

A CONTRIBUTION OF INTERNSHIP IN HIGHER EDUCATION TO THE FUTURE EMPLOYMENT OF STUDENTS

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ABSTRACT

In a turbulent business environment, it is extremely important to provide the adequate qualifications for students who will have the knowledge and skills after finishing their studies to fit into the working environment. Rapid adaptation to the working environment is equally important to a student, who has greater confidence in the new environment, as well as an employer, who does not suffer any major losses due to being introduced new employee into the business process. Different forms of internship programmes in higher education endeavour to increase employability of students after graduation. This paper analyses the contribution of internship in higher education to the better employment possibilities for students. The factor analysis is made according to the survey on employability of students after their graduation. The main thesis was that internship contributes to easier employment after graduation. After the conducted research, we find that the internship programs contribute to linkage of theoretical knowledge with practical work and increase students' awareness of the profession. Also, the most of the students remained working with the same employer after completing their internship programs, what confirms the thesis that internship programs have impact on the future employment.

INTRODUCTION

The form and scope of internships in Croatia varies between different institutions within higher education. Besides the specialities and needs of study programs, the internship varies between the different institution that provide same study programs. (Botrić, 2017) Also, the perception of significance of internships by students and employers is different among different study fields (Botrić, 2017), but mostly there is still insufficiently developed awareness about the importance of internships for the future employment.

Profit-oriented society has less and less understanding for workers with a higher education degree without working experience. This opens up a huge gap between employers and young people without experience. The reason for this gap lies in the problem where employers require professional experience as a precondition for job application, while people with just completed studies usually do not have the required professional experience. Also, fast development and changes in business process decrease the effectiveness of teaching and study programs.

On the other hand, students often perceive internship as additional obligation that deprives their time and has no special importance for their education.

The gap between employers and people after completing their formal education could be solved by strengthening student's internship program. Students internship is first formal working experience and should be part of teaching process. In general, developed economies realized that there are many benefits of coupling higher educational system and real sector. In that way

the educational system is becoming working-based learning system. Improving the internship program is crucial among the students because it enriches their experiences, knowledge and skills. In that way, the students increase their level of confidence which is very important for their future job opportunities (Jaradat, 2017). There are many benefits for students that participate actively in internship programs; a) job-related benefits (acquiring professional skills and work experience), b) career-related benefits (career development support, social support and role modelling) c) and networking/job market benefits (creating links and network with other people in the business world) (Maertz et al., 2014, Kohlmeyer et al., 2017). The surge in popularity of internships in higher education is not only a consequence of someone's individual choices; it is also the result of universities which emphasizing the importance of internships as part of the broader educational experience on one side and students with greater chances of getting a job after college cause of the internship. A central objective of higher education all over Europe becomes employable of graduates especially after Bologna Reform was accepted (Teichler, 2011).

The aim of this paper is to confirm the importance of internship in higher education to the future employment of students. The main thesis is that internship program brings benefits to the students and increases the employment opportunities.

The methodology involves the use of a questionnaire with 12 question survey to disclose the importance of students' internship programs for their future employment. The survey was conducted in the period of June 2019 till August 2019. The findings confirm the main thesis of this paper and evidence of huge importance of students' internship program in higher education system. This paper is divided in three main parts. The first part is about introduction and literature review, the second part is about survey analysis, and the last part is about main conclusions.

LITERATURE REVIEW

In the fast developing environment, the significance of student internship becomes more and more important. Today the educational system encourages working-based learning and the curriculum include internship in much wider volume. There is numerous analysis that confirm the benefits of internship programs and that the internships are necessary to increase undergraduates' employability after their graduation. (Binder et al., 2015, Lian et al., 2018)

Internship is a form of interactions that students can use to acquire empirical knowledge that could help them to the faster transition to their future workplaces. Internships and mentoring programs provide several benefits for students. After experiencing working in real sector, students are becoming organizationally dedicated and have more self-confidence. (D'Abate, 2010)

Sanahuja Vélez and Ribes Giner (2015) provided a systematic review of the impact of internships completed by university students. The findings of this study confirm the positive effects of business internships for all participants of internship programs; students, employers, and higher education institutions.

Internships as work-based learning enable students to participate in skills competition, co-operative education and job shadowing. (Nicholas et al., 2015) Students who attended actively internship programs are able to apply basic academic skills and know the professional skills that are expected by employers. In the same time, these students have positive attitude toward work and they are more willing to take responsibility for the job done. (Kapereliotis et al., 2019)

The new graduates' success in the workplace does not depends only on their theoretical knowledge gained through formal educational process, but also on specific competencies that

students could gain through working-based learning. There are five highest-ranking competencies (soft skills) that are necessary for success in business environment; a) ability and willingness to learn, b) teamwork and cooperation, c) hardworking and willingness to take on extra work, d) self-control and e) analytical thinking. These competencies could be developed only if universities work together with real sector to develop workplace-oriented programmes. (Pang, et al., 2018). When students experience the theoretical knowledge in real working system, they realize the real benefit of learning process and the applicability of teaching materials. In the end, students assess the learning through practical experience very positively. (Renganathan et al., 2012) During the internship program, students develop a comprehensive understanding of how to apply theoretical knowledge to solve practical problems. (Breum Ramsgaard, Juul Ostergaard, 2017)

Weible and McClure (2014) confirmed that internship programs improved class-room discussions, increased enrolment, and enhanced department reputation. Also, students who participated in internship programs were hired sooner by the best organizations into better positions with higher salaries relative to students without internships.

DATA AND METHODOLOGY

The survey was conducted in the period of June 2019 till August 2019 on 300 respondent. We received 60 valid answers after which we made analysis using various statistical methods such as the factor analysis presented in this paper. The enumerated subjects were students from Applied University Baltazar. The questionnaire of the study consists of two sections. The first section (Table 1) consists of demographical information of the participants (gender, age, study programmes and their working status) and descriptive statistic analysis (Table 2). The second section consists present the items used for the factor analysis which are formulated in a five-point Likert scale. Likert scale is the most frequently used scale in surveys. It assesses the degree respondent opinion and position as follows: 5- strongly agree; 4- agree; 3- neither agree nor disagree; 2- disagree; 1- strongly disagree. Factor analysis was used to evaluate the contribution of student internships. Factor analysis according to Tabachnick and Fidell (2001) is technique that requires a large sample size and it is based on the correlation matrix of the variable involved, and correlations usually need a large sample (Comrey and Lee, 1992) size before they stabilize. As a rule of thumb, a bare minimum is 10 observations per variable is necessary to avoid computational difficulties. In our paper we have 60 participations for 1 variable, what means that the necessary condition is met. Using factor analysis we quantify the contribution of each item to each of the resulting factors. This is possible due to means of the factor loading.

Table 1. Demographic students' profile

	<i>Percentage %</i>
<i>Gender</i>	
Male	50%
Female	50%
<i>Age Distribution</i>	
18-25	3,3%
26-35	65%
35-50	26,7%
Over 50	5%
<i>Study Programmes</i>	
Undergraduate study of Business Economics and Finance	18,3%

Undergraduate study of Office Management	5%
Undergraduate study of Cultural Management	13,3%
Graduate study of Financial Management	8,3%
Graduate study of Communications Management	10%
Graduate study of Project Management	40%
Graduate study of Public Sector Management	5%
<i>After internship I stay work at the same employer</i>	
Yes	41,7%
No	58,3%

Source: Authors calculations based on the result of Frequencies in SPSS program

According to the data, the overwhelming majority of the participating students (65%) are between 26 and 35 years and the remaining 35% belong to the following categories: 26,7% are between 35 and 50 years old, 5% over 50 years old and 3,3% are between 18 and 25 years old. 63,3% of the total number of students finished some of the Graduate Program, while 36,7% finished Undergraduate program. 41,7% students stayed working with the same employer after finishing the internship program. This result confirms that internship programs lead to better future employment.

Descriptive statistical analysis was applied throughout the whole sample. The arithmetic mean and the standard deviation for each statement were calculated in order to determine the homogeneity/heterogeneity of the students' attitudes. The obtained results of descriptive statistical analysis are presented in Table 2.

Table 2. Descriptive Statistics

	N	Mean	Std. Deviation
Experience of internship give me the knowledge to get me a better job after collage	60	3,1167	1,54142
Program of internship prepared me to be a better employee	60	3,2333	1,49991
Experience of internship helped me connecting theoretical knowledge with practical	60	3,2833	1,4623
Experience of internship increase my knowledge about profession	60	3,3167	1,50132
Experience of internship helped me to network with professionals	60	3,2667	1,65567
Internship gives me a relative knowledge and practical experience for my future business environment	60	3,4167	1,39359

Source: Authors calculations based on Descriptive Statistics in SPSS program

The most acceptable statements were that "Internship gives me a relative knowledge and practical experience for my future business environment" where the highest value of the arithmetic means (3,41). The statement "Experience of internship increase my knowledge about the profession" was also high with arithmetic mean of 3,31.

The highest heterogeneity of respondents was obtained with the statements that "Experience of internship helped me to network with professionals which means that the highest degree or disagreement among respondents is because of the standard deviation of 1,65567. The lowest value of the standard deviation (1,39359) was obtained from statement that "Internship gives me a relative knowledge and practical experience for my future business environment" which is the most common answer among students at the same time.

First step in our second part of research was reliability test. In reliability statistics, results of Cronbach's Alpha that we were looking for had to be higher than 0,7. Reliability Statistics in our case is 0,969 which means that there is high degree of reliability between all of the item.

Table 3. Reliability Statistics

Cronbach's Alpha	.969
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Source: Author's calculation based on the result of Reliability Statistics in SPSS programme

Table 4. Reliability Statistics for each item

	Cronbach's Alpha if item Deleted
Q1	.961
Q2	.957
Q3	.965
Q4	.964
Q5	.961
Q6	.966

Source: Author's calculation based on the result of Reliability Statistics in SPSS programme

A Cronbach's analysis was conducted on the item "Q1 - experience of internship gives me the knowledge to get a better job after college, Q2 - program of internship prepared me to be a better employee, Q3 - experience of internship helped me connecting theoretical knowledge with practical, Q4 - experience of internship increased my knowledge about profession, Q5 - experience of internship helped me to network with professionals and Q6 – internship provides a knowledge of practical experience for my future business environment." It was found that the subscale's alpha level was 0,96, which indicates that the subscale has an adequate level of inter-item reliability.

When it comes to the justification tests for the use of factor analysis satisfactory, according to the results the justification for the implementation of this method is achieved.

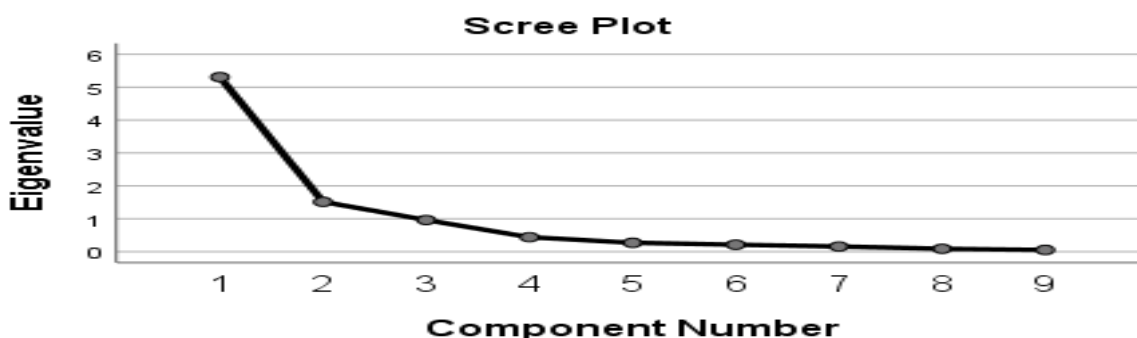
Table 5. KMO and Bartlett's Test

Kaiser-Mayer-Olkin Measure of Sampling Adequacy		,873
Bartlett's Test of Sphericity	Approx. Chi-Square	488,251
	df.	36
	Sig.	,000

Source: Authors calculations based on the result of Factor Analysis in SPSS program

The Kaiser-Mayer-Olkin Measure of Sampling Adequacy [Tabachnick, Fidell (2007.), Hair et al. (2006.)] measure varies between 0 and 1, and values closer to 1 are better. Suggested minimum is 0,6, and in our example it is 0,873. Since the factor analysis uses correlations between the variable, it is necessary to conduct Bartlett's test. Bartlett's test tests the null hypothesis that the correlation matrix is an identity matrix. Results of Bartlett's test (Table 5) show that there is a statistical significance $p < 0,001$. Image 1 presents our results of the total variance in which is visible that the first two components have eigenvalues larger than 1 (first component 58,954% and the second one 16,821 %). These components explain a total of 75,77% variance which is in line with other researches in the field of social sciences (Kurnoga-Živković, 2004).

Image 1. Total variance explained - Initial Eigenvalues (% of Variance)



Source: Authors calculations based on the result of Total Variance Explained in Factor analysis in SPSS program

Further, the Component Matrix contains factor loads that represent coefficients of correlation between executed factors and variables. The load factor indicates the importance of each variable for each factor (Kurnoga-Živković, 2004).

In the results of these research, the initial matrix has no characteristic of a simple structure because the first item has a large number, and the individual variables are correlated with two components. Therefore, after the first extraction, a factor rotation was performed that changed the relationship between variables and factors. The basic aim of rotation is to provide a simple interpretation of the factors. The rotation was performed by an orthogonal method that includes uncorrelated factors. The Varimax method has been applied, which in comparison with the others is most successful in achieving the principle of a simple structure. Only those factor weights greater than 0.5 will be taken into account.

Table 6. Rotated Component Matrix

	Component	
	1	2
Experience of internship give me the knowledge to get me a better job after collage	,964	
Program of internship prepared me to be a better employee	,944	
Experience of internship helped me connecting theoretical knowledge with practical	,937	
Experience of internship increase my knowledge about profession	,919	
Experience of internship helped me to network with professionals	,911	
Internship gives me a relative knowledge and practical experience for my future business environment	,903	
After graduating you stay working at the same employee		,853
After the end of the program internship I stay work with the same employee		,822
Study Program		-,356

Authors calculations based on the result of Factor analysis in SPSS program

After the factor rotation, a matrix is presented in Table 7, where for each factor can be clearly distinguished high values of factor weight. Thus, they are in the first factor explaining all the variance of the associated constraints with factor weights higher than 0.55. The two-dimensional solution explained a total of 58.954% of variance, with the contribution of the first factor, while the 16.821% contribution of the second factor.

Contribution of internships to future student recruitment, while another factor will be called the impact of study orientation on future employment.

The results of the conducted factor analysis show that in this study there is no confirmation of the existence of all six dimensions affecting the student's employability increase while the factor analysis of the perception scale confirmed the two-dimensional structure. Rotated solution revealed the existence of a simple structure.

This means that by applying factor analysis, as a method of multivariate analysis, it can successfully identify the impact of internships on increasing students' employment and as such they can be considered relevant for further analysis and research.

CONCLUSION

The main findings of this paper are: a) the confirmation of importance of internship programs both for students and for employers and b) students benefit from internship programs by having working experience. Most of the respondents remained working with the same employer after completing their internship programs. Also, the experience of internship program provided students with the opportunity for networking with industry and business environment colleagues. The internship program increased the students' awareness of the profession and helped them to combine theoretical knowledge with practical work. The results of factor analysis are in accordance with other empirical studies. Hynie et al. (2011) also confirmed that students acquire research and professional skills and new understanding of theoretical knowledge.

LITERATURE

Binder, J. F., Baguley, T., Crook, C., Miller, F. (2015) The academic value of internships: Benefits across disciplines and student backgrounds, *Contemporary Educational Psychology*, Vol 41, pp 73-82, <https://www.sciencedirect.com/science/article/pii/S0361476X14000745>, [09.07.2019.]

Botrić, V. (2017) Studija o stručnoj praksi u visokom obrazovanju, Ministarstvo znanosti i obrazovanja, https://mzo.hr/sites/default/files/dokumenti/2017/OBRAZOVANJE/Visoko/Razvoj_visokog/studija_o_strucnoj_praksi_u_visokom_obrazovanju.pdf, [01.07.2019.]

Breum Ramsgaard, M., Juul Østergaard, S. (2017) An entrepreneurial learning approach to assessment of internships, *Education + Training*, <https://www.emerald.com/insight/content/doi/10.1108/ET-11-2016-0164/full/html>, [09.07.2019.]

Comrey, A. L., & Lee, H. B. (1992). *A First Course in Factor Analysis* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

D'Abate, C. (2010) Developmental Interactions for Business Students: Do They Make a Difference?, *Journal of Leadership & Organizational Studies*, Vol 17 issue: 2, page(s): 143-155,

<https://journals.sagepub.com/doi/abs/10.1177/1548051810370795?journalCode=jlob>, [09.07.2019.]

Hynie, M., Jensen, K., Johnny, M., Wedlock, J., Phipps, D. (2011) Student internships bridge research to real world problems, *Education + Training*, Vol. 53 Issue: 2/3, pp.237-248, <https://www.emeraldinsight.com/doi/abs/10.1108/00400911111115753>, [01.07.2019.]

Jaradat, G. M., (2017) Internship training in computer science: Exploring student satisfaction levels, *Evaluation and Program Planning*, 63, (109), https://www.ncbi.nlm.nih.gov/pubmed/?term=Jaradat%20GM%5BAuthor%5D&cauthor=true&cauthor_uid=28456017, [08.07.2019.]

Kapareliotis, I., Voutsina, K., Patsiotis A. (2019) Internship and employability prospects: assessing student's work readiness, *Higher Education, Skills and Work-Based Learning*, <https://www.emerald.com/insight/content/doi/10.1108/HESWBL-08-2018-0086/full/html>, [09.07.2019.]

Kohlmeyer, J. M. III, Parker, R. J., Sincich, T. (2017) Career-Related Benefits and Turnover Intentions in Accounting Firms: The Roles of Career Growth Opportunities, Trust in Superiors, and Organizational Commitment, *Advances in Accounting Behavioral Research*, Emerald Publishing Limited, <https://www.emerald.com/insight/content/doi/10.1108/S1475-148820170000020001/full/html>, [09.07.2019.]

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (Vol. 6).

Kurnoga Živadinović, N. (2004). Defining the basic product attributes using the factor analysis. *Ekonomski pregleđ*, 55(11-12), 952-966. https://hrcak.srce.hr/index.php?id_clanak_jezik=24758&show=clanak, [19.07.2019.]

Lian, K. M. J., Foo, Z. Y., Ling, F. Y. Y. (2018) Value of internships for professional careers in the built environment sector in Singapore, *Engineering, Construction and Architectural Management*, Vol. 25 No. 1, pp. 77-89, <https://www.emerald.com/insight/content/doi/10.1108/ECAM-09-2015-0133/full/html>, [08.07.2019.]

Maertz, C. P. Jr., Stoeberl, P. A., Marks, J. (2014) Building successful internships: lessons from the research for interns, schools, and employers, *Career Development International*, 19, 1, (123), <https://www.emerald.com/insight/content/doi/10.1108/CDI-03-2013-0025/full/html>, [09.07.2019.]

Nicholas, J., Chae, C., Hussain, M. A. M., Zulkifli, R., Passmore, D. (2015) School-to-Work Revisited: Did Work-Based Learning Experiences Improve Prospects for Students in Career and Technical Education?, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2703854, [09.07.2019]

Pang, E., Wong, M., Leung, C. H., Coombes, J. (2018) Competencies for fresh graduates' success at work: Perspectives of employers, *Industry and Higher Education*, Volume: 33 issue: 1, page(s): 55-65, <https://journals.sagepub.com/doi/10.1177/0950422218792333>, [08.07.2019.]

Renganathan, S., Zainal Ambri Bin Abdul Karim, Chong Su Li (2012) Students' perception of industrial internship programme, *Education + Training*, Vol. 54 No. 2/3, pp. 180-191, <https://www.emerald.com/insight/content/doi/10.1108/00400911211210288/full/html>, [08.07.2019.]

Sanahuja Vélez, G., Ribes Giner, G. (2015) Effects of Business Internships on Students, Employers, and Higher Education Institutions: A Systematic Review, *Journal of Employment Counseling*, 52, 3, (121-130), https://www.researchgate.net/publication/281488878_Effects_of_Business_Internships_on_Students_Employers_and_Higher_Education_Institutions_A_Systematic_Review, [08.07.2019.]

Tabachnick, B. G., Fidell, L. S. & Ullman, J. B. (2007) *Using multivariate statistics* (Vol. 5). Boston, MA: Pearson.

Teichler, U. (2011). Bologna–Motor or stumbling block for the mobility and employability of graduates?. In *Employability and mobility of bachelor graduates in Europe* (pp. 3-41). Brill Sense.; <https://brill.com/view/book/edcoll/9789460915703/BP000003.xml>, [18.07.2019.]

Weible, R, McClure, R (2014) An Exploration of the Benefits of Student Internships to Marketing Departments, *Marketing Education Review*, 21:3, 229-240, DOI: 10.2753/MER1052-8008210303, www.tandfonline.com/doi/abs/10.2753/MER1052-8008210303, [01.07.2019.]