

Attitudes of Students and Employers to the Use of Student Centers' IT Services

Sonja Nidogon Višnjic

University of Zagreb

Faculty of Organization and Informatics

Pavlinska 2, 42000 Varaždin

svisnjic@foi.unizg.hr

Katarina Pažur Aničić

University of Zagreb

Faculty of Organization and Informatics

Pavlinska 2, 42000 Varaždin

kpazur@foi.unizg.hr

Abstract. *The work of students through authorized intermediaries, during their secondary, tertiary and post-academic education is an important segment that is largely related to academic success, and carries with it both positive and negative characteristics. The development of information and communication technology (ICT), new tools that enable education and distance work, as well as adaptations of the institutions dealing with student work, should contribute to better coordination between student work and individual academic success. An additional impetus to the use of ICT in mediation in the performance of student work was stimulated by the appearance of COVID-19. This paper explores the attitudes of users of student services in the Republic of Croatia, students and employers, towards the use of online student contracts. Although the system of issuing online student contracts has existed for several years, the research results show that students are still more inclined to pick up student contracts at physical student service locations, but also that external incentives, such as the recent situation with COVID-19, affect increased use of online student contracts.*

Keywords. student work, student contracts, online services

1 Introduction

The temporary and occasional work of students is, not only a positive contribution to the developmental and cognitive skills of the individual, but it also represents the financial aspect, which is an important driver of work engagement. Student work during academic education is a common occurrence, and is widespread in economically developed countries around the world. The work of students and other persons in the Republic of Croatia (RH) is regulated by the Law on conducting student jobs, which is relatively recent, from November 8, 2018. (Narodne Novine, n.d.-b). Until its

adoption, the Rule book on mediation in the employment of full-time students from 1996 (Narodne Novine, n.d.-a) was in force. For the first time, the 2018 law prescribes the mediator to keep electronic databases and issue electronic contracts, thus directly encouraging the digital transformation in the work of student centers, which includes the introduction of an electronic student contract, electronic invoice and electronic signature. Although the e-inclusion of all stakeholders when it comes to student work is an assumption that is legally regulated, in practice it is currently not fully feasible. An online student contract has been introduced in the practice of student services, which cannot be treated as an electronic contract, because neither employers nor students sign it with smart electronic signatures. Currently, all student services have enabled the issuance of online student contracts, but they cannot be considered electronic contracts. In practice, there is often a confusion as uninformed users believe that a scanned user signature (sent electronically) is an electronic signature.

The aim of this paper is to investigate the attitudes of students and employers towards the use of existing information and communication services available by student centres in the Republic of Croatia and to determine the impact of the emergence of COVID-19 on their use.

2 Theoretical Framework

2.1 Previous Research

It has been found that early employment of young people results in better work experience in the long term and that education and work during education have a positive effect on employment and financial independence (Adams, 1978). Some authors deny the negative consequences of student work, and conclude that work during studies even improves academic success, but only if paid work does not exceed a certain

threshold of the number of working hours, which does not take away students the time needed to master academic obligations (Kosi et al., 2013), (Applegate & Daly, 2006). The cost of higher education in the UK and the need for self-financing of students through employment during their studies contributes to a higher probability of employment of students whose parents have higher education, and a higher probability of employment of female students belonging to ethnic minorities (Metcalf, 2003). The need for self-financing of studies leads to the division of studies into those that facilitate work during studies and those that do not prefer work during studies, with an emphasis on more prestigious universities (Metcalf, 2003). Working during studies is important for future careers, not only as a financial factor but also to help students increase their competitive advantage and gain certain work experiences. Work attitudes and career choice itself are important factors influencing student work during their studies (Wang & Chen, 2017), (Patel et al., 2012).

Observing the countries of the Western Balkans, the authors emphasize the positive side of student work as an investment in human capital, highlighting the age of students in all three countries as a predictor. In Serbia, the level of studies stands out as a predictor, in Montenegro the level and field of studies, while in Bosnia and Herzegovina the educational level of parents is an important predictor (Savić & Kresoja, 2018). Research on the consequences of combining study and work with special emphasis on stress shows that work does not cause additional stress for students but represents valuable work experience, but as a result they spend less and less time in compulsory education, and therefore institutions should enable and adjust student obligations to student work (Smith & Schoffstall, 2020), (Savić & Kresoja, 2018), (Robotham, 2012). Students are not dissatisfied with the fact that they spend part of their free time working, but with the academic schedule and obligations that are inconsistent and consider them a burden (Robotham, 2013), (Lingard, 2007). Studying the socio-economic aspects of student work, it was noticed that occasional work actually enriches school life and increases social inclusion, but at the same time harms students' relationships with parents (Manthei & Gilmore, 2005), (Lingard, 2007).

The number of students in the Republic of Croatia is declining, which is in line with the demographic picture of the Republic of Croatia. At higher education institutions in the Republic of Croatia in the academic year 2018/2019 a total of 181,424 students were enrolled. In 2019, a total of 94,786 students earned compensation for performing student work on the basis of student contracts (source: data available to the first authors through Student Centre Varaždin), which means that more than 52% of students have a need to work while studying (given that some were employed or did work through employment contracts).

2.2 Student Online Contract Issuance System

Today, when the basic information literacy is considered a prerequisite for normal daily activities and when electronic information exchange is present in both business and private spheres of life, it is logical to expect that the student population will readily accept the possibilities of online student contracts. The emergence of the COVID-19 pandemic changed the habits of many users of everyday services in a very short time, and thus affected the business of registered employment agencies. Although the Student Center Rijeka has had the possibility of issuing online contracts since 2008, and the Student Center Varaždin since 2017, only with the adoption of the Law on conducting student jobs (Narodne Novine, n.d.-b) in 2018, the electronic contract became a legal obligation of all intermediaries in student employment.

For the purposes of this paper, it is necessary to distinguish the concept of electronic contract, which is defined by the Law, from the current possibility of online issuance of student contracts. For the full implementation of the electronic student contract, all legal preconditions have not yet been met, i.e. all participants in the tripartite relationship (student, employer, student centre) should also have electronic signatures, which is not the case in practice. Although online contracts were expected to completely crowd out the issuance of forms at the intermediary's physical location this did not happen.

According to the available data of intermediaries, who had the opportunity to issue online student contracts even before the legal obligation, it takes a longer period to eradicate old habits and for users to accept more modern ways of doing business. Table 1 shows the percentage of contracts issued online in relation to the total number of contracts issued.

Table 1. Number of contracts issued online in Student service Varaždin and Student service Rijeka (source: data available to the first authors through Student Centre Varaždin)

	Student service Varaždin	Student service Rijeka
Year	% of contracts issued online	% of contracts issued online
2015		26,65
2016		28,68
2017	2,37	32,08
2018	12,63	34,95
2019	15,71	32,12
January – June 2020	34,91	51,53

In the Student Service Varaždin (the same software solution is used by 11 student services in the Republic of Croatia), each registered member can independently

create a contract on their computer and print it. The system is accessed through the student center's website, and the user logs in using user AAI data (Figure 1).

Figure 1. Display of the initial screen of the system for online contract issuance of the Student Center Varaždin

When creating a contract, the basic data defined by the Law that the contract must contain (data on the student, data on the employer, time, type and place of work) are entered, i.e. all the data that the student should tell the student service officer when picking up the student contract in person. After the adoption of the Law on conducting student jobs, all other student services in the Republic of Croatia enabled the issuance of online contracts (based on AAI user data), except for the Student Center Rijeka, which assigns each user a separate code and password that allows members to issue online contracts. Reasons for a kind of resistance to digitalization of this type of business should be sought primarily in the internal organization of individual student services, so if the work of individual branches of student services was evaluated through the number of issued contracts, then employees did not aim to encourage users to issue contracts online. Salaries of employees in student services are not defined by the number of issued contracts, but this is data that is monitored for the purpose of monitoring turnover at the level of individual student centers, but also at the level of the Ministry of Science and Education. The emergence of the COVID-19 pandemic has in some way forced the vast majority of working students and employers to turn to the online issuance and calculation of student contracts, as evident from Table 1, and this paper will explore in more detail the extent to which.

3 Methodology

3.1 Instrument

The research was conducted electronically using a survey questionnaire using Google Docs tools, was

anonymous and voluntary, and the results were interpreted exclusively in groups. The link to the survey was available on the official Facebook page of Student Services Varaždin, and on the websites of student services in Rijeka, Osijek, Karlovac, Zadar and Pula, and on the Studentski.hr portal. The research was conducted in the period from March 18, 2020 to May 18, 2020, in the period when students were largely prevented from moving outside their place of residence due to the pandemic of COVID-19 in the Republic of Croatia. The questionnaire consisted of 42 items, of which 7 were related to demographic data and one item was open-ended, for respondents' comments only. The instrument was measuring general attitudes of respondents about the COVID-19 pandemic and its impact on everyday students and employers, but this paper presents only part of the results, which is related to online student contracts and the acceptance of ICT in the work of student services.

3.2 Respondents

The sample consists of 96 respondents, of which 20 employers (16 of which who have already used the student services for the purpose of employment mediation) and 76 students. Convenience sampling method was used. Respondents were students, existing users of student services, but also employers who used online issued student contracts. Of the 20 respondents on the employer side, women made up 85% and men 15% of the sample. Among students (N = 76), women were represented by 82% and men by 18%. Among employers, respondents represent 15% with secondary education, undergraduate level with 30%, while 55% of respondents have completed graduate or higher academic level of education. Among students, respondents with completed secondary education participate with 39.47%, undergraduate level with 59.22% graduate level with 1.31%. Although the sample is occasional, looking at the whole sample, respondents from all parts of the Republic of Croatia are represented, so that 76% of respondents are from Central and Northwestern Croatia, 12.5% from North Adriatic, 7.3% from Eastern Croatia and 4.2% from Central and South Adriatic. The sample represents all branches of the company's activity (if we look at the activity where the student worked at the time of completing the questionnaire or the employer at the time of completing the online student contract). The most represented activities are services with 43.7% and production with 19.8%. The representation of respondents from telecommunications, computer and software services is 10.4%.

4 Results

Figures 2, and 3 shows demographic characteristics of all respondents, their age structure and user type.

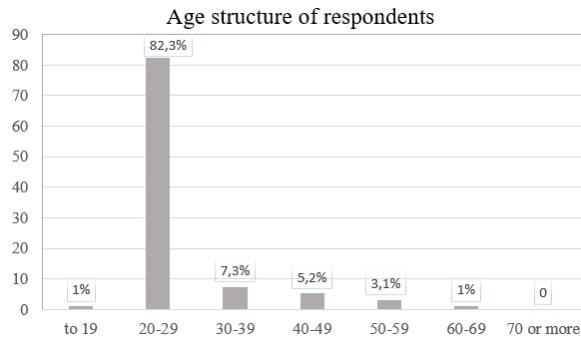


Figure 2. Age structure of all respondents (N=96)

It is logical that the largest number of respondents are in the age group 20-29 years, given that the service is primarily intended for students. Older respondents are employers, clients who use online contracting services on the client's side, those who fill out student contracts.

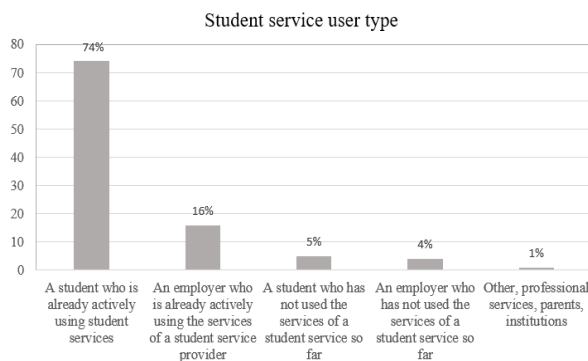


Figure 3. Student service user type (N=96)

The largest number of respondents, 74% are students and employers who already use online contracting services. However, to get a broader picture, the questionnaire was available to potential users who have access to the service but for some reason have not used it yet.

4.1 Respondents' Attitudes About Working From Home

Of the total number of respondents (N = 96), according to the results of the survey, 75% employers (N = 20) fully support work from home, teleworking, while only 58% of students (N = 76) support work from home. 55% of employers and only 34.2% of students strongly or completely agree with the statement "I have personally used the possibilities of working from home before", while 42.1% of students do not agree with this statement at all. At the same time, 10% of employers

and 40.78% of students fully agree with the statement "Due to the nature of my work and the activity I am engaged in, I am not able to work objectively from home." The same claim is completely rejected by 50% of employers and 26.31% of students. The claim of supporting work from home in exceptional situations is largely supported by 60% of employers and 80.26% of students. None of the employers thinks that working from home is of lower quality than working in the office, i.e. at the physical location of the employer, and 30% of them do not agree at all with the stated statement. When it comes to students, 6.56% of them fully agree with the statement that working from home is of lower quality than working in the office.

When it comes to the use of ICT, 76.3% of students and 90% of employers largely or fully use ICT in their daily work. 50% of employers in the sample believe that the new opportunities will to a greater extent affect the greater use of ICT in them personally, while on the side of students this percentage is 55.26%. The vast majority of employers, 95%, largely or completely agree with the statement: "I think that the use of ICT technology currently greatly facilitates business." When it comes to students, 63.16% of them largely or completely agree with the previous statement.

4.2 Respondents' Views on the Use of Online Contracts

To examine respondents' views on the existing system of issuing online student contracts and its intuitiveness (Figures 4, 5, and 6), an ordinal scale was used, with the following five degrees of agreement: 1-Completely Disagree, 2- Mostly Disagree, 3- Undecided, 4- Mostly Agree and 5- Completely Agree. When it comes to the attitudes of respondents about the issuance of online student contracts, 55% of employers completely believe that the existing system is fully tailored to all users.

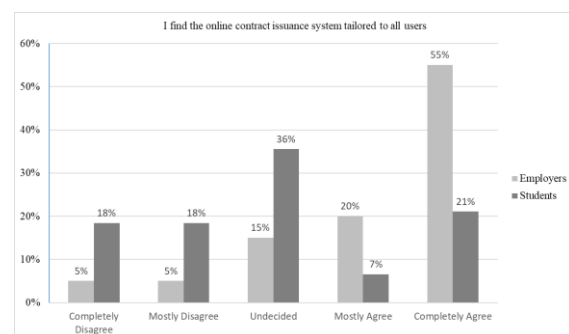


Figure 4. Attitudes of employers and students about the existing system of issuing online contracts

Opinions of students are quite uneven when it comes to the existing online system of issuing student contracts, which can be seen in Figure 4, so only 21%

fully agree with the statement that the system is tailored to all users. As expected, a large percentage of employers (85%) largely or completely agree with the statement that the online contracting system requires only basic IT literacy, while only 30% of employers say that the system is tailored to more advanced users, who use more advanced tools and techniques. The percentage of students who largely or completely agree with the statement that the system requires only basic IT literacy is 81.58%, while only 2.6% of students hold that the system is tailored to more advanced IT users. On the question of the intuitiveness of the system and its functioning in practice, opinions are divided (Figure 5, Figure 6)

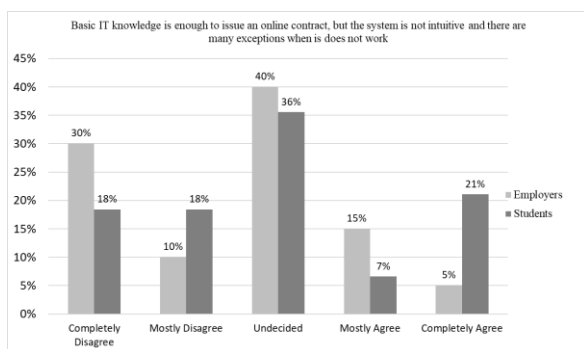


Figure 5. Attitudes of employers and students about the intuitiveness of the online contract issuance system

Given that the system of online contract issuance is primarily intended for students, academic citizens, it essentially implies basic computer literacy, and 60% of employers and 65.42% of students agree with this to a large extent or in full. A small part of the surveyed employers, 5% of them completely agree with the statement that the system is impractical because not all students have the opportunity to use computers and printers, and none of the employers think that the system is impractical because students do not have enough free time to they create contracts themselves.

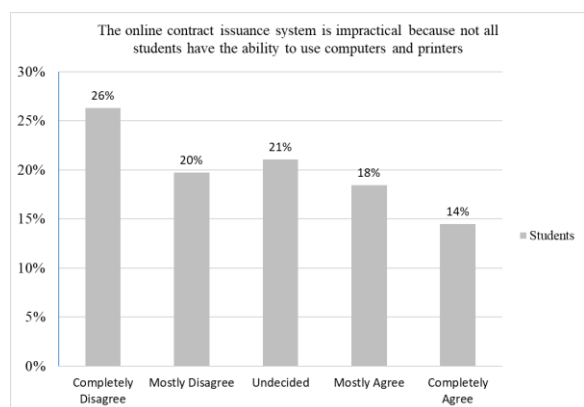


Figure 6. Students' attitudes about the impracticality of the system due to lack of computers and printers

Unexpectedly, 14.47% of students think that the system is impractical due to the inability to use computers and printers. When it comes to students' free time to create contracts on their own, 68.42% of students do not consider this to be a limiting factor at all.

When it comes to employers' awareness of the fact that the online contract issuance system has been operating in some student services since 2008, and in all since 2018, 15% of employers state that they have been using this system for years, 60% of them have been using the system since application of the Act (Narodne Novine, n.d.-a), while 10% of employers only accepted the possibility of issuing contracts online recently with the appearance of the COVID-19.

Students, on the other hand, are a little better acquainted with the possibilities of online contracting, so 19.73% of students have been using the system for years, 47.37% of them started using online contracts after the implementation of the new Law, while 27.63% sought an alternative to issuing contracts at physical locations only with the appearance of COVID-19.

4.3 Respondents' Attitudes About the Use of ICT in Communication With Student Services

Employers prefer communication via e-mail (37.21%), followed by communication via fixed (30.23%) and mobile (16.28%) telephone lines. Students prefer to communicate via websites (using their AAI data they have access to open work positions, they are enabled to monitor the status of contract payments but also to issue online contracts). In the second place in terms of the representation of communication channels is the calling of student services on fixed telephone lines, followed by communication by e-mail, and as expected, communication via fax takes the last place (Figure 7). Although these are young people who have access to ICT, 23.68% of them prefer to physically visit student service locations, although alternatively they can do all communication remotely.

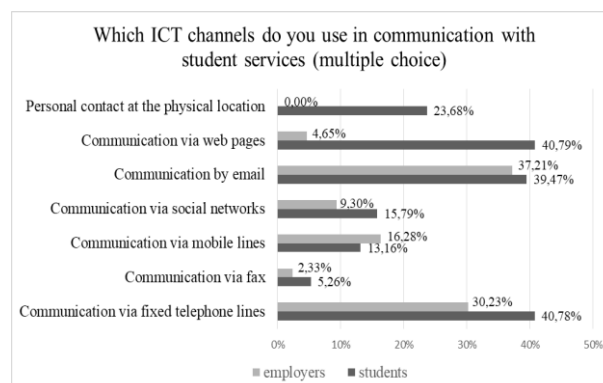


Figure 7. Types of ICT used in the communication of employers and students with student services

5 Discussion

The appearance of COVID-19 in the whole world, including the Republic of Croatia, has certainly left its mark in every sphere of private and business life of every individual. Students, as one of the more sensitive categories in the labour market, were under direct attack. Not only did most have to leave their temporary accommodation (student dormitories or accommodation with private renters), get used to the conditions of online education, but like the vast majority of employees they had to adjust to online working conditions as well. Interestingly, a higher percentage of employers than students prefer working from home, teleworking, although both categories of respondents largely use ICT in their daily work. One of the possible reasons may be that a larger number of students work in production, warehousing, assembly and distribution of products, in shopping malls, etc.,. Therefore 40.78% of students say that due to the very nature work and activities in which they are engaged so far have not objectively used the possibilities of teleworking.

Perhaps the emergence of extraordinary circumstances, such as the appearance of the COVID-19, gave birth to some positive aspects, and in some way forced some users to stop resisting all the benefits and advantages of ICT technology in everyday business, as the vast majority of employers (95%) and 63.16% students acknowledges that the use of ICT technology has greatly facilitated their business in the new circumstances. Moreover, it is evident that the number of issued online student contracts has raised significantly in the first half of 2020, when the epidemic situation forced most of the users to use online services.

It should be taken into account that the results of this study are based on an occasional sample, and the assumption is that the respondents who participated in the online survey have already adapted to the conditions of teleworking. Still, some students (6.56%) believe that working from home is of lower quality than working at a physical location, while no one on the side of employers fully agrees with this, which certainly depends on the type of activity in which the company is engaged.

Although the online contract award system for students is quite intuitive and simple for most student services, it is enough to know the user's AAI data and the employer's OIB, according to the data shown in Figure 4, only 21.05% of students stated that agrees with the statement that the online contracting system is tailored to all users, and 81.58% that the system requires only basic IT literacy. It is not a negligible fact that 23.68% of students have not used any communication channels in their work with student services, but solve everything by personal departures, although in fact they can get all the information online.

6 Conclusion

When interpreting the results, it is necessary to take into account the limitation related to the appropriate sample of respondents and the method of data collection. Also in further research it is necessary to include respondents based on a random sample, which will be representative of the entire student population. In conclusion, a series of legal measures to raise the quality of student services, as well as activities to raise awareness of the student population and the employer, it is possible to change the existing social and business situation in business organizations in the Republic of Croatia. The results of this research showed the perception of respondents about the benefits of using ICT technology, both in everyday work and especially in unforeseen circumstances, when online business is the safest way to do business.

The Law on conducting student jobs also defines the handling of electronic student contracts, but they have not yet taken root in practice due to the fact that an extremely small percentage of students and employers use advanced electronic signatures, which is a basic prerequisite for electronic contracts. It would be desirable to investigate in more depth the reasons why some students and employers, who live surrounded by ICT technology and who grow up with smartphones still prefer to physically go to the location of a public institution, although all activities can be done electronically.

Reference

- Adams, A. V. |An. O. (1978). *The Lingering Crisis of Youth Unemployment*. (First Edit). W. E. Upjohn Institute for Employment Research, Kalamazoo, Michigan.
- Applegate, C., & Daly, A. (2006). The Impact of Paid Work on the Academic Performance of Students: A Case Study from the University of Canberra. *Australian Journal of Education*, 50(2), 155–166.
<https://doi.org/10.1177/000494410605000205>
- Kosi, T., Nastav, B., & Šušteršič, J. (2013). Umanjuje li zaposlenost studenata njihov akademski uspjeh? slučaj slovenije. *Revija Za Socijalnu Politiku*, 20(3), 253–274.
<https://doi.org/10.3935/rsp.v20i3.1129>
- Lingard, H. (2007). Conflict Between Paid Work and Study: Does it Impact upon Students' Burnout and Satisfaction with University Life? *Journal for Education in the Built Environment*, 2(1), 90–109.
<https://doi.org/10.11120/jebe.2007.02010090>

- Manthei, R. J., & Gilmore, A. (2005). The effect of paid employment on university students' lives. *Education and Training, 47*(3), 202–215. <https://doi.org/10.1108/00400910510592248>
- Metcalf, H. (2003). Increasing Inequality in Higher Education: The role of term-time working. *Oxford Review of Education, 29*(3), 315–329. <https://doi.org/10.1080/03054980307447>
- Narodne Novine. (n.d.-a). *Pravilnik o posredovanju pri zapošljavanju redovitih studenata*. Retrieved April 15, 2020, from https://narodne-novine.nn.hr/clanci/sluzbeni/full/1996_02_16_256.html
- Narodne Novine. (n.d.-b). *Zakon o obavljanju studentskih poslova*. Retrieved April 22, 2020, from https://narodne-novine.nn.hr/clanci/sluzbeni/2018_10_96_1851.html
- Patel, N., Brinkman, W. P., & Coughlan, J. (2012). Work placements and academic achievement: Undergraduate computing students. *Education and Training, 54*(6), 523–533. <https://doi.org/10.1108/00400911211254299>
- Robotham, D. (2012). Student part-time employment: Characteristics and consequences. *Education and Training, 54*(1), 65–75. <https://doi.org/10.1108/00400911211198904>
- Robotham, D. (2013). Students' perspectives on term-time employment: An exploratory qualitative study. *Journal of Further and Higher Education, 37*(3), 431–442. <https://doi.org/10.1080/0309877X.2012.666892>
- Savić, M., & Kresoja, M. (2018). Modelling factors of students' work in Western Balkan countries. *Studies in Higher Education, 43*(4), 660–670. <https://doi.org/10.1080/03075079.2016.1190960>
- Smith, R. A., & Schoffstall, D. G. (2020). Employment impact on hospitality and tourism students' academic journey: the HBCU students' perspective. *Journal of Teaching in Travel & Tourism, 20*(2), 105–120. <https://doi.org/10.1080/15313220.2019.1706696>
- Wang, Y. C., & Chen, C. J. (2017). College Students Part-Time Jobs: Factors and Challenges for Future Careers. *Proceedings - 2017 6th IIAI International Congress on Advanced Applied Informatics, IIAI-AAI 2017*, 1–4. <https://doi.org/10.1109/IIAI-AAI.2017.18>