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Working and learning? Features of student employment during COVID-19

Theoretical background

International and national research have indicated that employment of university students is increasing (Masevičiūtė 2018, Pascarella & Terenzini 1998, Perna 2010, Riggert et al. 2006, Teichler 2011). According to previous research in the Eastern region of the European Higher Education Area, the main motivations of students can be linked to material aspects, such as financing leisure activities, independence from parents and financing living costs. Gaining work experience was also a motivating factor while motivating factors (such as expanding the network of contacts, gaining acquaintances) from which students could benefit during their last employment were less typical for higher education students (Kovács et al. 2019, Pusztai & Kocsis 2019). EUROSTUDENT VI data show that in two-thirds of the surveyed countries, 45% of students have study-related work. In almost all countries, Master’s students were characterized by a horizontal fit between work and study. Examining the field of study, students in IT, education, health and social studies were more likely to have a study-related job (Masevičiūtė et al. 2018). According to the results of Kocsis and Alter (2021), technical, natural science and non-STEM fields can be considered relatively homogeneous in terms of the frequency of work and the horizontal fit between work and study. However, the proportion of students in the medical sciences who have work related to their studies is the lowest. In contrast, IT students' work is more likely to fit their field of study. The results also indicate that making new acquaintances is particularly important for IT students.

According to the literature, study-related work enhances the positive effects of student employment. The relationship between work and study is significant for future returns. Employers have a set of expectations for career starters. Young people who already have the professional, practical knowledge to get a job as soon as possible may be more successful (Gáti & Róbert 2011). When students do study-related work, they are much more likely to gain skills and experience that they would not do at a university. Educational methods in Hungary are theory-centred. There are fewer opportunities to integrate theoretical and practical knowledge and solve problems. The major problem is that the needs of the labour market do not appear in the curriculum of higher education institutions. The knowledge and curriculum that students know are so far removed from problem-solving and work situations. As a result, the development of critical competencies is not solved either (Kovács 2016). A study-related job can be beneficial when entering the job market after graduation. However, if they do work where there is no link between work and study, they are less likely to gain specialized work experience. They may also fail to mention these non-study related jobs on their CV, especially if they have done physical work or had these jobs that have low social esteem (Markos 2014).

Conflicting results have been obtained regarding the impact of student work on academic performance (Astin 1993, Hámori et al. 2018, Pascarella & Terenzini 1998, Perna 2010, Riggert et al., 2006). Research on the impact of student work can be interpreted, on the one hand, as a risk factor confirming social inequalities and dropout rates (Darmody & Smyth 2008, Kovács et al. 2019), on the other hand, as a supportive factor playing an identity-forming role, promoting academic engagement, and having a positive impact on soft skills and future labour market performance (Beerkens 2011, Perna 2010, Pollard et al. 2013, Sanchez-Gelabert et al. 2017). A quarter of students who interrupted their studies referred to workplace reasons (Masevičiūtė 2018); in their case, the attractiveness of the labour market is more pronounced. According to domestic research on dropout (Kocsis 2020, Kovács et al.

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2019, Pusztai & Szigeti 2018, Kocsis & Pusztai 2020), one of the main reasons for dropping out is financial difficulties and work. Students working due to financial constraints, are disappointed with university education, or are pursuing a job that provides a secure income without a degree may be more likely to drop out. An essential question for our current research is how vulnerable students who have taken up work mainly because of financial constraints and do not have study-related work are. According to Euro student VI., almost half of Hungarian students could not afford to study at university without a paid job. (Masevičiūtė et al. 2018).

The novelty of our research is that no scientific research has been carried out in Hungary yet, which examines the impact of the pandemic on students’ work. The research results may be necessary for universities, especially for assessing the situation after the end of the epidemic period. In the research, we study the risk factors caused by employment, and we can identify the risk groups affected by the epidemic and their problems. Our results may help identify further research directions as well as for supporting policy decisions.

Research questions and hypotheses

An important question from educational research is how does the current situation affect students' attitudes toward learning? Is it possible that students will drop out of college because they cannot finance their studies without paid work? Previous research shows that one group of dropouts were those who interrupted their studies for financial and professional reasons (Kovács et al. 2019), so we hypothesize that some students decided to interrupt their studies and prefer to work in the labour market, even in a profession that may be less affected by the epidemic and does not require a university degree. Furthermore, based on previous research (Kocsis 2020, Kocsis & Alter 2021, Kovács et al. 2019), we hypothesized that a low percentage of students have study-related work.

Methodological background

For our exploratory research, we used convenience sampling. Thus, the closest and available subjects participated in the research. Our future goal is to test the research on a larger and more representative sample, depending on the current research results.

University students who regularly work or have worked alongside their studies took part in the research. The online survey was conducted between January and March 2021. The questionnaire was completed voluntarily by 235 students, 73% of whom had worked regularly at university prior to COVID-19.

The first block of the questionnaire explored pre-coronavirus work habits: frequency of work, motivation, and relationship between work and study. We also investigated students' financial background and tendency to drop out of college. The second block of the questionnaire focused on the period in spring 2020, on work during the period of restrictions. We explored the impact of the interventions on employment opportunities, financial situation and housing. We also felt it was essential to assess how working students' attitudes to learning had changed. We also wanted to obtain information about changes in employment opportunities during the summer and fall periods and the labour market situation of student respondents when they completed the questionnaire (January-March 2021). Finally, we explored the main epidemiological experiences and work-study relationships and the students' family and institutional background.

In our current research, we focus on the relationship between work and study.

The sample

We processed data from 235 full-time higher education students, 86.4% enrolled in state-supported education. The sample included full-time students BA /BSc (55%), MA /MSc (19%) and students on undivided training courses (26%). They all have active student status at the time of answering the
questionnaire. According to the distribution of respondents by institution, 74.8% of the students study at the University of Debrecen, followed by the students’ study at the University of Nyíregyháza (8.1%), Eötvös Loránd University (5.1%) and the University of Miskolc (2.1%). In addition, students from some more prominent rural and metropolitan universities also filled in the questionnaire. Students are mainly represented in undivided teacher training courses (20.1%), humanities (15.8%), economics (15%) and medical and health sciences (11.5%). In contrast, a smaller proportion of students in teacher training courses, agricultural sciences, law, IT, natural sciences and social sciences completed the questionnaire. Of the respondents, 62 males and 169 females participated in the survey.

41% of the students' mothers have secondary education, while 36% have tertiary education. 23% of them have primary education. The father of the students has primary or secondary education (37%-37%). When we examine the labour market status of the parents, we can see that the parents of the majority of the students have a permanent job (over 80%).

Results

Working during COVID-19

Regarding the financial situation of the students' families, 55% of the students had no change in their family's financial situation due to the epidemic. However, one-third of the respondents (32.3%) were negatively affected. Some students reported a positive change, and nearly one-tenth of students could not assess what change there was in their family's financial situation due to the epidemiological measures. Looking at the own financial situation of the surveyed students, we find that there was no drastic, negative change that affected most students.

Before COVID-19, more than half of the students (56.7%) reported an average financial situation, having everything needed in daily life but not being able to afford higher expenses. More than 5% of students sometimes had serious financial problems, and 2% had more frequent financial difficulties in their daily lives. The appearance of the coronavirus changed the lives of the students: Almost half of them moved home to their parents and terminated their tenancy or moved out of the dorm. A quarter of them lost their jobs, and 26% of these students had significant problems because they no longer had income from another source.

Most students were unaffected by the epidemiological measures, and we can continue working unchanged or returned to work after a few weeks of downtime. However, in the spring of 2020, the number of students who could not cover their daily expenses doubled. At that point, one-tenth of students were already affected. The proportion of students struggling with day-to-day financial problems remained low. However, their numbers increased as a result of the measures.

During the summer holidays, the frequency of student employment stabilized; more than half of the students worked regularly, and most of them were able to continue their work in the autumn semester. In the fall of 2020, the frequency of work and the number of working hours approached those of the pre-viral period. A similar trend was observed in their financial situation. The number of individuals with frequent or daily financial problems decreased compared to the spring period. It can be hypothesized that the improvement in students' financial situation was aided by their ability to receive various financial aid and scholarships during the semester and earned income. Our hypothesis regarding the employment and financial situation of the students was not proved because we can see from our previous results that the majority of the students were working during the epidemiological situation. They did not have serious financial problems.
The relationship between the horizontal suitability of work and studies

In the pre-coronavirus period, 57% of respondents had non-study-related work. Only 16% of them had work entirely related to their studies. 21% of students had a job which partly related to their studies. 6% of students did not work during this period.

In the semester of autumn 2020, the number of people doing study-related work increased, with 20% of students having fully study-related work and 14% of them having jobs that were partially matching to their studies. The majority of students (43%) did not have study-related work. 23% of them did not work.

At the time of completing the questionnaire, 30% of students were not working. One-fifth of the students did work entirely related to their studies (14% of them only partially). 37% of students had non-study-related work.

| Table 1.: Relationship between work and study (%) (N=235) |
|---|---|---|---|
| | pre-coronavirus period | the semester autumn, 2020 | January-March, 2021 |
| fully related to their studies | 16,2 | 20 | 19,6 |
| partly related to their studies | 21,3 | 14,3 | 13,5 |
| non-study-related work | 57 | 42,6 | 36,5 |
| do not work | 5,5 | 23 | 30,4 |

Source: edited by author

We obtained similar results to previous studies. A quarter of the students performed work that was fully aligned with their studies. While doing work related to their studies, students can gain unique work experience, increase their contact capital, and look for a job in their profession with a more significant advantage after graduation.

We investigated the positions students worked in during their undergraduate years. 16.2% of them worked as interns, private tutors, so these jobs were related to their studies. 19% of the students had a typical student job. Typical student jobs were defined as usually temporary, part-time jobs and offered by student job centres. These jobs include call centre and receptionist jobs and hostess, entertainer, receptionist, and ticket office jobs. 14.3% of the students worked in retail, mainly as salesmen, loaders. Also, 14.1% worked in hospitality during the semester as waiters and bartenders. One-tenth of them had administrative jobs, and 8.7% did unskilled and manual labour.

There was no significant change in the job during the coronavirus. Students took up work in the previous areas at a similar rate. However, in the current epidemiological situation, students were also sought new jobs. Based on students' experiences, most employers and student job centres were looking for students to check masks and deliver food. Students could also apply for the following jobs: Dispensing and dispensing hand sanitiser, taking body temperature, checking customer numbers in stores, or keeping time zones. These jobs were often advertised as trained workers. However, few of the students did these jobs.

Learning or earning?

An essential question for educational researchers has been what characterizes the relationship between work and learning. On the one hand, how has COVID 19 changed students' attitudes toward learning? Has learning become more important or not? On the other hand, independent of the virus, how does work, work experience influence attitudes towards study? Previous research suggests that work-related decisions significantly influence students' attitudes toward studying (Kocsis & Pusztai 2020). However, there are equivocal research findings in the literature about the influence of work on
a university career. According to some approaches, employment can be a predictor of dropping out and can be interpreted as a risk factor because it hinders the time spent on studies and courses, as well as with students’ integration into university life and the development of interactions with faculty and fellow students (Curtis & Shani 2002, Darmody & Smyth 2008, Kovács et al. 2019, McCoy & Smyth 2004). However, according to Tinto (1975), in addition to socio-cultural characteristics, these factors also contribute significantly to the successful graduation of students. In addition, employees can have negative consequences when students work night shifts or in a responsible job. In this case, they are exposed to constant challenges that often lead to a disruption of the work-life balance (Baffoe-Bonnie et al. 2007, Pollard et al., 2013).

We examined how students’ attitudes toward work and learning evolved over epidemiology. Based on our results, we can say that 56.1% of students think that work has become much more essential for them due to the epidemiological situation. However, they also think about the importance of learning in a similar proportion. 40.5% of the respondents said that they study more only in the hope of getting a scholarship because it is also an extra income in this precarious situation. We can see that the pursuit of financial security also appears in this form. Achieving a higher undergraduate average is vital because of the higher scholarship. It motivates them to learn rather than acquire knowledge?

**Figure 1.: The relationship between work and learning during the COVID 19 (N=235)**

However, precisely because of the viral situation, more than one-tenth of the students considered interrupting their studies to work full time and create financial security for themselves. Regardless of COVID-19, 22% of the students still had the idea of interrupting their studies before the pandemic. We examined the reasons they gave for their answers to the open-ended question as follows:

- "Practical training could not be implemented to a sufficient extent."
- "I need a semester abroad to improve my job skills, so I have been thinking about it."
- "Because of the fear for my future."
- "It was very mentally draining to study with little contact, as the community experience and daily personal contact help me process the material. As a result, I often felt alone."
- "It was stressful. I’m an art major, and the lack of contact hours completely took away from the essence of my education. It was awful."

Although actual interruption of studies affected only a minimal number of students, it is thought-provoking that the idea of interrupting studies came up more than once in one-fifth of the respondents. Notwithstanding, we cannot draw firm conclusions and generalizations from our findings; they do draw attention to the fact that the commitment of institutions, lecturers and the quality of practical training can be decisive factors in interrupting studies in some cases.
Then, we examined the extent to which work experiences influence students’ attitudes toward studies, independent of COVID-19 (Figure 2). From our results, it is clear that learning is essential to students regardless of an epidemic. Only 16% indicated that learning is less important to them since they are working. In addition to learning, gaining work experience is also crucial to students, with 19.3% stating that only work related to their studies is practical. However, most students hold the opposite view, meaning that work unrelated to their studies can also be relevant and crucial. Pollard et al. (2013) point out that employment positively impacts their soft skills (teamwork, communication, responsibility, time management, etc.), all skills that students do not acquire or acquire only to a limited extent during higher education.

![Figure 2. Attitudes to learning during student employment (N=235)](image)

A significant problem in Hungarian higher education is that the needs of the labour market are less reflected in the curriculum. The situations in the workplace are far removed from the experience gained in education (Secondary analysis of international research on the labour market status of STEM graduates, Óbuda University 2018). Therefore, it is understandable that the vast majority of students believe that any work experience they can gain is necessary.

The statements about work experience can be divided into two groups. First, the work made the students uncertain whether they had chosen the right profession. They got to know professions in the workplace that confirmed that it is possible to succeed in the labour market even without a degree. The other group consists of statements about experiences that the student work confirmed the students in their desire to work they were also studying at university and encouraged them to complete their university studies as well as possible. We investigated a relationship between the following variables and students' gender, institutional characteristics (field of study, form of education, and funding), and horizontal fit between work and study. According to our results, there is no significant relationship between the gender of students, the form of financing education and the relationship with learning and experience during work.

The cross-tabulation analysis showed a significant relationship between the field of study and the following variables: "I feel that I can succeed in the job market without a degree; I have been exposed to career paths that have shown me that it is possible to succeed without a degree, and only work experience related to my field of study is useful." Among the undivided student teachers, the proportion of students who think that it is not true that only study-related experiences are meaningful is overrepresented (p=0.042, adj.res.=2.1).
Furthermore, 54% of undivided teacher students believe that they would succeed in the job market even without a degree. The proportion of these students is also overrepresented. (p=0.047, adj.res.=2.7). In contrast, the proportion of students participating in other teacher training (elementary teachers, special education teachers, kindergarten teachers) who believe they would succeed in the labour market without a degree is underrepresented (p=0.047, adj.res.=2.5). We also found a significant relationship with the latter two variables for the form of education. For example, 54% of students in undivided education say they would be successful in the job market even without a degree, compared to 32% of BA /BSc students and 30% of MA /MSc. The proportion of those who think so is over-represented among students in undivided education (p=0.011, adj.res.=3). In the current sample, only student teachers and medical students study in undivided education. However, medical and health science students do not think they can succeed in the labour market without a degree.

As a result, we examined the characteristics of undivided teacher-students in terms of the horizontal fit between work and study and the position taken and found thought-provoking results. Namely, only 17% of undivided teacher students worked in a study-related job before COVID -19; these students worked mainly as private teachers, music teachers. Even when filling the questionnaire, only one-fifth of them have a job related to their field of study. Considering only the undivided teacher-student (n = 47), the cross-tabulation analysis shows that the proportion of those whose job was not related to their studies is overrepresented, after which their work experience confirms that it is possible to succeed without studying (p = 0.018, adj.res. = 3). We can see that the majority of these students do not have a study-related job, yet they believe that any work experience can be helpful, and their work confirmed that it is possible to succeed without a degree. We believe that these students are at risk of dropping out or interrupting their studies because they are gaining work experience that could weaken their commitment to their studies.

Following the educational characteristics, we examined whether study-related work and learning showed a significant relationship. The following table does not include the responses of the few students who did not work during this period. Except for two variables, we found a significant relationship between study-related work and relationship to learning (Table 2).

According to our results, the percentage of students who believe that they would be successful in the labour market without a degree is overrepresented among those with a non-study related job. This statement is typical of 44.7% of these students. We obtained similar results when we examined how the experiences and opportunities gained during student work influenced their opinions.

Accordingly, we can say that their experiences confirmed that those who do non-student work during student work could be successful even without a degree. On the other hand, those whose work is closely related to their studies are overrepresented in their case by those who believe that only study-related work is essential; 39.5% of these students think so.
Table 2.: Connection between the importance of learning and study-related work (N=223)

<table>
<thead>
<tr>
<th></th>
<th>The relationship between doing paid work and studies</th>
<th></th>
<th></th>
<th>Sign.</th>
<th>χ²</th>
</tr>
</thead>
<tbody>
<tr>
<td>Since I’ve been working, learning is less important to me</td>
<td>always: not typical</td>
<td>84,2</td>
<td>79,2</td>
<td>85,6</td>
<td>0,780</td>
</tr>
<tr>
<td></td>
<td>typical</td>
<td>15,8</td>
<td>20,8</td>
<td>14,4</td>
<td></td>
</tr>
<tr>
<td>I would do well on the job market even without degree</td>
<td>always: not typical</td>
<td>73,7</td>
<td>68,8</td>
<td>55,3</td>
<td>0,037</td>
</tr>
<tr>
<td></td>
<td>typical</td>
<td>26,3</td>
<td>31,3</td>
<td>44,7</td>
<td></td>
</tr>
<tr>
<td>Only the study-related experience is important</td>
<td>always: not typical</td>
<td>60,5</td>
<td>71,4</td>
<td>91</td>
<td>0,001</td>
</tr>
<tr>
<td></td>
<td>typical</td>
<td>39,5</td>
<td>28,6</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>The job has confirmed me that I want a job in my profession</td>
<td>always: not typical</td>
<td>21,6</td>
<td>29,2</td>
<td>56,8</td>
<td>0,001</td>
</tr>
<tr>
<td></td>
<td>typical</td>
<td>78,4</td>
<td>70,8</td>
<td>43,2</td>
<td></td>
</tr>
<tr>
<td>The job has made me unsure whether the chosen profession is suitable for me</td>
<td>always: not typical</td>
<td>91,9</td>
<td>78,7</td>
<td>77,1</td>
<td>0,068</td>
</tr>
<tr>
<td></td>
<td>typical</td>
<td>8,1</td>
<td>21,3</td>
<td>22,9</td>
<td></td>
</tr>
<tr>
<td>The job encourages me to complete my studies successfully</td>
<td>always: not typical</td>
<td>18,4</td>
<td>34</td>
<td>49,2</td>
<td>0,003</td>
</tr>
<tr>
<td></td>
<td>typical</td>
<td>81,6</td>
<td>66</td>
<td>50,8</td>
<td></td>
</tr>
<tr>
<td>During my work I found out that it is possible to be successful even without degree</td>
<td>always: not typical</td>
<td>81,1</td>
<td>72,9</td>
<td>53,8</td>
<td>0,001</td>
</tr>
<tr>
<td></td>
<td>typical</td>
<td>18,9</td>
<td>27,1</td>
<td>46,2</td>
<td></td>
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</tbody>
</table>

* For the underlined figures, the absolute value of the adjusted residuals is above two.
Source: edited by author

Although most of them think that not only these experiences are essential, even though they also have study-related work. Regardless of whether the students’ work is closely or partially related to their field of study, we find that the majority of students among them have been encouraged by their student work in their desire to find employment in their profession after graduation. At the same time, this is not typical of 57% of students who do not have a study-related job. Students who have study-related work are encouraged by their work experience to complete their studies as successfully as possible and have been shown that a degree is essential for their future employment.

Summary

Our results made it clear that there were no drastic negative changes in the financial situation and employment of the students. In the first phase of the epidemiological situation, a quarter of the students lost their jobs, and 26% had significant problems because they no longer had income from another source. The majority of the students were not affected by the epidemiological measures. They were able to continue their work unchanged or returned to work after several weeks of downtime. During summer break 2020, the frequency of student employment stabilized; more than half of the students worked regularly, and most of them were able to continue their work in the fall semester. In fall 2020, the frequency of student employment and the number of hours worked approached those of the pre-viral period.

We analyzed the relationship between work and study; our results are similar to previous research. A quarter of students do work that is fully aligned with their studies. Some of the undivided teacher students can be considered at-risk groups. They have gained experience during their employment that has made them insecure about graduating. Our results also highlighted that students who have study-related work are more committed to graduation and less uncertain about finding a job in their chosen profession.
Limitations and conclusion

From our results, it is clear that study-related work is related to successful completion of education, employment plans in the profession. We believe that it would be necessary for students to test and apply their theoretical knowledge in practice. Moreover, during the study-related work, they can gain special professional experience and contacts, which is an advantage in their future employment in the labour market. Although the literature suggests that work not related to studies is less beneficial for students in terms of later payoff (Fényes & Mohácsi 2019), many of the student’s skills and abilities develop even during work that is not related to studies. According to previous research (Kovács et al. 2019), the risk of dropping out may increase when non-study related work is associated with factors such as financial difficulties, educational disappointment, or when students believe that their chosen course of study is not marketable or have experienced during employment that obtaining a degree is not essential.

One of the solutions to reduce the negative effect of student employment is to spread dual education. Higher education institutions should increase cooperation with companies and ensure internships in several fields of study. This can ensure that students have study-related work. These internships would allow students to work in conditions where they can gain professional experience and positively impact their engagement and academic performance. Also, higher education institutions should ensure that students can gain experience, competencies and soft skills through their courses. They should allow the acquisition of practical knowledge at the university. It would be necessary to regularly apply various higher education pedagogical methods in courses that support the transition from school to work and entry into the labour market. Gaining work experience can be facilitated in education through the work-integrated learning (WIL) method, which integrates academic and practical knowledge in a chosen work environment. Integrating curriculum requirements and instructional materials with work experience allows students to combine theory and practice in a work environment, deepening students’ knowledge and developing their work-related skills.

It would be necessary for the university to play a role in informing students about job opportunities off-campus as well as within the university. In addition, it would be important for students to receive important information about how to maintain a balance between their work and study and their responsibilities. This would help them to be aware of the difficulties and risks of student employment and its benefits and opportunities. The main objective of the work obtained with the help of the university or the work opportunities offered by the institution would be to hire students so that the students work in a familiar environment, in a suitable schedule.

One of the limitations of our research is that when we examined the employment characteristics of students by field of study, we found that the number of items in each field of study is fragmented. Therefore, in this case, we cannot draw firm conclusions about which field of study has the highest student employment rates and a greater propensity to drop out. Our research has not focused on fully identifying epidemic risk groups. From our findings to date, we can see that students with more severe financial problems may constitute an at-risk group. However, we have not examined in more detail how the financial situation and employment opportunities of students who work for a living have changed during the epidemic. Similarly, because of the small number of items, we did not examine in more detail the group of students who lost their jobs as a result of the epidemic and were placed in a difficult financial situation as a result.

With our current research, our primary goal was to examine the extent to which the coronavirus and regulations have changed students’ employment opportunities, financial status, and the importance of learning. In addition, what areas of research require further research to explore the connections more deeply? So far, our findings can serve as a starting point for further research on this topic.
References


