

EMPLOYABILITY OF ICT GRADUATES IN CROATIA

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ABSTRACT

The employability of graduates has become an important topic of research interest. Generally, graduates with qualifications in driving sectors such as ICT are assumed to be more employable than others. Research on graduate employability based on data collected in the Eurograduate Pilot Survey and analysed using the operational employability model adapted to the Eurograduate Survey supports this assumption and shows that the field of study is one of the factors influencing graduate employability. The results of the analysis, conducted on a sample of graduates with university master's degrees obtained in Croatia in 2016/2017, show that graduates from the broad field of study "Information and Communication Technology - ICT" (ISCED F) are more employable than graduates with comparable qualifications in the reference educational field. The results indicate that for ICT graduates i) the odds ratio of finding employment in occupations vertically matching their qualifications is three times higher than the odds ratio of graduates in the reference field, ii) the probability of finding a job within a shorter period after graduation is 57.2% higher than the same probability for graduates in the reference education field and iii) the gross monthly income is on average EUR 701 higher than the gross monthly income of graduates with comparable qualifications in the reference educational field. These results support the main postulate of human capital theory that investment in high-quality and relevant education and training brings economic benefits to individuals and society.

KEYWORDS

Eurograduate, ICT, Employability, Human Capital Theory

1. INTRODUCTION

Recent developments in education and employment policies, as well as contemporary research findings, show that human capital is becoming increasingly important for the development of individuals as well as for economic growth and the development of inclusive societies. Possessing relevant skills and knowledge arguably increases an individual's chances of finding quality employment after graduation. Building on the basic principles of human capital theory, complemented by the stipulations of cultural capital and social capital theories, as well as constructivist education theory, this paper examines the relationship between the field of study and the employability of graduates and shows what advantages ICT graduates have in the Croatian labour market.

The operational employability model used in this analysis is embedded in the broad theoretical and conceptual framework. It builds on previous research in this area and on existing analytical frameworks that explore the concept of employability. It has been adapted to the Eurograduate instrument and the data collected in the pilot survey. The operational employability model was tested and piloted as part of a wider research of the Eurograduate data and is used in this paper to examine the hypothesis that stipulates that ICT graduates are more employable than graduates from other disciplines.

Employability is measured here by three indicators: i) finding employment in occupations requiring a higher education qualification, ii) in a shorter period of time after graduation, and iii) having a gross monthly income that is higher than the income of persons with comparable qualifications in the reference educational field. Focusing on the relationship between field of study and employability, the assumption that there is a causal relationship between field of study and the three dimensions of employability was tested and the hypothesis was confirmed.

The paper begins with the theoretical and conceptual framework that provides the background for the development of an operational model of employability, presented in Section 2. Section 3 describes the methodology which includes the presentation of the sample, research instrument and research design. Section 4 presents the results and the final Section 5 provides conclusions that highlight the benefits, limitations and potential applications of this study.

2. THEORETICAL AND CONCEPTUAL FRAMEWORK

The theoretical framework for the analysis presented in this paper is grounded in the human capital theory, complemented by the theories of cultural and social capital and constructivist education theory. The conceptual framework is based on the analysis of the chronological development of the construct of employability, the existing analytical frameworks and the models of employability that show the complexity of the different factors that influence the outcomes of individuals in the labour market. The theoretical and conceptual framework formed the basis for the development of the operational employability model applied in the analysis presented here.

2.1 Human, Social and Cultural Capital Theories

Human capital is generally and broadly defined as “a person's skills, knowledge and competencies that are developed through education and training” (Fuente and Ciccone, 2003). Human capital theory, developed in the 1960s by economists Gary Becker and Theodore Schultz (Schultz, 1961; Becker, 1962) has regained prominence with recent policy developments in the knowledge economy and society that depend on people's skills and knowledge. OECD data show that higher educational attainment increases the likelihood of being employed and that higher educational attainment also brings financial rewards. More specifically, the data show that “on average across OECD countries the employment rate is 61% for 25-34 year-olds without upper secondary education and 85% for those with tertiary education” and that “full-time workers with a tertiary degree earn 54% more than those with an upper secondary education” (OECD, 2020).

The focus on individuals' skills and knowledge as important determinants of employability places activating learning and teaching methods (O'Neill and McMahon, 2005; Hannafin and Hannafin, 2010) and engaging student practices or “high impact practices” (Hu and Wolniak, 2013; Wolniak and Engberg, 2019) at the centre of educational theories. According to constructivist theory, people construct their knowledge with their own different experiences and views of reality (Carlile and Jordan, 2005). This implies that students actively learn and engage in knowledge creation (Sfard, 1998) which requires active and deep learning and understanding (Lea, Stephenson and Troy, 2003) as well as high impact practices such as volunteering, studying abroad or work-based learning, that affect early career outcomes (Wolniak and Engberg, 2019).

However, possessing the right skills and knowledge is not enough to explain positive labour market outcomes for individuals. It is necessary to understand the role that a broader social context and access to social resources and networks play in creating educational and career opportunities. The theory of cultural and social capital advanced by the French sociologist Pierre Bourdieu emphasises the importance of family cultural and educational background (Bourdieu, 1977, 1986; Bourdieu and Passeron, 1990) and highlights the value of social networks and connections for advancement in society (Lin, 1999) which includes finding a suitable job after graduation.

2.2 Conceptual Framework

The conceptual framework for the analysis of employability of graduates is based on the chronological developments of employability as an exploratory construct, existing analytical frameworks and employability models that demonstrate the complexity of different factors affecting persons' outcomes in the labour market.

The conceptual framework for analysing graduate employability draws on the chronological development of employability as an exploratory construct, existing analytical frameworks and employability models that reveal the complexity of the various factors that influence individuals' labour market outcomes. A review of the literature shows that since the beginning of the last century, when the focus was exclusively on individual characteristics, i.e. the supply side (Gazier, 2001) the definition and concept of employability has evolved

towards a more complex concept that additionally incorporates the demand side, i.e. characteristics of the labour market and local economy (Peck and Theodore, 2000; McQuaid and Lindsay, 2005). Examples of broad frameworks for employability analysis include individual characteristics, discipline-specific and transversal knowledge, skills and competences as well as personal circumstances on the one hand, and external factors such as labour market demand for certain skills and knowledge on the other hand (Hillage and Pollard, 1998; Dale and Krueger, 2002; Eby, Butts and Lockwood, 2003; de Grip, Loo and Sanders, 2004; McQuaid and Lindsay, 2005; Black and Smith, 2006; Van der Heijde and Van der Heijden, 2006).

The theoretical and conceptual framework provided the background for the development of an operational employability model, additionally adapted to the Eurograduate research instrument used to collect data on graduates. The operational employability model was tested on a set of data on individuals who graduated from a higher education institution in Croatia in 2016/2017 and some results are presented in this paper.

2.3 Operational Employability Model

The operational employability model used in this analysis (Figure 1) identifies cultural, social and human capitals as well as specific learning experiences during higher education as predictors of employability. The interaction between factors associated with cultural and educational family background, socio-economic status, social networking, personal characteristics, knowledge, skills and attitudes, and promoted by activating learning and teaching methods and specific high-impact practices during study, affects graduate employability as measured by three indicators, namely finding employment in occupations matching graduates' qualifications, income and the probability of finding a job in a shorter period of time after graduation. The operational employability model was developed as part of a broader research and doctoral thesis *Employability of Higher Education Graduates: Transition from Higher Education to Labour Market* (Tecilazić, 2023).

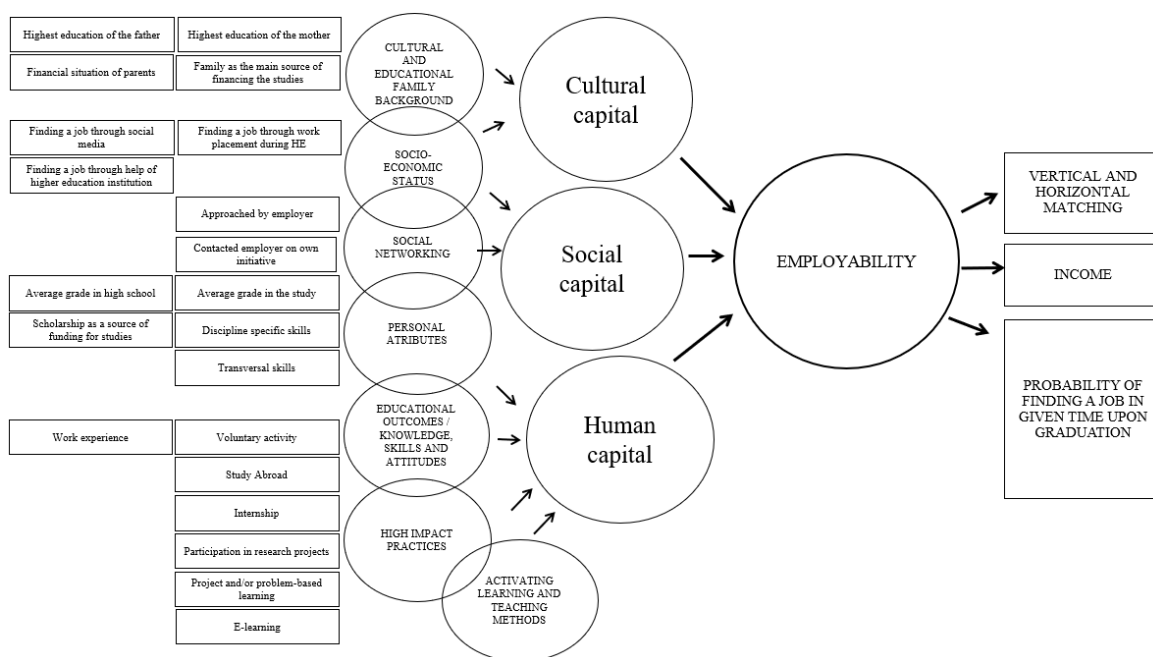


Figure 1. Operational employability model

The predictors of employability in the operational employability model include measured variables and factor scores, as summarised in Table 1. Factor analysis was applied to reduce the number of measured variables indicating the same constructs of human, social or cultural capital, activating learning and teaching methods and high impact practices. The measured variables and factor scores were used as predictors in the multiple regression analysis presented in the following section.

Table 1. Variables included in the operational employability model

MEASURED VARIABLE INCLUDED IN THE OPERATIONAL EMPLOYABILITY MODEL	CONSTRUCT
"Highest education of the mother"	CULTURAL CAPITAL (Cultural and educational family background; Socio-economic status)
"Highest education of the father"	
"Financial situation of parents"	
"Family as a source of financing the studies"	
Successful employment strategy - "Through social media"	SOCIAL CAPITAL (Social networking - Bridging social capital)
Successful employment strategy - "Through help of HEI"	
Successful employment strategy - "Through work placement during HE"	
Successful employment strategy - "Approached by employer"	
"Scholarship as a source of financing the studies"	HUMAN CAPITAL (Educational outcomes – knowledge, skills and attitudes)
"Average final examination grade in secondary education"	
"Average final grade in higher education"	
Successful employment strategy - "Contacted employer by own initiative"	
Discipline specific or different transversal skills	
"Participation in research projects"	Activating Learning and Teaching Methods
"Internships/work placement as formal part of the study programme"	
"Project and/or problem-based learning"	
"E-learning"	
"Study in another country"	High Impact Practice – Study Abroad
"Studying in another country: mobility"	
"Internship as part of or outside the curriculum (abroad)"	
"Voluntary activity related to higher education institution"	High Impact Practice - Volunteering
"Voluntary activity not related to higher education institution"	
"Work experience in the country of HEI not related to study"	High Impact Practice - Working experience
"Work experience abroad that not related to study programme"	
"Work experience before studying"	
"Internship as part of or outside curriculum (country of HEI)"	High Impact Practice - Internship

However, it has to be emphasised that the operational employability model, grounded in a broad theoretical framework, built upon the previous research and conceptual developments of the employability construct, does not include a variety of factors that may influence employability of graduates. The operational employability model was adapted and, therefore, limited to the set of data available from the questionnaire used in the pilot Eurograduate tracking survey.

3. METHODOLOGY

The research findings presented in this paper are part of a broader research and analysis of data collected as part of the Eurograduate Pilot Survey. The method used in this research is multiple regression analysis, using as predictors measured variables and factor scores resulting from factor analysis that indicate constructs of human, social or cultural capital.

3.1 Sample and Instrument

The data on graduates collected between October 2018 and February 2019 as part of Eurograduate, the first pilot study tracking graduates in Europe, includes responses from a total of 16,408 graduates from two cohorts

graduating in 2012/2013 or 2016/2017 in eight European countries (Austria, Croatia, Czech Republic, Germany, Greece, Lithuania, Malta, Norway) (Meng *et al.*, 2020; Rimac, 2020). The final dataset was weighted using population data and then clustered based on the level of qualification (BA, MA) and the type of higher education institution (university, non-university). The analysis presented in this paper is conducted on a sample of 1,620 individuals who graduated from master's programmes at universities in Croatia in 2016/2017. The sample is distributed across nine broad fields of study according to the broad European classification ISCED-F, which includes: Education; Arts and Humanities; Social Sciences; Journalism and Information; Business, Administration and Law; Information and Communication Technologies (ICT); Engineering, Manufacturing and Construction; Agriculture, Forestry, Fisheries and Veterinary; Health and Welfare; and Services. Table 1 provides a description of the demographic characteristics of the sample distributed across the study areas.

Table 2. Description of the sample

Sample characteristics	%
Age	
<24	44.4
25 – 29	46.0
30 – 34	5.0
35 – 39	1.8
40 – 49	2.3
50<	0.4
Gender	
Male	36.6
Female	63.4
Study field	
Education	9.0
Arts and Humanities	11.9
Social Sciences, Journalism and Information	8.3
Business, Administration and Law	25.1
Natural sciences, Mathematics and Statistics	5.8
Information and Communication Technologies	4.1
Engineering, Manufacturing and Construction	14.9
Agriculture, Forestry, Fisheries and Veterinary	5.1
Health and Welfare	11.2
Services	4.6

The survey instrument used in this research was a standardised online questionnaire with data centrally collected and anonymised by the Deutsche Zentrum für Hochschul und Wissenschaftsforschung (DZHW) – German Centre for Higher Education Research and Science Studies.

3.2 Research Design

In analysing the data, multiple linear regression analysis was applied to determine the causal relationship between field of study and employability as measured by three indicators, controlling for other possible predictors identified in the operational employability model (Figure 1). First, logistic regression was used to examine the odds ratio of finding a job in an occupation vertically matched to the qualification. Second, survival analysis and Cox regression were used to examine the factors that influence the probability of finding a job within a short period of time after graduation. Finally, linear regression analysis was used to predict the relationship between field of study as the independent variable and gross monthly income as the dependent variable.

The independent variables were included as covariates in blocks in each analysis. The first block contained eight variables related to fields of study, with "services" being the reference field of study. The second block contained factor scores related to individual characteristics and family cultural and educational background, and the third block contained factor scores related to learning and teaching methods and high-impact practices (volunteering, internships, work experience, study abroad) during studies. The fourth block contained variables related to efficient strategies in finding the first significant job after graduation, as follows: "advertisements in

electronic media"; "Croatian Employment Service"; "contacting the employer on one's own initiative"; "approached by an employer"; "family, friends and acquaintances". The research results are presented in the following section.

4. RESEARCH RESULTS

Research on the employability of graduates based on data collected in the Eurograduate Pilot Survey shows that graduates in the broad field of study "Information and Communication Technology - ICT" (ISCED F) are more employable than graduates with comparable qualifications in the reference educational field.

First, the logistic regression results (Table 3) show that, controlling for other variables, five predictors have a significant impact on success in obtaining a job requiring a master's level degree (vertical matching): field of study, cultural capital, human capital, social capital and work experience. The regression analysis shows that the odds ratio of finding employment in occupations that vertically match the qualifications of graduates with a master's degree from universities in Croatia is 309% higher for ICT graduates than the corresponding odds ratio for graduates with a master's degree in the reference educational field of "Services" (B = 1.407; Exp(B) = 4.085; p = 0.014).

Table 3. Predictors for vertical matching of qualifications and occupations

	B	S.E.	Wald	df	Sig.	Exp(B)
Status (full time)	0.458	0.259	3.125	1	0.077	1.582
ISCED field			25.157	9	0.003	
Education	1.225	0.457	7.197	1	0.007	3.404
Arts and Humanities	0.781	0.439	3.163	1	0.075	2.184
Social Sciences, Journalism and Information	0.520	0.433	1.441	1	0.230	1.682
Business, Administration and Law	0.666	0.368	3.288	1	0.070	1.947
Natural Sciences, Mathematics, Statistics	1.078	0.509	4.489	1	0.034	2.939
Information and Communication Technologies	1.407	0.570	6.093	1	0.014	4.085
Engineering, Manufacturing and Construction	0.276	0.391	0.499	1	0.480	1.318
Agriculture, Forestry, Fisheries and Veterinary	-0.181	0.571	0.101	1	0.751	0.834
Health and Welfare	1.393	0.433	10.350	1	0.001	4.026
Family cultural capital	0.312	0.084	13.691	1	0.000	1.366
Human capital (education outcomes)	0.355	0.092	14.789	1	0.000	1.426
Passive learning and teaching methods	-0.063	0.082	0.591	1	0.442	0.939
Active learning and teaching methods	0.038	0.076	0.252	1	0.616	1.039
Study abroad	0.001	0.076	0.000	1	0.990	1.001
Volunteering	-0.018	0.080	0.050	1	0.823	0.982
Work experience	0.200	0.081	6.112	1	0.013	1.221
Internship	-0.124	0.083	2.206	1	0.137	0.884
Finding a job through advertisement in (online) newspaper	-0.276	0.193	2.041	1	0.153	0.759
Finding a job through the Croatian Employment Service	-0.179	0.194	0.853	1	0.356	0.836
Finding a job through social media	0.062	0.338	0.033	1	0.855	1.064
Finding a job by contacting the employer - own initiative	0.329	0.191	2.972	1	0.085	1.390
Finding a job by being approached by an employer	0.920	0.271	11.551	1	0.001	2.510
Finding a job through work placement	0.369	0.367	1.011	1	0.315	1.446
Finding a job through family, friends or acquaintances	-0.787	0.196	16.079	1	0.000	0.455
Finding a job through higher education institution	0.290	0.362	0.640	1	0.424	1.336
Finding a job through internship	-0.108	0.448	0.058	1	0.810	0.898
Constant	-0.142	0.415	0.117	1	0.732	0.868

Secondly, the results of the Cox regression (Table 4) show that when controlling for other variables, the factors that affect obtaining a job in a shorter time after graduation for graduates with a master's degree from universities in Croatia are the field of study and the specific strategies used in obtaining the first job. The regression analysis shows that the probability of finding a job in a shorter time after graduation is 57.2% higher for graduates from the ICT sector than for graduates from the reference field of study "Services" (Exp(B) = 1.572; p = 0.031).

Table 4. Predictors for probability of finding a job in a shorter period of time after graduation

	B	SE	Wald	df	Sig.	Exp(B)	95.0% CI for	
							Exp(B)	Exp(B)
Gender	-0.035	0.071	0.240	1	0.625	0.966	0.840	1.111
Status (full time)	0.595	0.108	30.189	1	0.000	1.813	1.466	2.242
ISCED field			18.841	9	0.027			
Education	0.092	0.192	0.230	1	0.631	1.097	0.752	1.599
Arts and Humanities	-0.258	0.199	1.682	1	0.195	0.773	0.524	1.141
Social Sciences, Journalism and Information	-0.005	0.199	0.001	1	0.981	0.995	0.673	1.471
Business, Administration and Law	0.044	0.179	0.061	1	0.804	1.045	0.737	1.483
Natural Sciences, Mathematics, Statistics	0.058	0.192	0.091	1	0.763	1.060	0.728	1.543
Information and Communication Technologies	0.452	0.210	4.653	1	0.031	1.572	1.042	2.371
Engineering, Manufacturing and Construction	0.067	0.189	0.124	1	0.725	1.069	0.738	1.548
Agriculture, Forestry, Fisheries and Veterinary	-0.015	0.399	0.001	1	0.970	0.985	0.450	2.155
Health and Welfare	0.001	0.190	0.000	1	0.997	1.001	0.690	1.451
Family cultural capital	-0.036	0.032	1.286	1	0.257	0.965	0.907	1.026
Human capital (education outcomes)	0.002	0.035	0.004	1	0.947	1.002	0.936	1.073
Passive learning and teaching methods	-0.033	0.030	1.179	1	0.278	0.968	0.913	1.027
Active learning and teaching methods	-0.040	0.030	1.776	1	0.183	0.960	0.905	1.019
Study abroad	0.019	0.027	0.481	1	0.488	1.019	0.967	1.073
Volunteering	0.061	0.031	3.803	1	0.051	1.063	1.000	1.130
Work experience	-0.040	0.033	1.448	1	0.229	0.961	0.901	1.025
Internship	-0.009	0.031	0.080	1	0.778	0.991	0.932	1.054
Finding a job through advertisement in (online) newspaper	-0.129	0.077	2.792	1	0.095	0.879	0.756	1.022
Finding a job through the Croatian Employment Service	-0.312	0.075	17.491	1	0.000	0.732	0.633	0.847
Finding a job through social media	0.142	0.126	1.280	1	0.258	1.153	0.901	1.475
Finding a job by contacting the employer - own initiative	-0.254	0.073	12.147	1	0.000	0.775	0.672	0.895
Finding a job by being approached by an employer	0.142	0.089	2.530	1	0.112	1.153	0.968	1.373
Finding a job through work placement	0.357	0.116	9.522	1	0.002	1.428	1.139	1.791
Finding a job through family, friends or acquaintances	-0.009	0.082	0.011	1	0.915	0.991	0.845	1.163
Finding a job through higher education institution	0.196	0.120	2.695	1	0.101	1.217	0.963	1.539
Finding a job through internship	0.105	0.155	0.459	1	0.498	1.111	0.820	1.504

Finally, the results of the linear regression (Table 5) show that when controlling for other variables, the following factors predict obtaining a job with higher income: the field of study and the use of social media when finding employment, while finding a job through the Croatian Employment Service has a statistically significant and negative effect on obtaining a job with higher monthly income. The regression analysis showed that among graduates with a master's degree obtained at universities in Croatia, those with qualifications in ICT are likely to find a job with an average gross monthly income that is EUR 701 higher than that of graduates with comparable qualifications in the educational field of "Services" ($B = 701.420$; $p = 0.004$).

Table 5. Predictors for finding employment with a higher gross monthly income

	Unstand. Coef.	Stand. Coef.	t	Sig.	95.0% Confidence Interval for B	
(Constant)	1217.462	185.739	6.555	0.000	852.909	1582.016
Education	-318.067	215.681	-0.084	-1.475	0.141	-741.389 105.254
Arts and Humanities	-350.737	217.003	-0.088	-1.616	0.106	-776.653 75.180
Social Sciences, Journalism and Information	-196.521	221.292	-0.047	-0.888	0.375	-630.856 237.814
Business, Administration and Law	-100.993	190.103	-0.040	-0.531	0.595	-474.111 272.126
Natural Sciences, Mathematics, Statistics	-174.432	235.777	-0.036	-0.740	0.460	-637.197 288.333
Information and Communication Technologies	701.420	241.484	0.137	2.905	0.004	227.455 1175.385
Engineering, Manufacturing and Construction	181.022	200.601	0.059	0.902	0.367	-212.702 574.746
Agriculture, Forestry, Fisheries and Veterinary	-303.795	279.884	-0.046	-1.085	0.278	-853.128 245.538
Health and Welfare	172.708	206.354	0.052	0.837	0.403	-232.306 577.723
Family cultural capital	-8.237	36.452	-0.008	-0.226	0.821	-79.782 63.308
Human capital (education outcomes)	46.029	40.247	0.041	1.144	0.253	-32.965 125.022
Passive learning and teaching methods	-24.708	36.874	-0.022	-0.670	0.503	-97.081 47.666
Active learning and teaching methods	-32.597	35.639	-0.030	-0.915	0.361	-102.547 37.352
Study abroad	-57.355	32.599	-0.059	-1.759	0.079	-121.338 6.628
Volunteering	53.456	35.922	0.051	1.488	0.137	-17.050 123.962
Work experience	-42.498	37.311	-0.038	-1.139	0.255	-115.729 30.732
Internship	-66.171	38.098	-0.060	-1.737	0.083	-140.946 8.605
Finding a job through advertisement in (online) newspaper	96.128	89.351	0.038	1.076	0.282	-79.243 271.499
Finding a job through the Croatian Employment Service	-307.094	89.477	-0.119	-3.432	0.001	-482.712 -131.476
Finding a job through social media	488.582	157.008	0.104	3.112	0.002	180.421 796.744
Finding a job by contacting the employer - own initiative	-156.351	84.469	-0.065	-1.851	0.065	-322.139 9.437
Finding a job by being approached by an employer	112.995	104.578	0.037	1.080	0.280	-92.263 318.253
Finding a job through work placement	-5.729	138.644	-0.001	-0.041	0.967	-277.848 266.390
Finding a job through family. friends or acquaintances	-56.982	92.593	-0.021	-0.615	0.538	-238.716 124.753
Finding a job through higher education institution	-213.325	143.295	-0.050	-1.489	0.137	-494.573 67.924
Finding a job through internship	154.125	197.230	0.026	0.781	0.435	-232.982 541.231

The results of the analysis show that, controlling for other variables, the field of study has a significant predictive effect on employability and that individuals with a degree in ICT have a higher probability of obtaining a better-paid job that matches their qualifications in a shorter time after graduation than their counterparts with qualifications from the reference field. It can be concluded that those who manage to find quality employment soon after graduation, where they can use the skills and knowledge they acquired during their education and where their qualifications pay off, are arguably more employable than those who have difficulty finding employment, or who take jobs that do not match their skill level and profile, or jobs with lower incomes.

5. CONCLUSION

Research on the employability of graduates based on data collected in the Eurograduate Pilot Survey shows that graduates from ICT programmes are more employable than graduates with comparable qualifications in the reference educational field. More specifically, ICT graduates are three times more likely to find employment in occupations vertically matching their qualifications than graduates in the reference field. The probability of finding a job within a shorter period of time after graduation is 57.2% higher for ICT graduates than for graduates of the reference educational field. The gross monthly income for ICT graduates is on average 701 EUR higher than the gross monthly income of graduates with comparable qualifications in the reference educational field.

It should be noted, however, that much of the data has been anonymised or categorised into broader groups in accordance with the General Data Protection Regulation. For example, study programmes have been grouped into broad fields of study, which limits the researcher's ability to conduct a more detailed analysis and provide evidence of comparative differences between qualifications from different educational fields and from different higher education institutions. Another limitation of this study is the limitation of the operational employability model itself. Although the theoretical and conceptual framework, elaborating on the complexity of the employability construct, acknowledge the labour market demand as a predictor of graduates' employability, the model was adapted to the Eurograduate data set which does not contain data on the employability factors from the side of the labour market demand.

Nevertheless, these research findings support the main postulate of human capital theory that investment in high-quality and relevant higher education brings economic and non-economic benefits to individuals and society. Based on the theories of human capital, cultural capital and social capital, as well as constructivist education theory, the operational employability model has proven to be effective in demonstrating a causal link between the field of study and graduates' employability. The model can be further applied in the analysis of a different data sets and cross-national comparisons can be made to further improve the understanding of graduate employability.

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