

RELATIONSHIP BETWEEN STUDENTS' MOTIVATION AND THEIR SOCIO-DEMOGRAPHIC CHARACTERISTICS

1 INTRODUCTION

The main focus of this paper is to examine the intensity of students' intrinsic and/or extrinsic learning motivation, as well as how this is related to their socio-demographic characteristics. As an innate human quality, and a central psychological concepts, motivation has been studied in many scientific disciplines, from many different perspectives: psychological, sociological and social-psychological, among others. Self-determination theory (Deci/Ryan 2000a: 68) explains human motivation and personality using traditional empirical methods, and focusing on human resources for the development of personality and behaviour regulation. A motivated person is characterized by the possession of energy, a strong interest in taking action, goal orientation and perseverance. By contrast, a person lacking inspiration and impetus to act is considered unmotivated. The types of factors that motivate a person to undertake an activity are extremely diverse. People can be motivated because they value the activity they are undertaking very highly, or because there is a strong external coercion. Students can be motivated to learn because of their inherent curiosity and interest in acquiring knowledge, or for external reasons, such as achieving good grades or positive feedback (approval) from their parents. Based on these different reasons and/or goals, self-determination theory (hereafter referred to as SDT) distinguishes between two types of motivation: intrinsic and extrinsic (Deci/Ryan 2000: 54).

To further explain extrinsic motivation and environmental factors, Deci and Ryan (2000: 61) introduced, alongside self-determination theory, another sub-theory, referred to as organismic integration theory. According to this theory, on the far left of the self-determination continuum (Figure 1) is amotivation, the state in which there is no interest in pursuing an activity, and at the far right end there is intrinsic motivation, which is characterised by a high degree of autonomy and intrinsic regulation. Extrinsic motivation, categorised by the degree of autonomy, is situated on the continuum between amotivation and intrinsic motivation.

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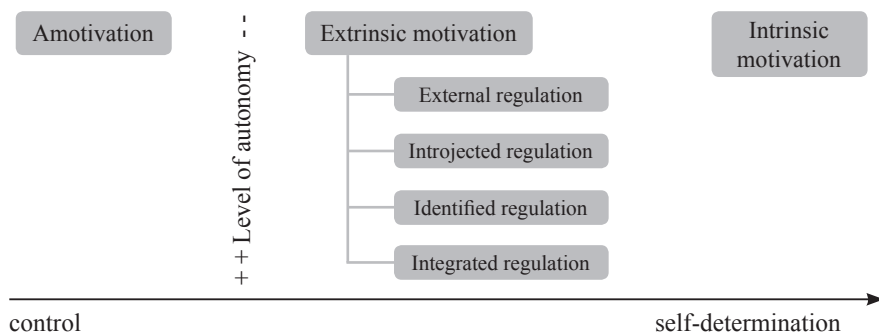


Figure 1: Self-determination continuum (Deci/Ryan 2000: 61) (adapted)

The first substantial studies on foreign language learning motivation appeared in the works of Canadian social psychologists, Gardner and Lambert (Gardner 2010: 205), who presented their theory of integrative and instrumental motivation, within the framework of the social psychological approach in their book, *Attitudes and Motivation in Second Language Learning*, published in 1972. Integrative motivation is associated with a positive attitude towards the target language group, a desire to interact and the “willingness to be like valued members of the language community” (Gardner 1972: 271). Instrumental motivation is associated with the potential pragmatic benefits of foreign language proficiency such as, for instance, a better job or a higher salary. As a sub-theory of self-determination theory, Deci and Ryan (2000: 58) presented cognitive evaluation theory, to explain social and environmental factors that cause variability in intrinsic motivation. Social-contextual events that are conducive to feelings of competence during action can enhance intrinsic motivation, because they fulfil a basic psychological need—the need for competence.

The sociolinguistic component affects substantially all language communication between members of different cultures who, acting as social agents in a specific environment, form part of a wider social context. The approach to language learning and teaching, adopted in the Common European Framework of References (CEFR), is based on a “fundamental principle of the Council of Europe, that the methods to be employed in language learning, teaching and research are those considered to be most effective in reaching the objectives agreed, in the light of the needs of the individual learners in their social context” (CEFR 2001: 142).

1.1 Motivation Research in Croatia

Jelena Mihaljević Djigunović, an author who has been predominantly engaged in the research on foreign language learning motivation in Croatia (1995, 1999, 2007), has explored the motivation for learning English, attitudes towards the language and the learning context, as well as secondary school and college students’ attitudes towards themselves as foreign language learners. In addition to pragmatic-communicative and integrative motivations, which have been the subject of much research, the author

introduced an affective motivation type, found in students who learn English because they like the language, especially owing to its acoustic model. The results of this research show that initial attitudes towards learning English are extremely positive and that, under favourable conditions, they remain very positive.

Marko Palekčić (2004) has carried out empirical research into students' interest in and motivation for learning in general, and examined Croatian and German students' regulatory styles and motives for choosing their study programmes. Personal and social motives were found to be more frequent in Croatian students, in contrast to external motives, which were less present. Social orientation plays a more important role in Croatian students, who show a stronger interest in their study programmes. They also show higher values for identified regulation, as a form of motivation for learning, which means that they have identified with their study programmes, and that acquiring a degree on completion of their studies has extreme personal importance.

Katica Balenović (2011) explored the motivation of adult learners of English in the context of globalization. According to the results of her research, adult learners show four types of orientations, or reasons, for learning English: affective-cultural, communicative-integrative, professional and instrumental-technological. These reasons do not differ significantly in relation to the environment in which students live.

Drawing on the aforementioned research studies, theoretical concepts of external and internal motivation were the main building blocks of the framework for this research. Although null hypothesis was made in favour of the external motivation, more evidence has been found with regard to intrinsic motivation.

2 RESEARCH METHODOLOGY

2.1 Aim

The aim of this research was to examine the existence and intensity of the relationship between indicators of intrinsic and extrinsic motivation, and the socio-demographic characteristics of the respondents. In particular, the aim was to explore the intensity of the relationship between each type of motivation and the type of upper secondary education completed, gender, parents' education, as well as the reasons for choosing the study programme, in relation to the motivation type and intensity. The relationship between each type of motivation, self-assessment of motivation for learning English, and students' satisfaction with their chosen study programme, was also examined.

2.2 Sample

The survey was conducted in March 2012, at seven higher education institutions, in four cities in Croatia:

1. Sveučilište u Splitu, Sveučilišni odjel za stručne studije, Nastavni centar, Zagreb (University of Split, University Department of Professional Studies, Teaching Centre, Zagreb)
2. Veleučilište "Hrvatsko Zagorje", Krapina (Polytechnic "Hrvatsko Zagorje" in Krapina)

3. Veleučilište u Karlovcu, Karlovac (Polytechnic in Karlovac, Karlovac)
4. Visoka poslovna škola Libertas, Zagreb (Business College Libertas, Zagreb)
5. Visoka škola za ekonomiju, poduzetništvo i upravljanje Nikola Šubić Zrinski, Zagreb (College for Economics, Entrepreneurship and Management Nikola Šubić Zrinski, Zagreb)
6. Visoka škola za poslovanje i upravljanje, s pravom javnosti Baltazar Adam Krčelić, Zaprešić (College for Business and Management Baltazar Adam Krčelić, Zaprešić)
7. Visoko učilište Effectus - visoka škola za financije i pravo, Zagreb (Effectus College for Finance and Law, Zagreb)

The sample comprised 604 respondents (full-time and part-time students) of whom 253 were male (41.9%) and 351 female (58.1%). Third-year students made up the largest proportion of the sample: 295 (49.3%). This was followed by second-year students: 201 (33.3%), and fourth-year and fifth-year students: 105 (17.4%)¹. Considering the fact that the higher education institutions that participated in the survey are located in four counties in north-western and central Croatia, with a majority in the city of Zagreb, this is a convenient sample.

2.3 Measuring Instruments

For the purpose of this research, a survey questionnaire was developed, consisting of four parts (Cigan/Šlogar 2012). The first part includes three questions, designed to examine the type of upper secondary education completed, secondary education grade point average, and factors influencing the respondent's choice of the study programme. All questions were closed-ended multiple choice questions, with the exception of the last question, which examined the factors affecting the decision, which was open-ended. The second part of the survey contained an instrument with ten separate items, which measure intrinsic and extrinsic motivation for learning. In the process of instrument development, the Self-Regulation Questionnaire for Adolescent Students (*Skalen zur motivationalen Regulation beim Lernen von Schülerinnen und Schülern - überarbeitete Fassung*, Müller/Thomas 2011) was adapted, and the items were formulated according to the tenets of self-determination theory (Deci/Ryan 2000: 55). Items measuring intrinsic motivation focus on respondents' reported satisfaction and comfort associated with the process of learning and language class activities. The second set of items, measuring extrinsic motivation, examines externally regulated behaviour (external, introjected and identified regulation).

The third part of the questionnaire consisted of two instruments that examined respondents' attitudes towards active teaching methods in English language and management classes, as well as students' active involvement in the learning process². The fourth

1 In further analyses of the results, fourth-year and fifth-year students are presented in the same category (fourth/fifth-year students).

2 Results are presented in detail in the article written by Cigan, V. and Šlogar, H. (2012) *Attitudes towards Teaching Methods at Higher Education Institutions Aiming to Develop Entrepreneurial Competencies*.

part of the questionnaire looked at the self-assessment of motivation for learning English, and further professional development after completion of the study programme, as well as self-assessment of one's satisfaction with the current study programme. Students were asked to specify their motivation intensity and level of satisfaction on a five-point Likert scale. At the end of the questionnaire, there was a set of independent variables which included the socio-demographic characteristics of the respondents: gender, year of study and parents' education.

3 RESEARCH RESULTS ANALYSIS

Using SPSS 15.0 software package, univariate and multivariate statistical analyses (descriptive data analysis, correlation analysis, t-test, ANOVA and factor analysis) were performed to analyse the compiled data. Characteristics of the sample are presented first. These are followed by the analyses of the indicators of motivation, self-assessment of motivation for learning English, further professional development after completion of the study programme, and the level of satisfaction with the programme of study.

3.1 Sample Characteristics

The sample comprises 604 respondents, of whom 41.9% are male students and 58.1% female. The majority of them (63.7%) completed vocational education before enrolling in the study programme, while the rest (36.3%) completed grammar school (Table 1). Two-thirds of the respondents (65.4%) achieved a very good final grade average on completion of secondary education, a slightly smaller percentage of them (21%) achieved an excellent grade average, while 13.6% achieved a good grade average (Table 2). Broken down by gender, the data show that a larger portion of female students than male completed grammar school, and that female students achieved higher grades on completion of secondary education than male students.

Type of upper secondary education completed	Frequency	%	Gender	Frequency	%
4-year vocational school	385	63.7	male	179	45.5
			female	206	54.5
Grammar school	219	36.3	male	74	34.8
			female	145	66.2
Total	604	100	-	604	100

Table 1: Type of upper secondary education completed

GPA	Frequency	%	Gender	Frequency	%
Excellent	127	21.0	male	32	25.2
			female	95	74.8
Very good	395	65.4	male	172	43.5
			female	223	46.5
Good	82	13.6	male	49	59.7
			female	33	40.3
Total	604	100.00	-	604	-

Table 2: Secondary education grade point average

The majority of students' parents in this sample have completed secondary education, and more mothers than fathers have only primary school education. Sixty-three percent (63%) of the mothers completed secondary education, while the percentage of fathers in that category is 61.4%. The percentage of fathers holding a university or academy degree (27%) is slightly higher than that of mothers (25.8%). The same trend exists for master's and doctoral degrees (6.1% of fathers and 4.1% of mothers). In terms of the educational attainment of students' parents, one quarter of students come from families where at least one parent has a higher education qualification. The vast majority of parents have completed secondary education, and there is an extremely low percentage of those who have completed primary school education only. The results of previous studies (Palekčić 1985, 2004) show that parents' education has a significant influence on the decision to study, motivation for learning and academic performance.

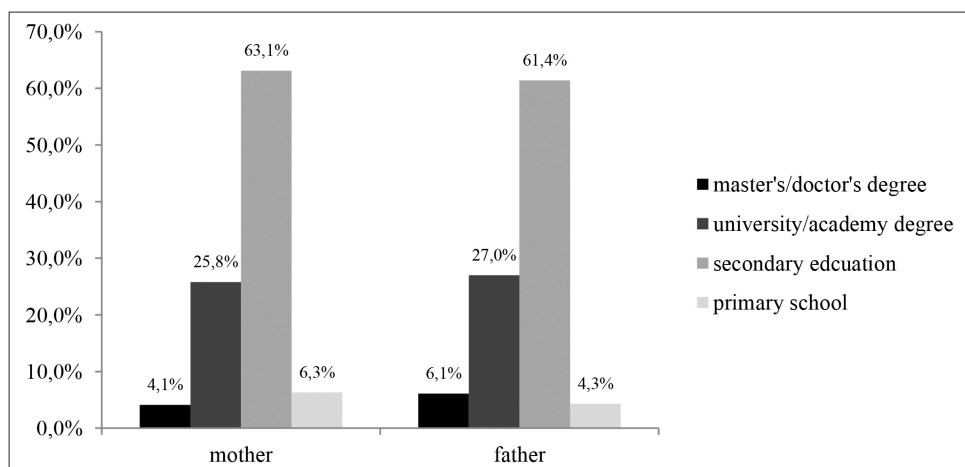


Figure 1: Parental level of education

In the first part of the questionnaire, examining factors influencing students' choice of the study programme, the respondents were offered six answers, the last of which was open-ended. Almost half of the respondents indicated that it was the desired job

that had a crucial impact in making this decision (47%), followed by failure at another institution (25.7%), and the influence of other people (friends, teachers) in 8.4% of the respondents. Parental influence is ranked fourth (6.1%), followed by personal factors (5.6%). Factors related to higher education institution (4.1%), and a marketing campaign conducted by the higher education institution, occupy the last place, with 3%. The responses to open-ended questions (9.8%) were coded according to two dominant types of factors derived from the collected answers: personal factors and those related to the higher education institution.

3. Indicators of Intrinsic and Extrinsic Motivation for Learning

One of the research objectives was to investigate the type and intensity of students' motivation in general, as well as students' self-assessment of motivation for learning English and further professional development. Another objective was to identify the relationship, if any, between motivation and the following independent variables: the type of upper secondary education completed, secondary education grade point average, year of study, gender, and parents' education, as well as the extent and direction of this relationship.

Students' motivation was examined using instrument 2.4, containing ten items. Five of them measure intrinsic motivation and another five measure extrinsic motivation. Students indicated their degree of agreement with the items on a five-point Likert scale³.

Respondents' answers were ranked according to the mean, and are shown in Table 3.

Instrument	Item No	Item	N		M	SD
			Valid	Missing		
		I learn because...				
2.4.	3.	it will give me better career choices.	601	3	4.36	.778
2.4.	2.	I want to acquire knowledge.	601	3	4.20	.706
2.4.	9.	I want a good grade.	598	6	3.89	1.134
2.4.	6.	I find class activities very interesting.	601	3	3.28	.845
2.4.	10.	I enjoy engaging in classroom activities.	601	3	3.27	.881
2.4.	8.	I simply have to.	598	6	3.16	1.305
2.4.	1.	it's fun.	603	1	2.98	.936
2.4.	7.	I want to do better than my fellow students.	601	3	2.81	1.110
2.4.	4.	I don't want my teacher to think poorly of me.	600	4	2.79	1.164
2.4.	5.	my parents demand that from me.	600	4	2.43	1.185

Table 3: Indicators of motivation for learning

3 ranging from 1 = *Strongly disagree* to 5 = *Strongly agree*.

The top five items, ranked according to the mean, are particularly interesting, because items 1 and 3 (better job and grades) represent both external regulation and identified regulation. In other words, the respondents are motivated for learning by values accepted in their social environment, but also by the conscious valuing of the goal of that activity, which they accept as personally important. Items 2, 4 and 5 represent autonomous behaviour, because the respondents follow their own internal interests.

The overall average motivation score of all respondents (motivation intensity total score = MITS) is 3.23, and the distribution of these results is shown in Figure 2.

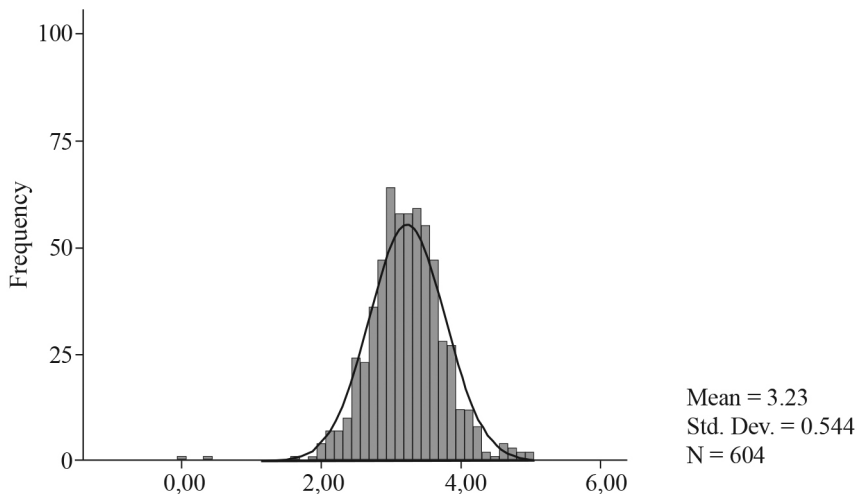


Figure 2: Histogram of overall motivation score

Table 4 shows the items ranked according to the mean, by type of motivation. In addition, the average score for the answers to the items, according to types of motivation, was calculated according to types of motivation, and shown in Figures 3 and 4. The mean for intrinsic motivation (IM) is 3.42, and for extrinsic motivation (EM) is 3.04. These average scores were used in further analyses, as dependent variables.

Intrinsic Motivation	M	Extrinsic Motivation	M
2.4.2. I learn because I want to acquire knowledge.	4.20	2.4.3. I learn because it will give me better career choices.	4.36
2.4.6. I learn because I find class activities very interesting.	3.28	2.4.9. I learn because I want a good grade.	3.89
2.4.10. I learn because I enjoy engaging in classroom activities.	3.27	2.4.7. I learn because I want to do better than my fellow students.	2.81
2.4.8. I learn because I simply have to.	3.16	2.4.4. I learn because I don't want my teacher to think poorly of me.	2.79
2.4.1. I learn because it's fun.	2.98	2.4.5. I learn because my parents demand that from me.	2.43

Table 4: Items ranked according to the mean by type of motivation

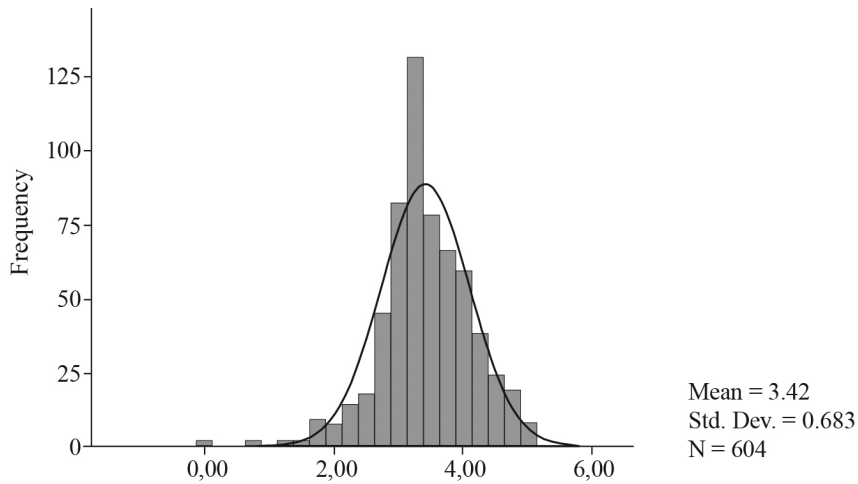


Figure 3: Histogram of intrinsic motivation total score

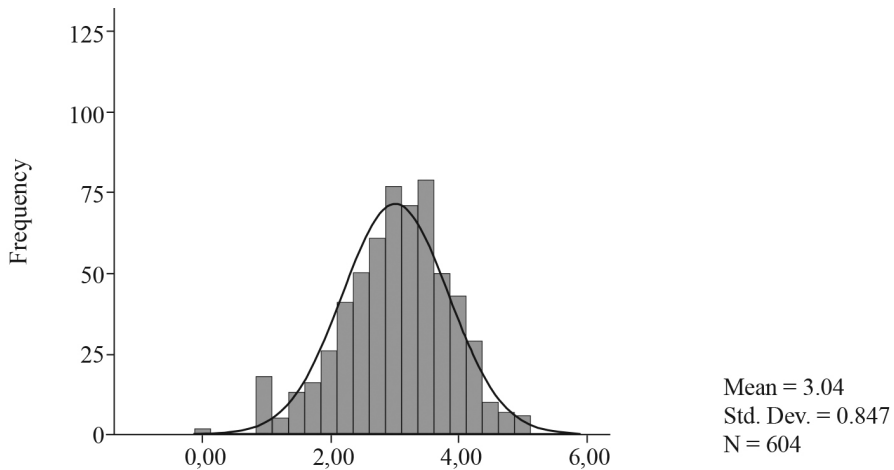


Figure 4: Histogram of extrinsic motivation total score

A high motivation intensity total score was found in this sample of students. According to types of motivation, the respondents were found to be slightly more intrinsically motivated.

The reliability of the instrument was tested, using Cronbach's Alpha coefficient for each type of motivation. Cronbach's Alpha coefficient indicates an acceptable level of reliability, which means that these two dimensions meet the requirements for further analysis of the results.

Type of Scale	Cronbach's Alpha Coefficient
Indicators of extrinsic motivation	0.621
Indicators of intrinsic motivation	0.782

Table 5: Cronbach's Alpha coefficient values

Factor analysis identified two factors which, together, account for 56% of the total variance. Table 6 shows the initial eigenvalues, percentages and the cumulative percentages of variance, on the basis of which these factors were extracted.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	2.603	32.542	32.542	2.603	32.542	32.542	2.580	32.249	32.249
2	1.873	23.409	55.951	1.873	23.409	55.951	1.896	23.702	55.951
3	.879	10.984	66.935						
4	.725	9.061	75.996						
5	.634	7.920	83.916						
6	.486	6.081	89.997						
7	.433	5.418	95.415						
8	.367	4.585	100.000						

Table 6: Extraction method: principal component analysis

The first factor, intrinsic motivation, accounts for 32.5% of the total variance, and comprises items 2.4.1., 2.4.2., 2.4.6., 2.4.10. The second factor, extrinsic motivation, explains 23.4% of the total variance and includes items 2.4.4., 2.4.5., 2.4.8., and 2.4.9. Table 7 shows factor loadings for each of the items.

According to factor loadings and content characteristics, the items *I learn because it will give me better career choices* and *I learn because I want to do better than my fellow students* align equally with both latent dimensions, which makes them unsuitable for further analysis. For that reason, these items were excluded from further analyses.

	Component	
	1	2
2.4.1. I learn because it's fun.	.776	-.108
2.4.2. I learn because I want to acquire knowledge.	.716	-.107
2.4.4. I learn because I don't want my teacher to think poorly of me.	.318	.605
2.4.5. I learn because my parents demand that from me.	.103	.752
2.4.6. I learn because I find class activities very interesting.	.772	.059

	Component	
	1	2
2.4.8. I learn because I simply have to.	-.240	.733
2.4.9. I learn because I want a good grade.	-.226	.632
2.4.10. I learn because I enjoy engaging in classroom activities.	.806	.044

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization.

Rotation converged in 4 iterations.

Table 7: Factor loadings

3.3 Self-Assessment of Motivation for Learning English and Further Professional Development and Satisfaction with the Study Programme

The final research objective was to examine how students assess their motivation for learning English and further professional development, and to what extent they are satisfied with the study programme.

According to the frequency of responses, 40.9% of the respondents are extremely motivated to learn English. 31.6% of the respondents rated their motivation intensity with a four, which means that two-thirds of the respondents are highly motivated to learn English, while 21% of them do not have a clear position. Low motivation intensity was found in 4% of the respondents, and only 2% were completely unmotivated.

How motivated are you to do the following activities: to learn English?

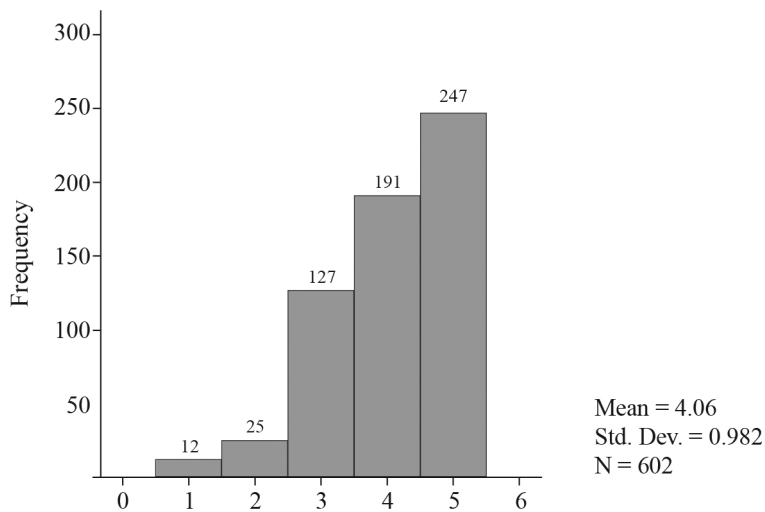


Figure 5: Motivation for learning English

The results of the self-assessment of motivation for further professional development show that 57% of the respondents are extremely motivated for further professional development after completion of the study programme, while 27.5% of them assessed their motivation intensity with a four. 13.4% of the respondents assessed their motivation intensity with a three, 1.3% with a two, while only 0.7% reported that they were not at all motivated for further professional development.

How motivated are you to do the following activities: further professional development after completion of the study programme?

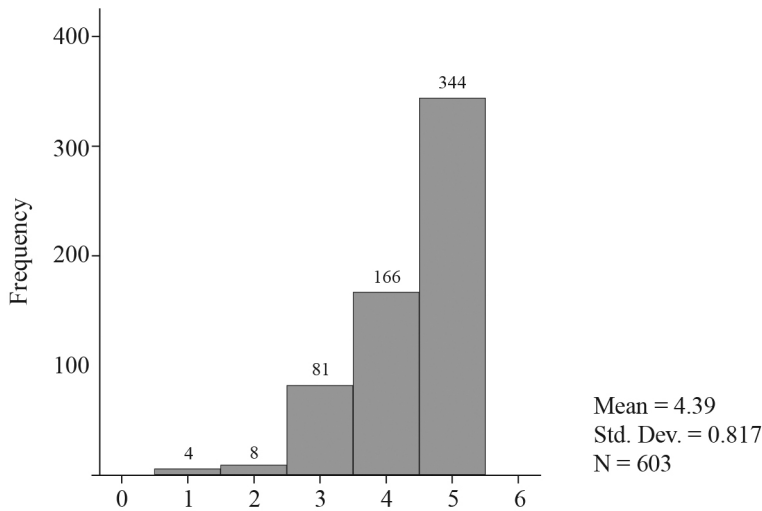


Figure 6: Motivation for further professional development

A sense of satisfaction can enhance motivation, and it is also an important prerequisite to achieving learning outcomes. This was the reason for examining students' satisfaction with the study programme chosen. The data obtained show that students are very satisfied with the study programme they presently attend ($M = 3.81$): 18.9% of them are highly satisfied, while 48.8% rated their satisfaction with a four. Viewed collectively, 67.7%, or two-thirds of the respondents, are very satisfied, 27.2% of the respondents rated their level of satisfaction with a three, and 4.5% with a two. Only 0.5% of the respondents are not at all satisfied with the study programme.

How satisfied are you with the study programme chosen?

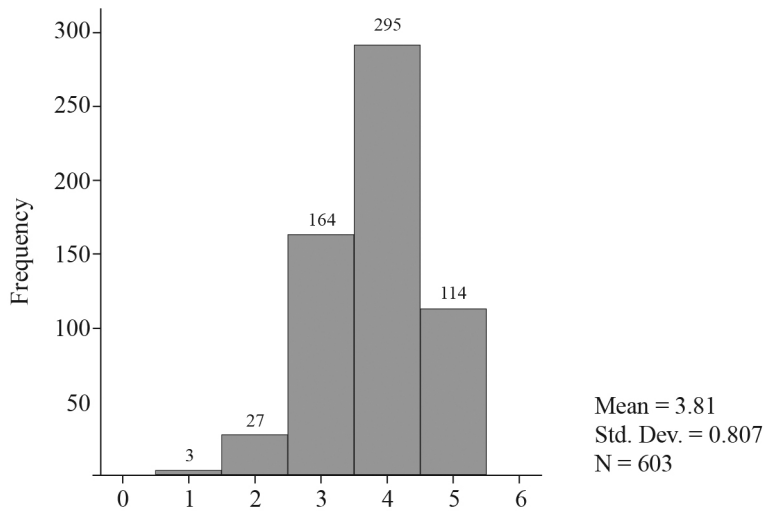


Figure 7: Level of satisfaction with the study programme

3.4 Relationship between Indicators of Intrinsic and Extrinsic Motivation for Learning and Socio-Demographic Characteristics

The existence and nature of the relationship between indicators of motivation and socio-demographic characteristics were examined using correlation analysis, analysis of variance and t-tests.

The t-test showed statistically significant relationships at a significance level of 0.05 between gender and three items from the instrument that measures motivation: 2.4.1. *I learn because it's fun*, 2.4.3. *I learn because it will give me better career choices*, 2.4.7. *I learn because I want to do better than my fellow students*. Female students scored higher on the first two items, while male students scored higher on item 2.4.7.

The test did not reveal a statistically significant relationship between items from instrument 2.4 and the type of upper secondary education completed, nor between total, intrinsic, and extrinsic motivation and the type of upper secondary education completed.

Using ANOVA for secondary education grade point average as an independent variable, a statistically significant difference was found for items 2.4.2. *I learn because I want to acquire knowledge* and 2.4.5. *I learn because my parents demand that from me*. Students who achieved a good grade on completion of their secondary education scored statistically significantly lower on item 2.4.2. than those who achieved a very good grade ($F = 4.37, p < 0.05$). A statistically significant difference was found for item 2.4.5 between students who achieved a good or a very good grade on completion of secondary education, and those who achieved an excellent grade ($F = 6.03, p < 0.05$). It can be concluded

that parental influence as an external locus of control is smaller in students who achieved an excellent grade on completion of secondary education. In other words, students with lower grades learn more because of their parents' influence and expectations.

Following that, the relationship between indicators of motivation, i.e. the items from the instrument 2.4, and the year of study was examined. The results of the analysis of variance indicate statistical significance only for item 2.4.1. *I learn because it's fun*. The difference was found between second-year students and fourth/fifth-year students ($F = 4.34$, $p < 0.05$), with the means increasing together with the year of study, up to the fifth year. These results support the conclusion that intrinsic motivation is stronger in senior-year students, and that learning as an activity has a high degree of autonomy and internally-perceived locus of causality.

The analyses did not reveal a statistically significant relationship between parents' education, the items from instrument 2.4., and the average scores for MITS, IM and EM. Similarly, no statistically significant relationship was found between the values of intrinsic and extrinsic motivation as dependent variables, and the tested set of independent variables (gender, the type of upper secondary education completed, secondary education grade point average, year of study and parents' education).

3.4.1 Relationship between Self-Assessment of Motivation for Learning English and Further Professional Development, and Satisfaction with the Study Programme Chosen and Socio-Demographic Characteristics

We examined the statistical significance of differences between average scores for the self-assessment of motivation for learning English and further professional development, and satisfaction with the study programme chosen and the set of independent variables.

There is a statistically significant difference in motivation for learning English between students who achieved an excellent grade on completion of secondary education, and those who achieved a good grade or a very good grade ($F = 5.09$, $p < 0.05$). It can be concluded that the respondents who achieved the highest grade on completion of secondary education are more motivated to learn English.

The results of the analysis indicate that there is a statistically significant difference in the variable motivation for further professional development, in relation to gender ($t = -2.87$, $p < 0.05$), whereby female students are more motivated for further professional development than male students.

A significant difference in relation to the variable year of study (ANOVA) was found in the variable satisfaction with the study programme chosen ($F = 5.37$, $p < 0.05$). In relation to the year of study, there is a difference between second- and third-year students and third-year and fourth/fifth-year students. A significant decline in the degree of satisfaction was recorded in third-year students, when compared to second-year students. The level of students' satisfaction then increases in the fourth and fifth year of the study programme, but still remains lower than that recorded in among second-year students.

No statistically significant inter-correlation was found between the variable motivation for learning English and further professional development, and satisfaction with the study programme chosen and the independent variable parents' education.

3.4.2 *Relationship between Indicators of Intrinsic and Extrinsic Motivation and Self-Assessment of Motivation for Learning English, Further Professional Development and Satisfaction with the Study Programme*

Other statistically significant correlations found using correlation analysis between motivation for learning English, motivation for further professional development, and satisfaction with the study programme and total, intrinsic, and extrinsic motivations are shown in Table 9.

	Self-assessment of motivation for learning English	Self-assessment of motivation for further prof. devel.	Self-assessment of satisfaction with the study programme
Intrinsic motivation for learning	0.205**	0.358**	0.343**
Extrinsic motivation for learning	-0.044	-0.086*	0.064
Motivation intensity for learning total score	0.096*	0.159**	0.265**

** Correlation statistically significant at the 0.01 level

* Correlation statistically significant at the 0.05 level

Table 9: Other correlations found

A weak statistically significant correlation was found between intrinsic motivation and motivation for learning English, further professional development and satisfaction with the study programme. Using a stricter cut-off point of $p < 0.01$, a correlation was found between intrinsic motivation for learning and all three dependent variables, while no correlation was found with extrinsic motivation.

The results obtained are in line with expectations. The assumption was that respondents motivated to learn in general (MITS) would be motivated for learning English and further professional development. The values of Pearson's correlation coefficient indicate that the found correlation between total and intrinsic motivation for learning, self-assessment of motivation for learning English and further professional development is weak, but nevertheless statistically significant and positive. There is a weak correlation between the motivation intensity total score and satisfaction with the study programme, with the value of correlation coefficient slightly higher for intrinsic motivation. The highest correlation found—which is also statistically significant and positive, but still relatively weak—was between intrinsic motivation and self-assessment of motivation for further professional development.

4 DISCUSSION AND CONCLUSION

The research was conducted with a sample of 604 respondents, in which female students made up a slightly larger portion (58%). Approximately two-thirds of the respondents completed vocational education, while approximately one-third completed grammar school education before enrolling in the study programme, which reflects the composition of secondary school graduates in Croatia. Female students had higher GPAs on completion of secondary education ($M = 4.17$) than male students ($M = 3.93$).

There are two main reasons why the respondents chose the study programme. The first reason, reported by 47% of the respondents, is their career aspirations, and the second reason is failure at another higher education institution (25%). Given this rather high percentage, it would be interesting to further investigate what the respondents mean by “failure at another institution” – failure to enrol in the study programme they want, failure to meet study requirements and pass the exams, or something else? Influence from friends, teachers and parents were less commonly cited reasons for enrolling in the study programme.

The main research instrument consisted of ten items, examining intrinsic and extrinsic motivation for learning. Factor analysis identified two factors which account for 56% of the total variance. The first factor comprises indicators of intrinsic motivation, and the second comprises indicators of extrinsic motivation, which confirmed the assumed existence of these two latent dimensions, as well as the validity of the applied instrument.

The survey results reveal a high motivation intensity total score among the respondents. Broken down by the type of motivation, the data show that the respondents are more intrinsically motivated. Higher intensity of intrinsic motivation is found in senior-year students, i.e. fourth and fifth-year students. External regulation, operationalised by item 2.4.3. *I learn because it will give me better career choices*, was also found. The wish to acquire knowledge ranked second, and the attitude that class activities are interesting are indicators of intrinsic motivation. A slightly lower rating was given to learning in order to get a good grade. This indicates integrated regulation, because a person has assimilated the importance of grades into his/her own sense of self, and undertaking the activity of learning has an instrumental value in achieving the set personal goal (good grade). Learning at college satisfies one of the basic psychological needs – the need for competence, which concurs with the results of previous studies (Cigan 2012, 2013). The results also show that learning a foreign language is important, in that it allows for better career choices, personal development, as well as personal affirmation.

Students in this sample are extremely satisfied with the study programme ($M = 3.81$) and thus, according to their own assessment, have an above-average motivation for further professional development ($M = 4.39$) and for learning English ($M = 4.06$). Based on previous studies (e.g. Ellis 1994), it is difficult to establish with certainty the mutually-reinforcing nature of the relationship between satisfaction and motivation; in other words, which of the two concepts affects the other. The results obtained support Gardner’s assumption (2010: 210) that this relationship is a two-way issue, likely to function in both directions. Students’ satisfaction with the chosen study programme

affects the intensity and maintenance of intrinsic motivation. Components of foreign language learning motivation, in Dörnyei's framework of motivation in language learning (1994: 280) concerning teaching materials, teaching methods and learning tasks performed during class, also enhance students' satisfaction.

A statistically significant correlation was found between motivation for learning and higher grades on completion of secondary education, which is consistent with many previous studies and conclusions about external and integrated regulation. The higher the level of students' autonomy (Figure 1), the higher the grades.

Previous studies (e.g. Palekčić 1985) show that parents' education may be an important factor, or have a substantial role in choosing the study programme, or that it is related to a developed motivation for learning. However, these assumptions have not been confirmed in this study. The correlation between parents' education and total, intrinsic or extrinsic motivation for learning, has not been found. These results suggest a weak external regulation of motivation, which is consistent with the finding that the respondents in this sample are more intrinsically motivated.

In terms of applicability of results for teachers in general, the study confirms that teaching materials and methods positively influence students' learning motivation, especially if the course content is closely connected to the field of studies and their future career. Failure at the previous college as the second reason for enrolling in the present studies indicates the need for teachers to offer support, reassurance and confidence to students. The affirming attitude of a teacher contributes to students' self-perception and, thus, to their intrinsic motivation.

Finally, there are some limitations in this research. Students' self-assessment has limitations of its own, as respondents often give socially desirable answers. The second limitation refers to the sample type. Despite a relatively large number of respondents, the sample is not truly representative of the Croatian student population. It is a convenient sample, because respondents are exclusively students attending professional study programmes, and the survey was conducted in a geographically-limited area that included Zagreb, Karlovac and Krapina. Nevertheless, in favour of generalising study results, it should be mentioned that the majority of higher education institutions are located in Zagreb, where a big portion of students from all over Croatia conclude their studies. Besides, all higher education institutions are organised according to standardised criteria and level of quality assurance. Therefore, it is expected that surveying any other sub-sample of students in another geographical area would yield similar results, regarding satisfaction and/or motivation.

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Abstract

RELATIONSHIP BETWEEN STUDENTS' MOTIVATION AND THEIR SOCIO-DEMOGRAPHIC CHARACTERISTICS

This article presents the results of research on the relationship between indicators of intrinsic and extrinsic motivation in students attending higher education institutions, and their socio-demographic characteristics: the type of upper secondary education completed, secondary education grade point average, year of study, gender, and parents' education.

The research was conducted in March 2012, through a survey questionnaire administered to a sample of 604 respondents. The questionnaire examined, among other things, students' motivation for learning, self-assessment of motivation for learning English and further professional development, and self-assessment of overall satisfaction with the study programme.

According to the self-determination theory developed by Deci and Ryan (2000), intrinsic and extrinsic motivation are essential for undertaking any activity, including learning. As a social agent, each individual interacts with different social groups in an action-oriented set of circumstances, and develops his/her personality (CEFR). Social contexts that catalyse intrapersonal and interpersonal differences also have a significant influence on motivation. Gardner's theory of motivation emphasizes the importance of social components and the extrinsic nature of instrumental and integrative orientation.

Instrumental-integrative dichotomy was further developed by Dörnyei (1994: 279), who introduced a motivational framework consisting of three levels: the language level, the learner level and the learning situation level.

Survey results show that the respondents are generally highly-motivated to learn, and that intrinsic motivation is predominant. Statistically significant differences were found between gender, secondary education grade point average, and year of study and the type and intensity of motivation, whereas the type of upper secondary education completed, and parents' education, were not found to be statistically significantly correlated with the examined concepts.

Keywords: intrinsic and extrinsic motivation, satisfaction with the study programme, learning English, professional development.

Povzetek

POVEZAVA MED MOTIVACIJO IN DRUŽBENO-DEMOGRAFSKIMI ZNAČILNOSTMI PRI ŠTUDENTIH

V članku predstavljamo rezultate raziskave o povezavi med indikatorji intrinzične in ekstrinzične motivacije pri študentih in njihovimi družbenimi in demografskimi značilnostmi: vrsto zaključene srednje šole, povprečno oceno v srednji šoli, letnikom študija in izobrazbo staršev.

Raziskavo smo z vprašalnikom, ki smo ga razdelili 640 respondentom, izvedli marca 2012. V vprašalniku smo med drugim spraševali po naslednjem: motivaciji za študij, oceni lastne motivacije za študij angleščine v povezavi z nadaljnjim profesionalnim razvojem ter oceni splošnega zadovoljstva s študijskim programom.

V skladu s samodeterminacijsko teorijo, ki sta jo razvila Deci in Ryan (2000), sta intrinzična in ekstrinzična motivacija bistvena dejavnika vsake dejavnosti, tudi učenja. Kot družbeno bitje ima posameznik stike z različnimi družbenimi skupinami, s katerimi deluje v okoliščinah in s tem razvija svojo osebnost (SEJO). Družbeni kontekst, ki katalizira intra- in interosebne razlike, prav tako pomembno vpliva na motivacijo. Gardnerjeva teorija motivacije poudarja pomembnost družbenih komponent in ekstrinzične narave instrumentalne in integrativne naravnosti. O instrumentalno-integrativni dihotomiji je pisal Dörnyei (1994: 279), ki je vpeljal motivacijski okvir, sestavljen iz treh ravni: jezikovne ravni, učenčeve ravni in ravni učne situacije.

Raziskava je pokazala, da so respondenti večinoma visoko motivirani za učenje in da prevladuje intrinzična motivacija. Statistično pomembne razlike smo našli med spolom, povprečno oceno v srednji šoli ter letnikom študija in intenzivnostjo motivacije. Pokazalo se je tudi, da vrsta zaključene srednje šole in izobrazba staršev nista imeli statistično relevantnih korelacij s preučevanimi koncepti.

Ključne besede: intrinzična in ekstrinzična motivacija, zadovoljstvo s študijskim programom, učenje angleščine, profesionalni razvoj.