,975 <sup>+</sup>	,374	,038
		THIRD YEAR	,581	,397	,453
		SECOND YEAR	FIRST YEAR	-,975 <sup>+</sup>	,374
	THIRD YEAR	THIRD YEAR	-,394	,288	,534
		FIRST YEAR	-,581	,397	,453
		SECOND YEAR	,394	,288	,534

Source: authors

Results of ANOVA multiple comparison (Bonferroni test) in Table 4 indicate statistically significant differences in attitudes in statement No. 4 between the students of the first and the students of the third year –  $p=0,017$  (*English proficiency is the most required when looking for a job*) and statement No. 15 between the students of the first and second year –  $p=0,038$  (*I'll earn a better salary if I am proficient in English*). The students of the first year agree more strongly that English is the most required when looking for a job ( $M=4,86$ ) than students of the third year ( $M=3,67$ ). The students of the third year possess more professional knowledge by the time they reach the final undergraduate year, and thus might consider a lot of more attributes to be important when looking for a job. The statistically significant difference in attitudes of students of the first ( $M=4,71$ ) and second year ( $M=3,74$ ) regarding earning a better salary if more proficient in English may also be attributed to the students of the second year having learned more professional subjects and thus having improved their English proficiency. It is common practice at the University of Dubrovnik to advise students to use professional literature in English, It is important to keep in mind that it is extremely significant to use a common language in foreign trade (Melitz, 2003, pp. 667).

Our main finding is that there are some statistically significant differences in attitudes of the students of economics and business economics with respect to the year of study. However, gender has proven to be of no significance with respect to the students' attitudes on the link between English proficiency and economy in the digital world.

Having in mind that various attitudes display contextual and temporal variation, the authors believe the results from this research would best be compared and utilised in further research in Croatian context focusing on and studying other programmes of study at other Croatian universities, or even worldwide. Future studies should include larger student population to share more light on the students' attitudes on the link between English proficiency and economy, depending on the gender, the year of study and the programme of study.

#### 4. CONCLUSIONS

While English proficiency is an important and frequently mentioned subject in empirical research, there have been no empirical studies on the link between English proficiency and economy. This research endeavours to open the subject topic and explore the attitudes of students, more precisely undergraduate students of economics and business economics, on the link between English proficiency and economy in the modern digital world. Available references have all tackled a specific part of the subject topic, however, none of them has covered it in full. English as a global language is spoken widely in the world, as a consequence of globalisation and digitalisation of the contemporary world, but also due to the current Covid-19 pandemic that has forced humanity to turn to the means of remote communication and learning. This has caused exponential rise of importance of language as a means of communication. According to Melitz (2016, pp. 583) it is necessary to identify the areas of life where English is a lingua franca in the world. According to him, those areas are international safety, the internal business of international organisations, internal communication within the international news industry, international sports and science. Also English is adopted as the lingua franca in an international assembly or conference room. On the other side (Grenier, 2015, pp. 3), communication in languages that not everyone understands tends to slow economic activity.

The results of our research, although only a small contribution to the subject topic, have confirmed the importance of researching attitudes of students of economics and business economics in Croatian learning context. Two statistically significant differences in the attitudes in relation to the year of study have been found. No statistically significant differences in attitudes of the students of economics and business economics in relation to gender have been obtained. The main reason might be the insufficient number of male students participating in the research.

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