

The WSCS Students Professional Situation Survey 2018/2019

November 2018

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1. Introduction

The Warsaw School of Computer Science (hereinafter the WSCS, the University) conducts an annual research which goals are the assessment of University's position in the local labor market and it's education profile's ability to adopt to the employers requirements. The basic tool of this assessment is a multi-aspect research of the WSCS graduates professional careers. The graduates' professional achievements are the main factor determining the assessment of University among employers. This assessment has a significant impact on the WSCS position on the labor and educational markets. The perceptible and growing deficit of qualified IT specialists is leading to profound increase in students professional activity during studies. Therefore, the evaluation of the university on the labor market is currently carried out not only on the basis of its graduates professional careers but also on the basis of its students professional activity.

2. Study goals

The main goal of the study was to determine the level of the WSCS students professional activity. The research goal was also to answer the question if there is a correlation between students educational profile and their jobs. The students were asked to determine their professional situation by choosing one of five possible answers:

1. I work at IT position in a company or institution from IT industry
2. I work at IT position in a company or institution beyond IT industry
3. I do not work at IT position, but I use my IT skills in my job
4. I do not work at IT position, and I do not use my IT skills in my job
5. I do not work currently

Students were also asked about the form of their employment, the size of the enterprise for which they work, their salaries and the amount of time they devoted to job-seeking.

3. Target groups

Due to the varied levels and forms of the WSCS studies, the survey was conducted in four target groups:

- Master Degree students, part time, first and second year. Size of the target group: 99 students; Responsiveness: 28,3%;
- Master Degree students (International) first and second year. Size of the target group: 50 students; Responsiveness: 52%;
- Bachelor Degree students, part time, from first to fourth year. Size of the target group: 1072 students; Responsiveness: 23,5 %;
- Bachelor Degree students, full time, from first to fourth year. Size of the target group: 251 students; Responsiveness: 6,1%.

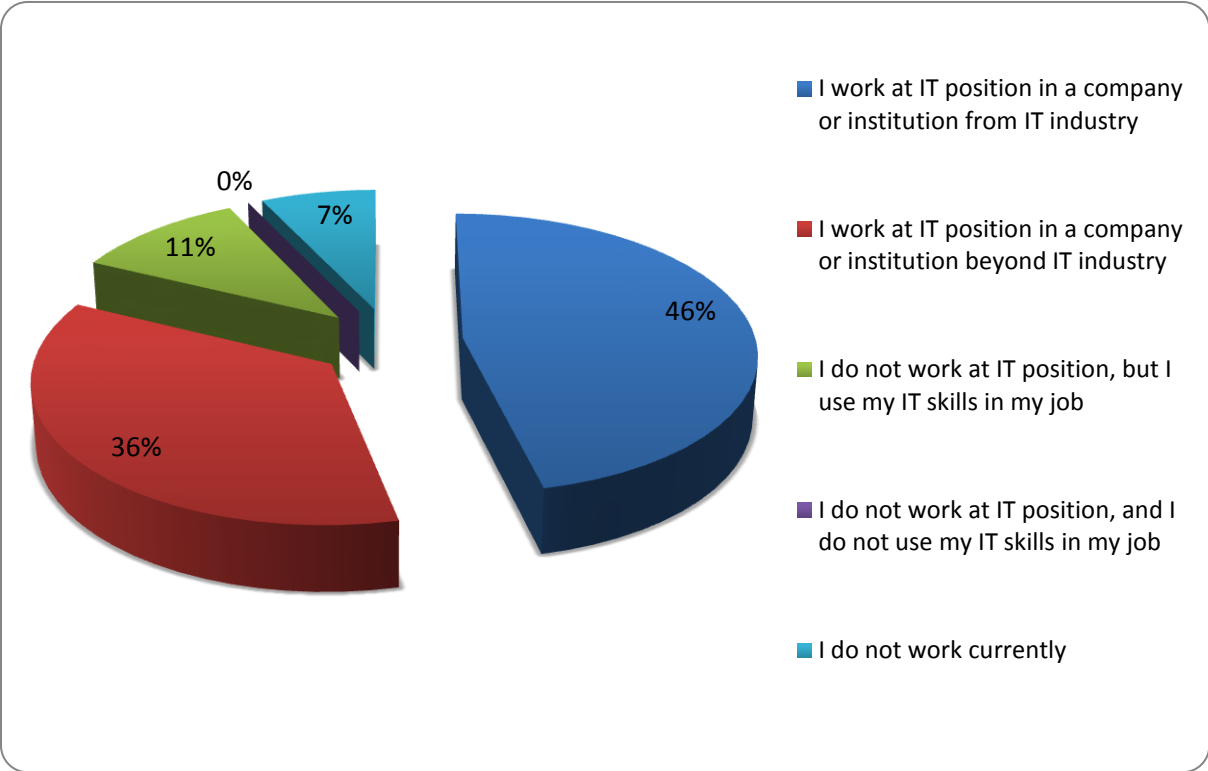
In total, 321 people participated in the study, which represents 21.8% of the WSCS students.

4. Students professional activity

a) Masters Degree students (part time)

Masters Degree students who obtained a Bachelor Degree (engineering) diploma have a dual status: a student and a graduate. They often have several years of professional career. This group has a high general employment rate and the highest rate of employment in IT (82%). Only 11% declared having a non IT job, but all use their IT skills (acquired during studies) in current jobs.

Picture 1
 Professional activity of the WSCS Masters Degree students (part time)

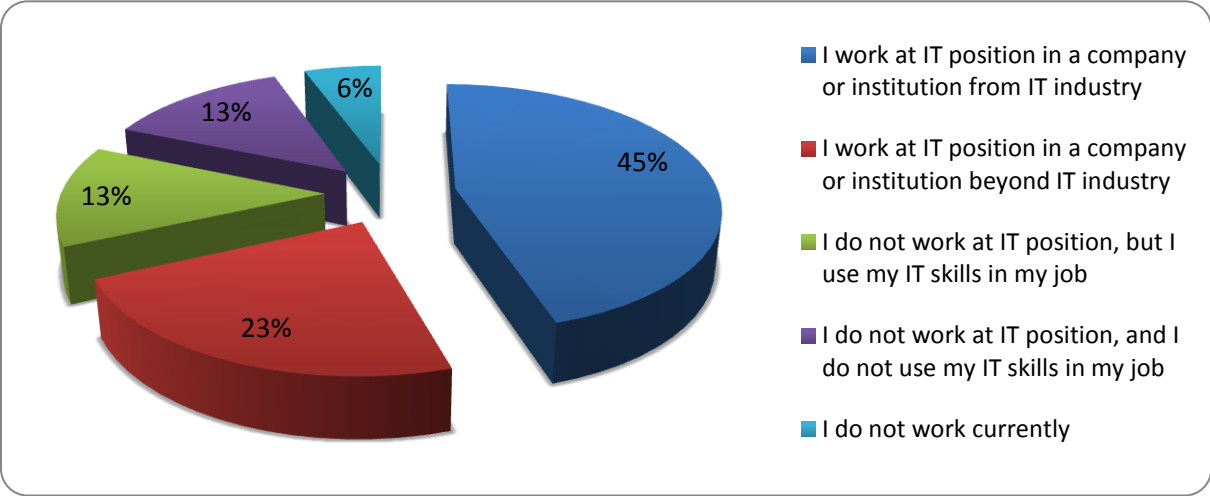


Source: Data based on the WSCS Students Professional Situation Survey 2018/2019

b) Bachelor Degree students (part time)

Despite the fact that this group is still in the process of acquiring full vocational qualifications, 68% of them indicates employment in the IT position. Another 13% of respondents use IT skills at work or work to achieve a financial resources for further education. The unemployment rate in this group is only 6% and half of them are first year students. Comparing the results of this year's survey with the results from previous years, one can observe a trend of gradual increase in IT position jobs. (58% - 2015, 62% - 2016, 71% - 2017, 68% - 2018).

Picture 2
 Professional activity of the WSCS Bachelor Degree students (part time)

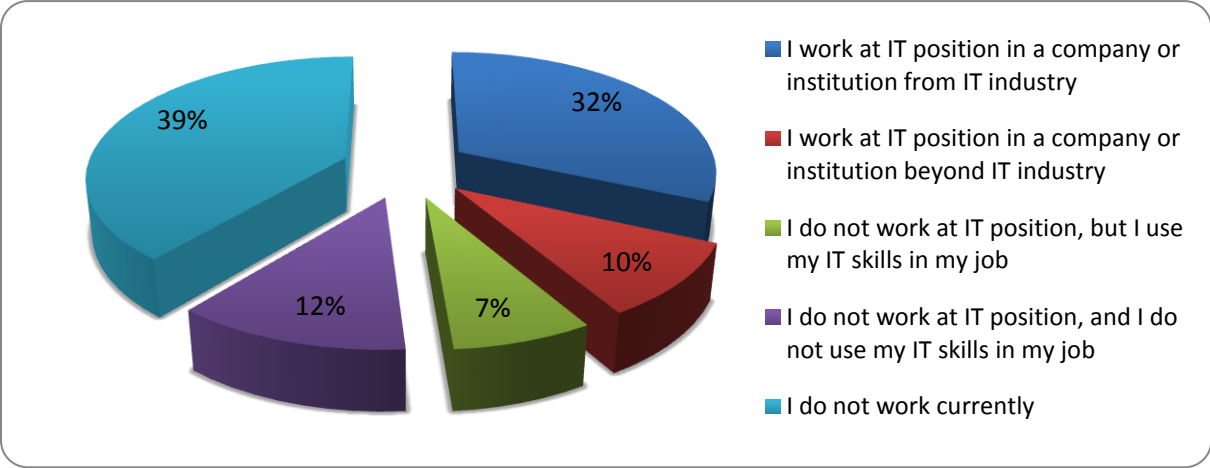


Source: Data based on the WSCS Students Professional Situation Survey 2018/2019

c) Bachelor Degree students (full time)

In this group of students, the highest percentage declares not taking up any job (39%). In direct interviews, the respondents justify the lack of employment by willingness to devote as much time to education as possible, postponing decision of starting a professional career for higher years of study or after graduation. Most students declare willingness to take up an casual that will be easy to reconcile with full-time studying. The rate on employment in this group (60%) should be considered as very high, especially in relation to employment rates of full-time students in other fields of study.

Picture 3
 Professional activity of the WSCS Bachelor Degree students (full time)



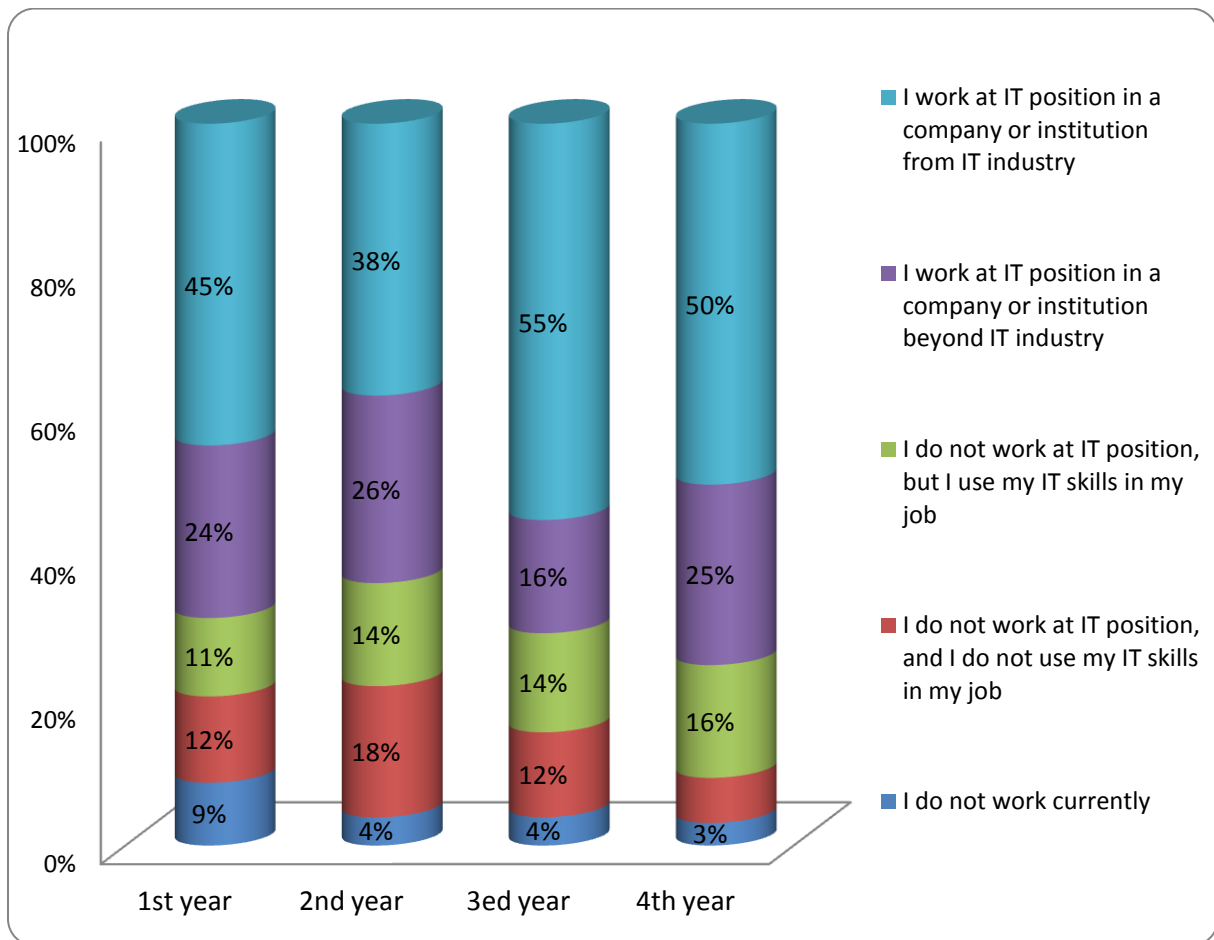
Source: Data based on the WSCS Students Professional Situation Survey 2018/2019

d) Students professional activity vs. year of study.

The professional activity of the WSCS students changes during time. Among Bachelor Degree students the employment rate on IT position increase in subsequent years of study. This dependence can be observed on the example of part time students, among whom IT related job declare 69% of first-year students, 64% of second-year students, up to 71% and 75% on the third and fourth year of studies (Picture 4).

Picture 4

Students employment rate on subsequent years of study (Bachelor Degree, part time)

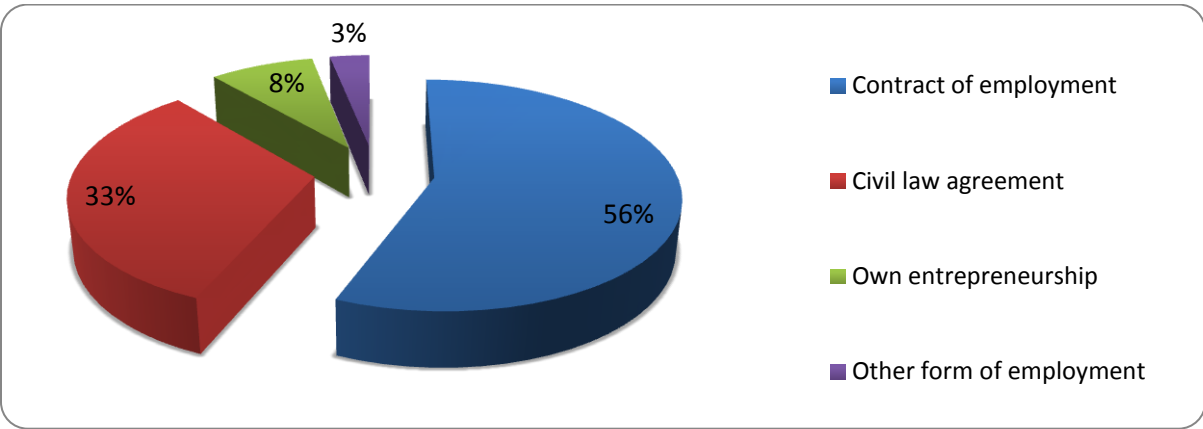


Source: Data based on the WSCS Students Professional Situation Survey 2018/2019

5. Forms of employment

In the survey, students were also asked about the form of employment they carry out their jobs. Possible answers were: a contract of employment, a civil law agreement, an own entrepreneurship and other form of employment. The majority of students (52%) had a contract of employment, and 35% had a civil law agreement (contract for specific task or order). The smallest group (10%) were students conducting sole proprietorship.

Picture 5
Forms of employment.

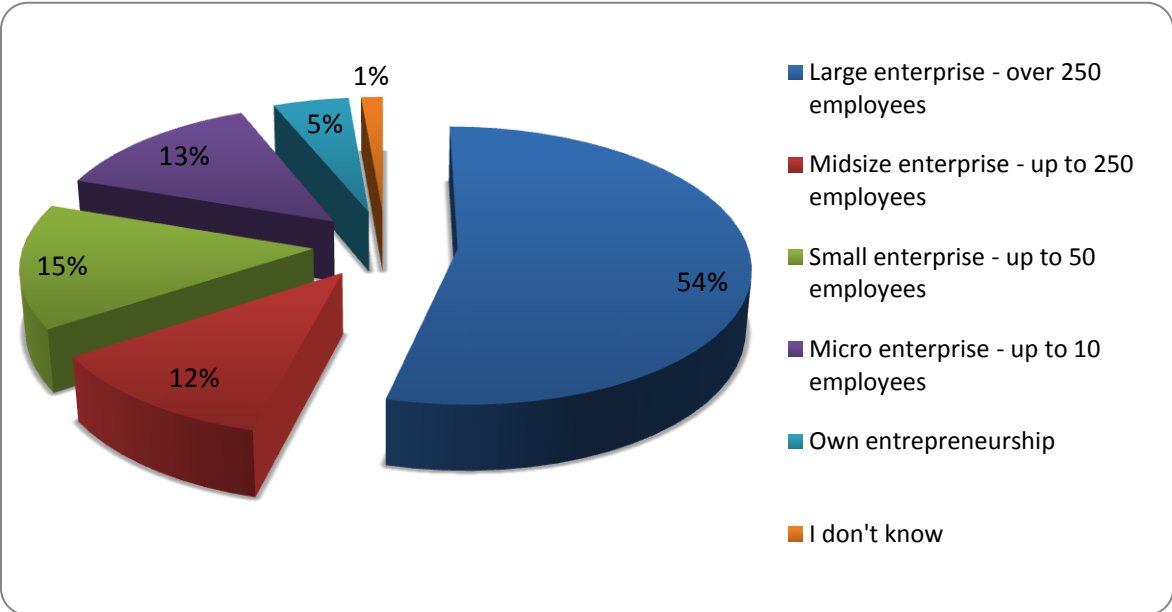


Source: Data based on the WSCS Students Professional Situation Survey 2018/2019

6. Size of the enterprise

The largest group were students working in a large enterprise employing more than 250 employees (54%). Twelve percent declared employment in a medium-sized company and another 15% in a small company. A job in a micro company employing up to 10 employees declared 13% of students.

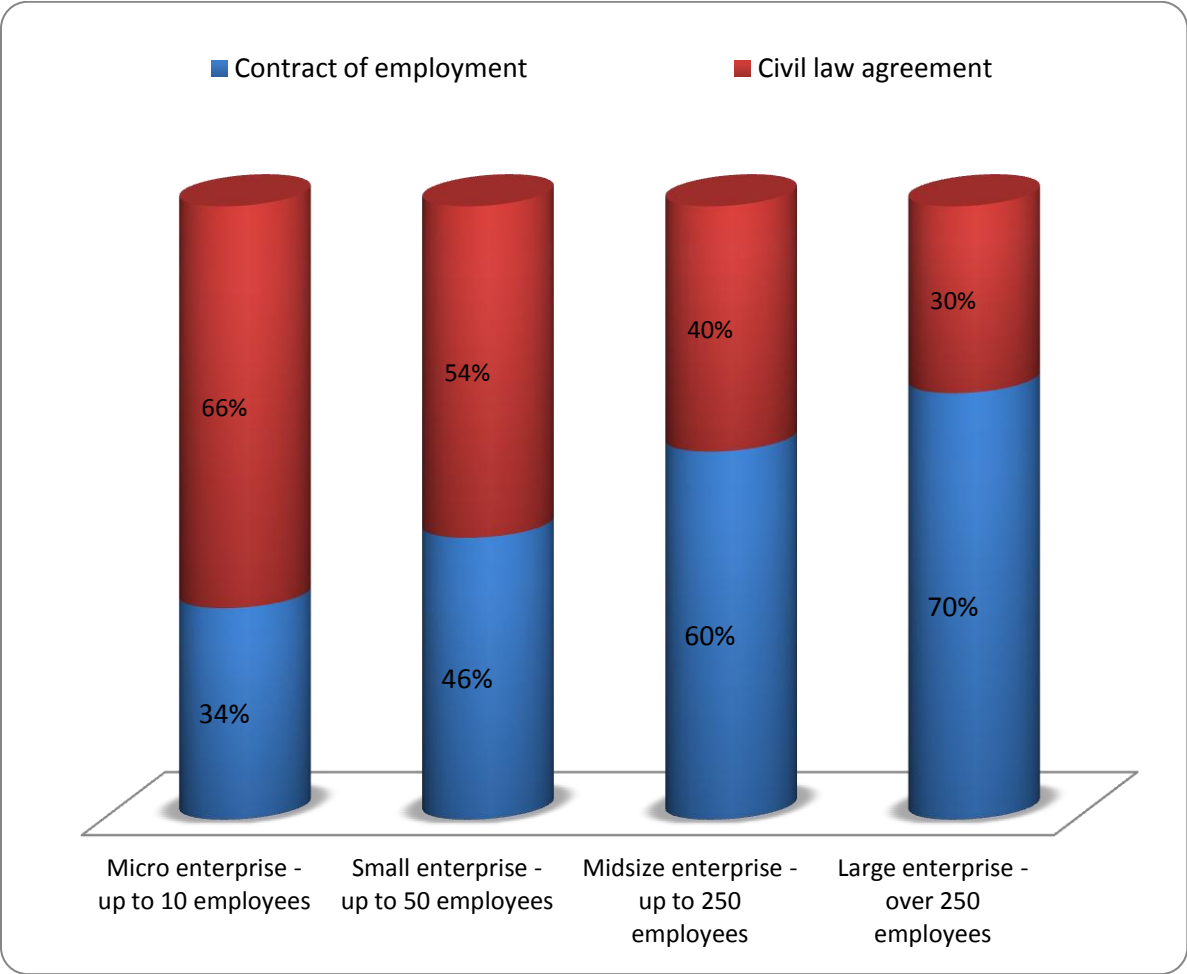
Picture 6
Size of the enterprises.



Source: Data based on the WSCS Students Professional Situation Survey 2018/2019

A correlation can be noticed when comparing students forms of employment with size of their companies. As the size of the enterprise increases, the percentage rate of contracts of employment increases as well. For example in microenterprises, the minority of students (34%) worked on the base of civil law contract and in large enterprises, this rate was 70%. Correlation has been illustrated on picture 7.

Picture 7
Company size vs. form of employment.

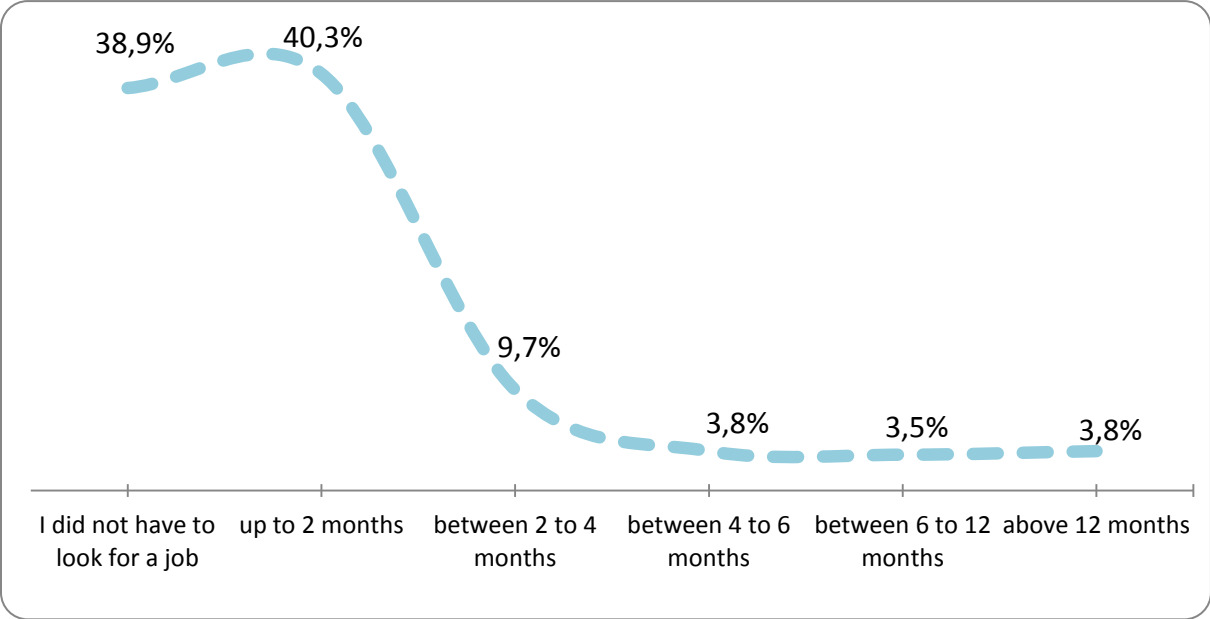


Source: Data based on the WSCS Students Professional Situation Survey 2018/2019

7. Job seeking period

Another import information is an amount of time students spent on looking for a job. Students were asked to specify how many months it took to find their current job. About 40% of students declared spending up to 2 months on looking for a job, and 39% found a job right away or don't have to look for it at all. Only 11% were seeking for job longer than 4 months. For 80% of working students, finding current employment took no more than 2 months (Picture 8).

Picture 8
Job seeking period.

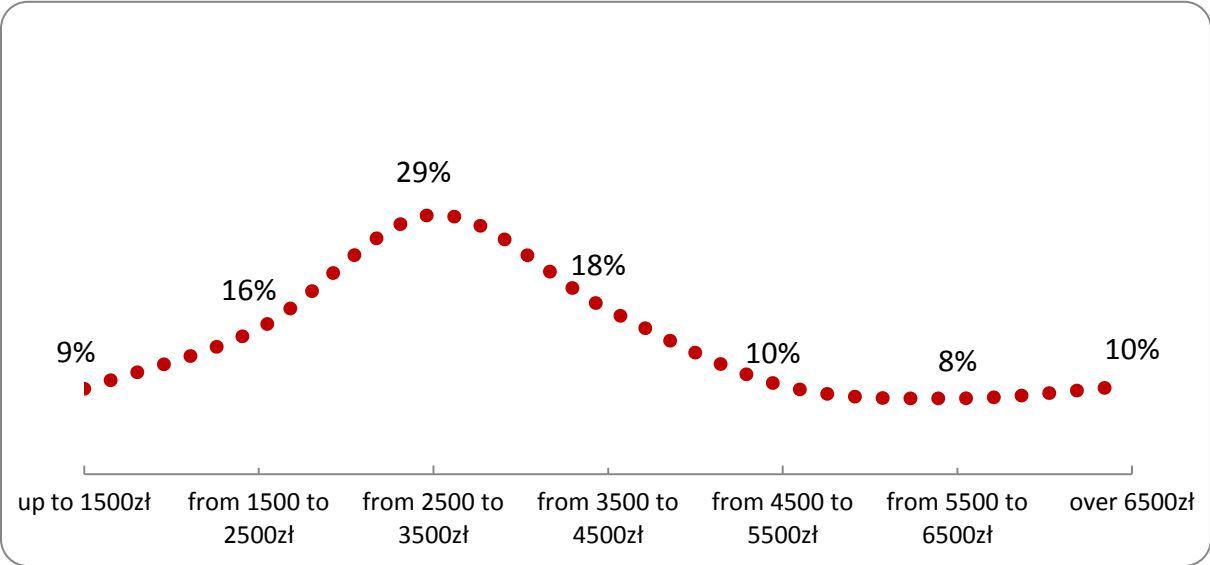


Source: Data based on the WSCS Students Professional Situation Survey 2018/2019

8. Students salary

Students were asked to specify their monthly average net salary by selecting one of seven income levels (level I <1500 zlotys - level VII > 6500 zlotys).

Picture 9
Students declared salary (net)

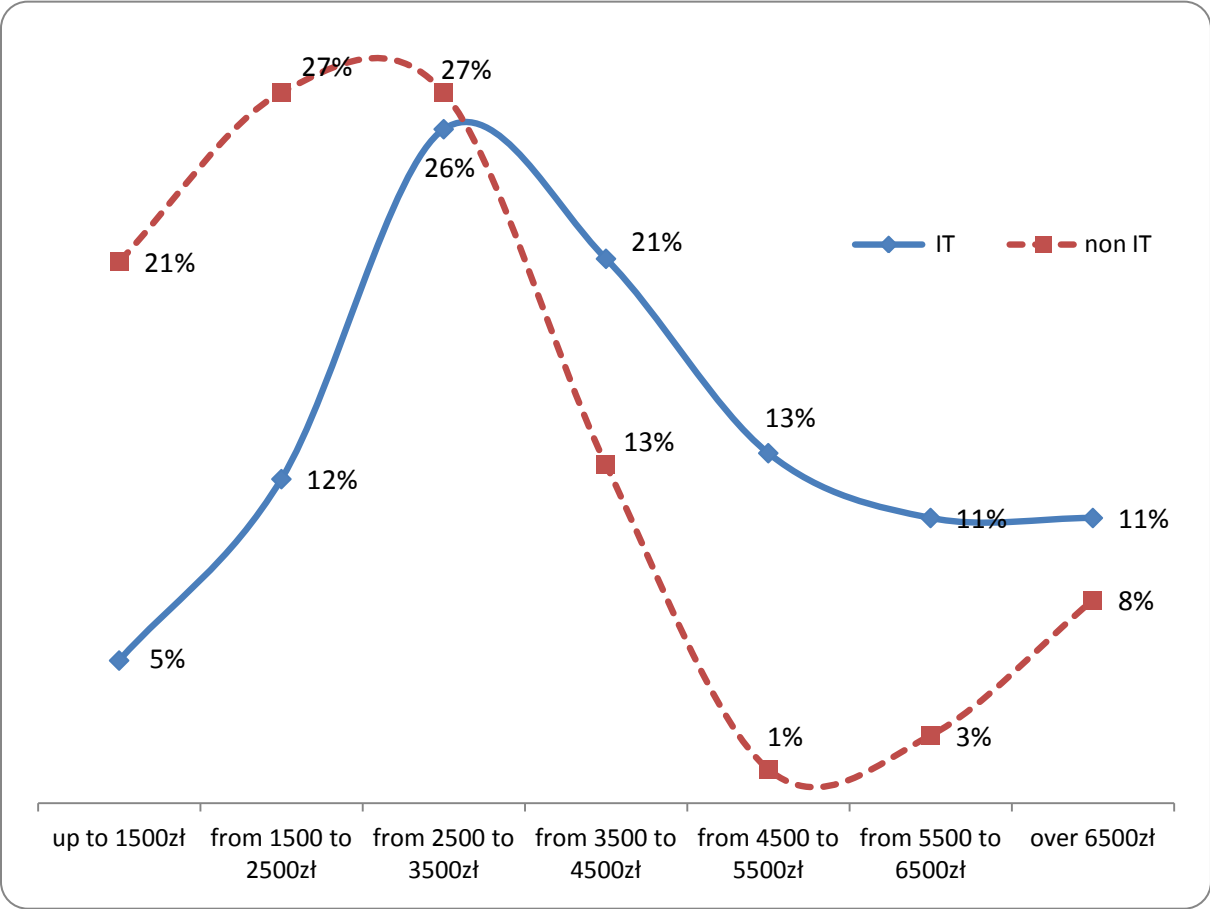


Source: Data based on the WSCS Students Professional Situation Survey 2018/2019

The largest group of 29% were students who obtained net income in the range from PLN 2,500 to PLN 3,500. The next largest group were students with income between 3500 PLN and 4500 PLN - 18% and between 1500 PLN and 2500 PLN - 16%. The smallest groups were students declaring an average salary lower than PLN 1500 - 9%, and students whose income were between PLN 5,500 and PLN 6,500 - 8%. Net income exceeding PLN 6,500 per month was declared by 10% of students. In the group of students with the highest salary, 85% declared employment on IT related position.

Comparing year by year, the percentage rate of high-paid students (PLN 5,500 and more) increased from 15% in 2017 to 18% in 2018. In comparison to students in non IT jobs, students on IT positions were much better rewarded. The most frequently declared salary (dominant) in IT related jobs was a salary level III (PLN 2,500 - PLN 3,500) when on non IT jobs it was salary level II (PLN 1,500 - PLN 2,500). A similar disproportion was observed when comparing the medians of both sets. IT jobs median was at salary level IV (PLN 3500-PLN 4500) and for other jobs at salary level III (PLN 2,500-PLN 3,500). Remuneration exceeding PLN 4,500 was obtained by 35% of students in IT jobs and 14% of students in non IT jobs.

Picture 10
Salary in IT and non IT jobs. (the WSCS students)

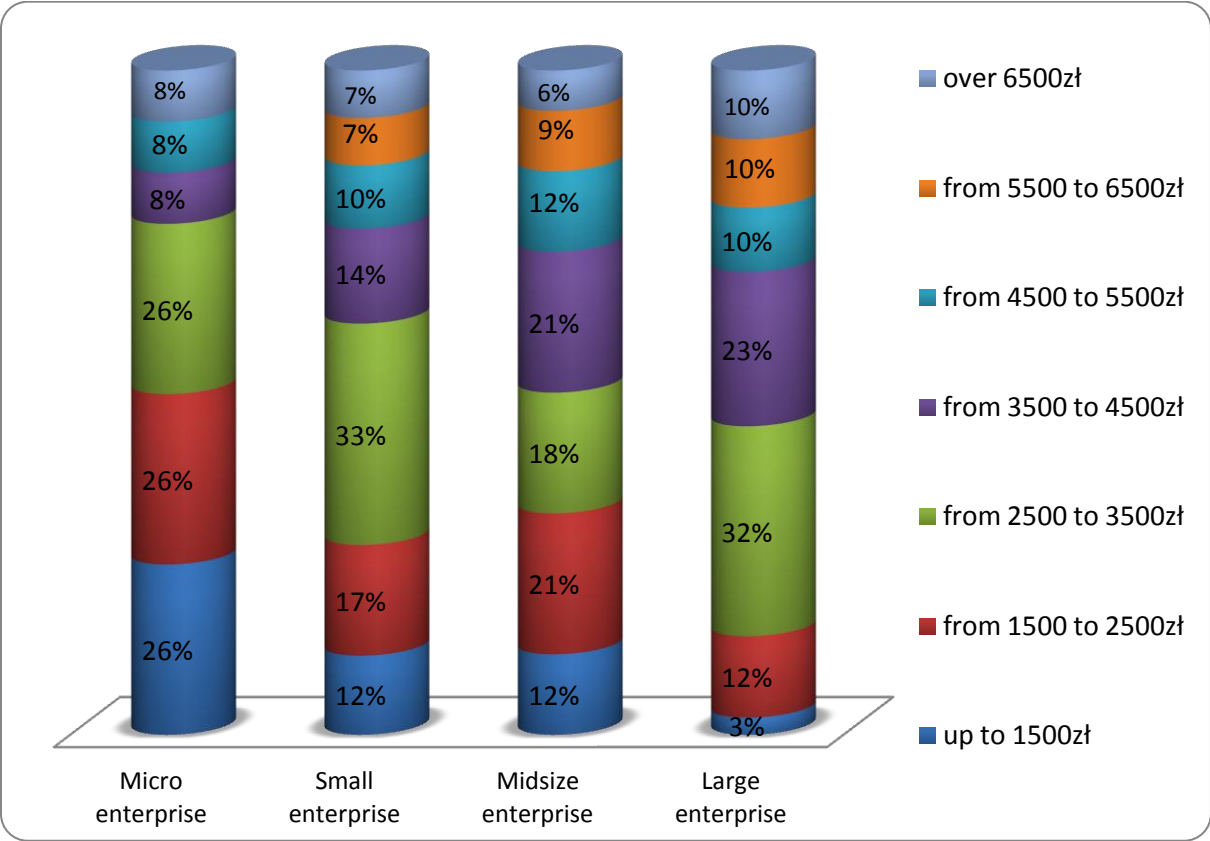


Source: Data based on the WSCS Students Professional Situation Survey 2018/2019

When comparing the results year to year, a significant increase in students salary employed on non IT positions can be noticed. In 2017 salary PLN 2,500 and more received 43% of students, while in 2018 it was 52%.

A similar correlation of the student's income can be seen in relation to the size of the enterprise. Among students employed in micro enterprises (up to 10 employees) an income not exceeding PLN 3,500 was declared by 78% of students, while in large organizations (over 250 employees), the same level of income was declared by only 47% of students. Income over PLN 4,500 was obtained by 16% of micro-enterprises employees 30% of a large company employees. It can be than assumed that the WSCS students salary is increasing along with the size of the company they work for. This relation has been shown on picture 11.

Picture 11
Size of the enterprise vs. students salary.

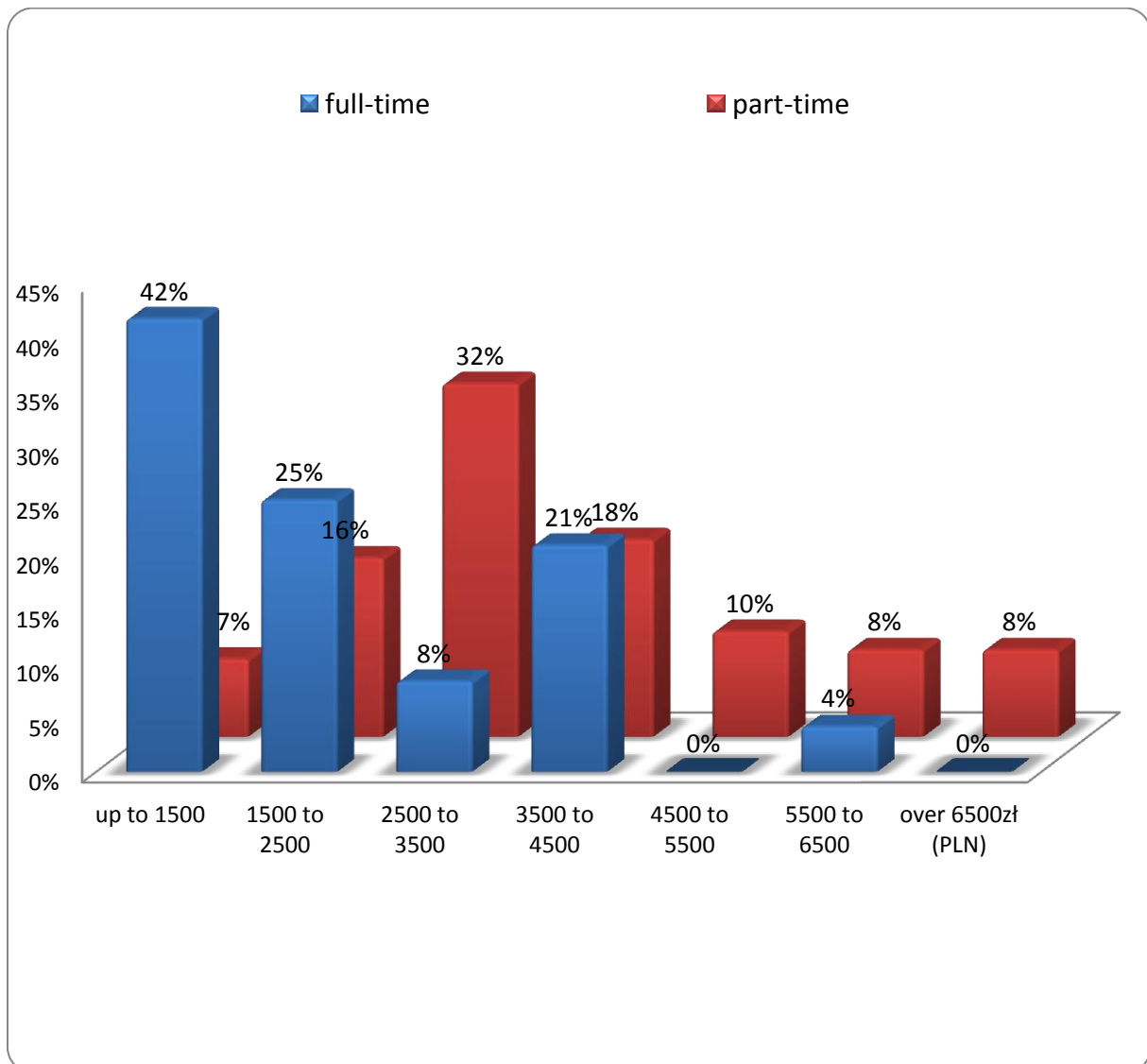


Source: Data based on the WSCS Students Professional Situation Survey 2018/2019

The difference in income level of full-time and part-time students is not a surprise. Most full-time students (67%) declared income not exceeding PLN 2,500, while among part-time students 50% declared income from PLN 2,500 to PLN 4,500. The mode of education is determined mainly by the willingness (or necessity) of combining education with a permanent job. Therefore, statistically higher income of non-stationary students (as more experienced) seems obvious and natural. Differences in the income levels of both groups are illustrated on picture 12.

Picture 12

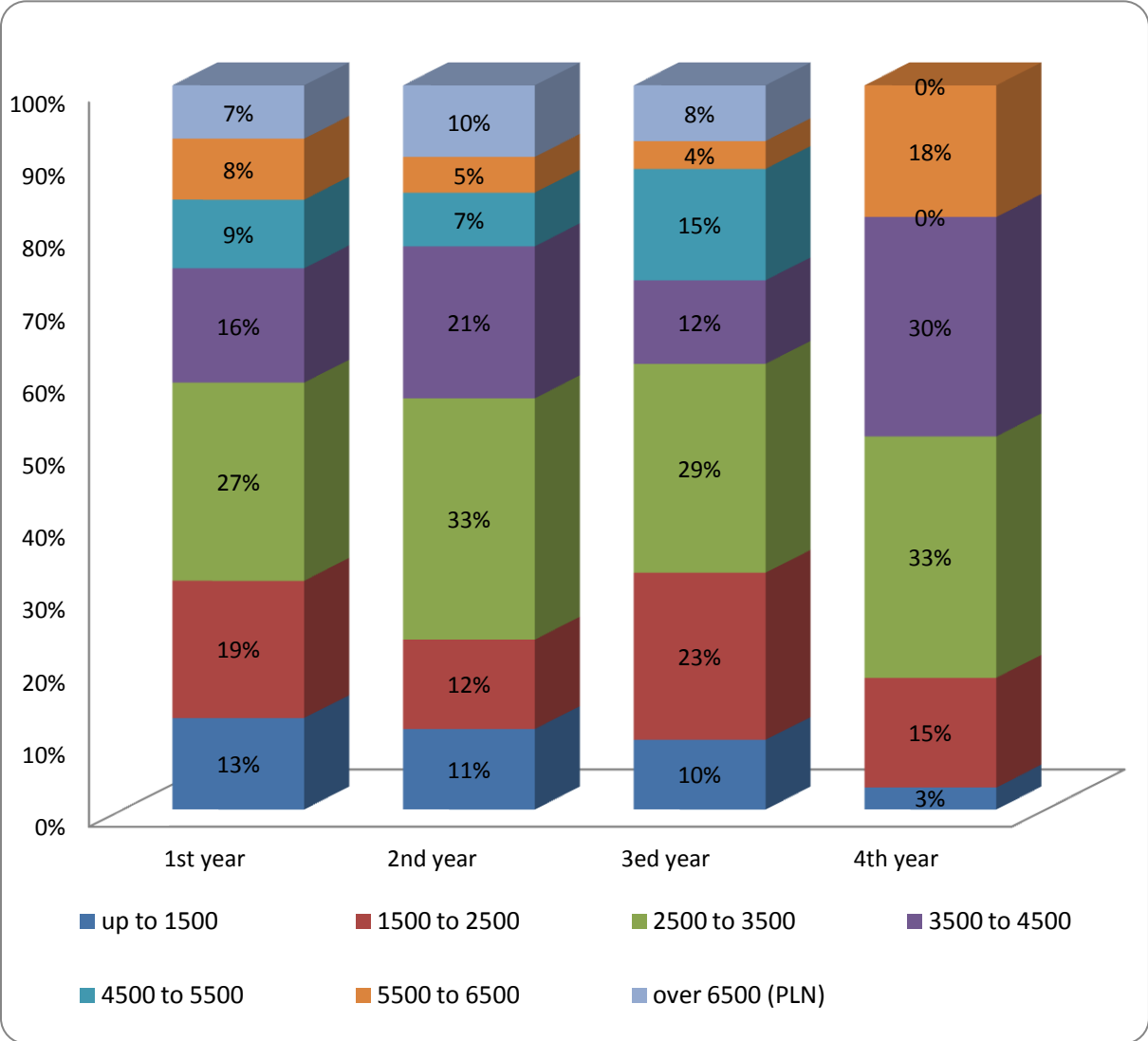
Salary comparison of part-time and full-time students (PLN).



Source: Data based on the WSCS Students Professional Situation Survey 2018/2019

The distribution of students incomes in subsequent years of studies indicates the correlation between income level and the year of study. Students earning over PLN 5,500 are from 38% to 43% from 1st to 3^{ed} year in percentage, while on the 4th year of study, this group increases to 48%. Students declaring the lowest level of income (up to PLN 1500) are only 3% on 4th year of study. Last year students are usually also the most experienced ones, resulting in the highest professional income. The distribution of income in subsequent years of study is shown on picture 13.

Picture 13
 Students salary during 1st to 4th year of studies.



Source: Data based on the WSCS Students Professional Situation Survey 2018/2019

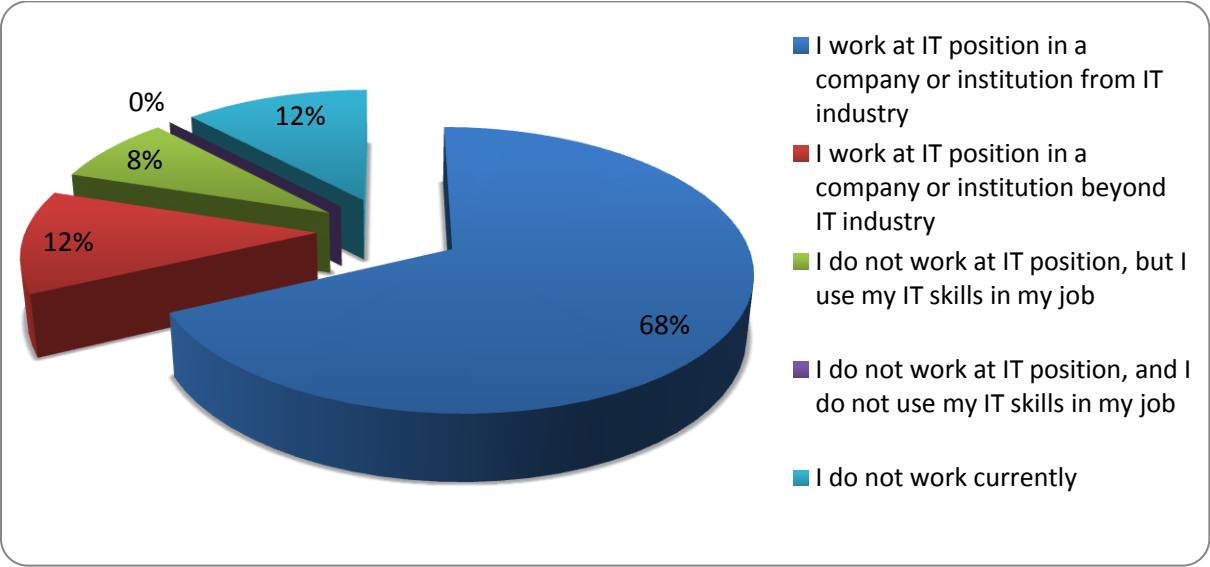
9. Professional situation of the WSCS international students.

The survey was carried out also among second-degree English speaking students on "IT Project Management" specialization. These are international students who started their education without any knowledge of the Polish language. The research allowed to answer two question: first - whether the lack of Polish language influence students professional activity on the Polish labor market; second – what are potential differences in professional activity between this group of students and native polish students of the same degree.

The results indicate that the overall level of professional activity of international students does not differ significantly from the their Polish colleagues. Working in IT industry declared 80% of English-speaking students and 82% of Polish-speaking students. The percentage rate of unemployed students

in this group was 12%, compared to 7% among Polish-speaking students of the same degree (Picture 14).

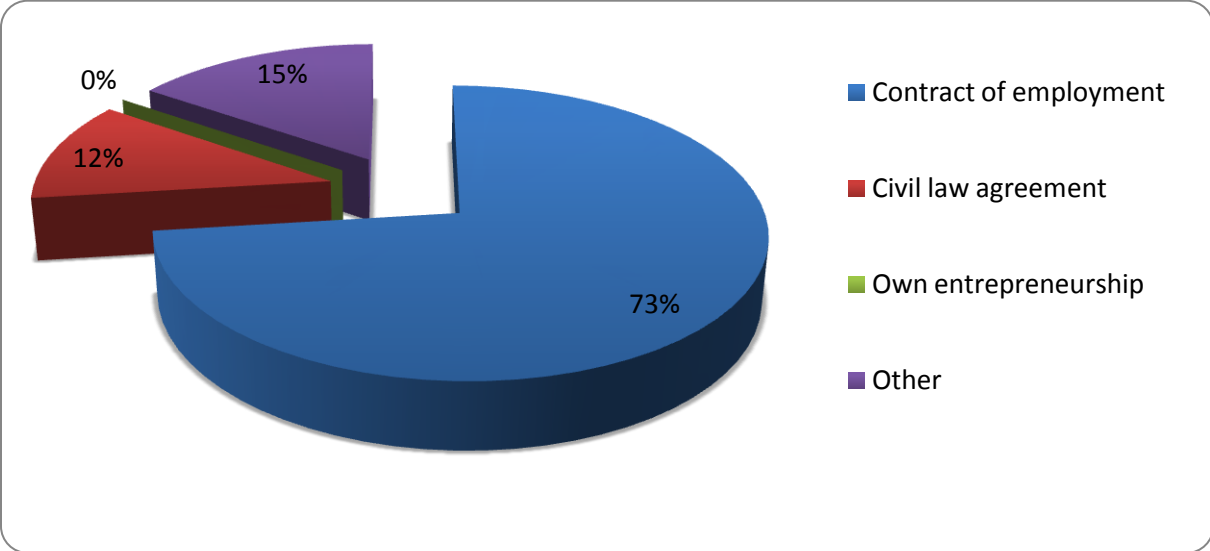
Picture 14
The professional activity of the WSCS international students.



Source: Data based on the WSCS Students Professional Situation Survey 2018/2019

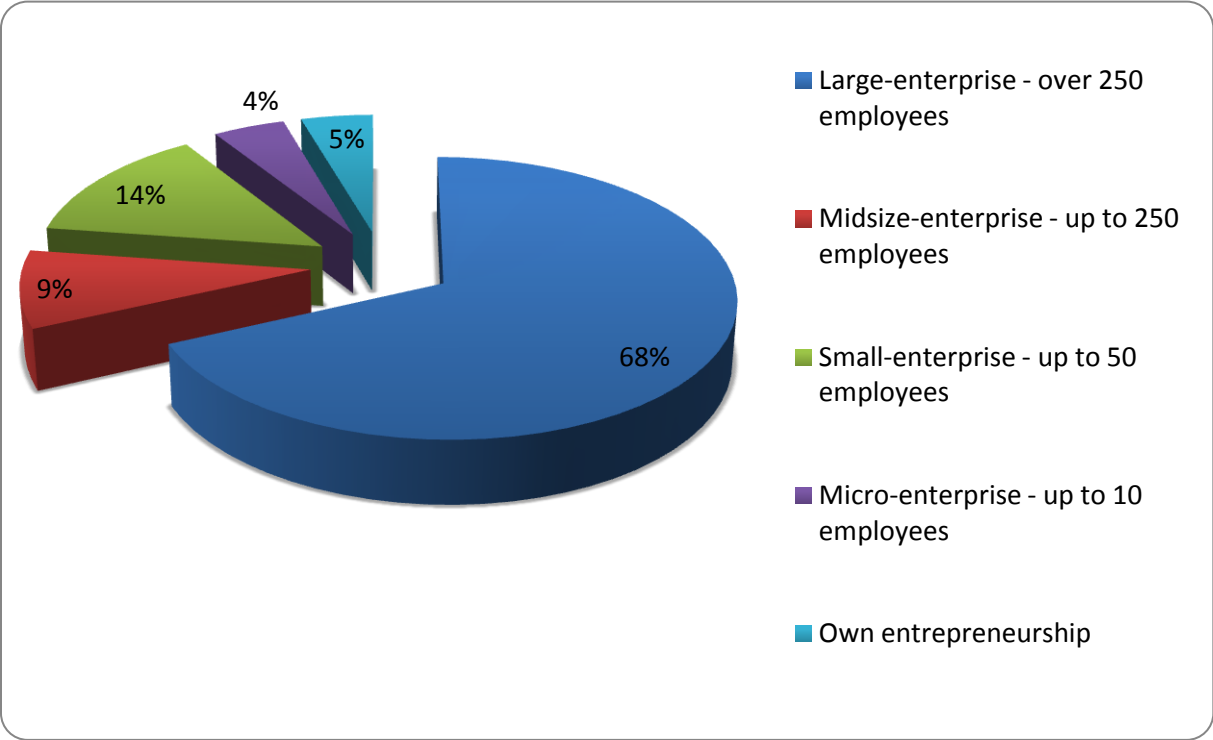
73% of international students had a contract of employment. This result is similar to Polish-speaking students, where 85% had a contract of employment (Picture 15). The majority of English-speaking students (68%) worked in large corporations in the IT industry (Picture 16).

Picture 15
International students forms of employment.



Source: Data based on the WSCS Students Professional Situation Survey 2018/2019

Picture 16
 Company size (International students).

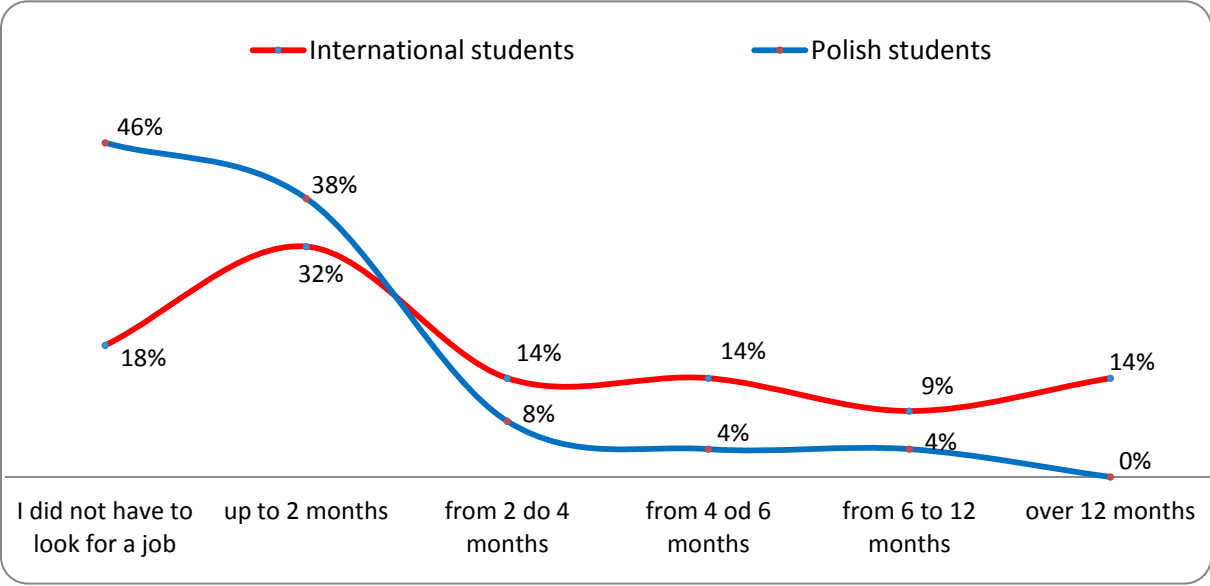


Source: Data based on the WSCS Students Professional Situation Survey 2018/2019

The biggest differences between both groups can be observed in declarations regarding the amount of time they spent on seeking a job (Picture 17) and students income (Picture 18). For obvious reasons English-speaking students was looking for a job statistically longer than that Polish-speaking students. However this period can still be considered as a short one. The half of international students have found a job within two months.

Two major salary levels for English-speaking students were, above PLN 6,500 (32%) and from PLN 3,500 to PLN 4,500 (27%). Among Polish-speaking students the dominant incomes were above PLN 6,500 (35%) and from PLN 4,500 to PLN 5,500. Although International students salaries are slightly lower than Polish students, they still seem high comparing to an average the WSCS student income (PLN 2,500 to PLN 3,500; p.8; Picture 9).

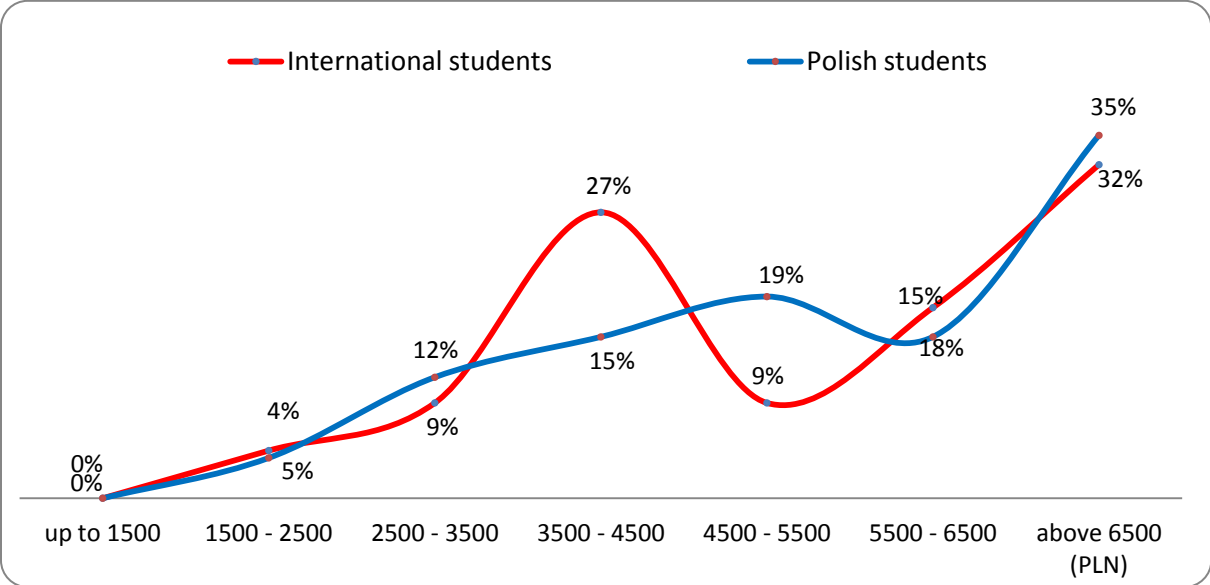
Picture 17
 English speaking students vs. Polish speaking students job-seeking period.



Source: Data based on the WSCS Students Professional Situation Survey 2018/2019

It can be concluded that the lack of Polish language knowledge is not a barrier in employment in the IT industry in Poland. The professional activity of English-speaking students is very high and does not differ significantly from Polish-speaking students professional activity.

Picture 18
 English speaking students vs. Polish speaking students monthly income.



Source: Data based on the WSCS Students Professional Situation Survey 2018/2019

10. Summary

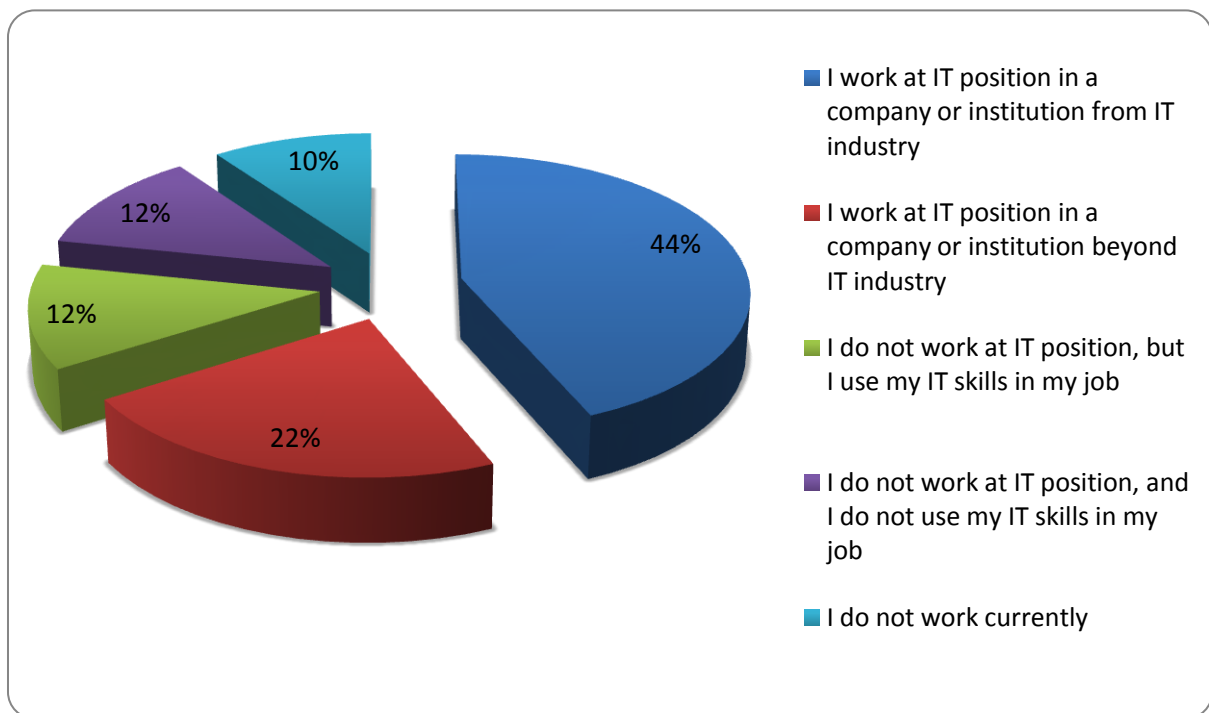
The study conducted in end of 2018 confirms a very high level of professional activity of the WSCS students. The vast majority (90%) combines studying with working. Over 66% of students work on IT related positions and another 12% use their IT skills at work. It can be then said, that there is a clear convergence between the nature of students jobs and the chosen profile of their education.

Most students are employed in large companies (above 250 employees) under the contract of employment. As in previous years there was a correlation between the size of the enterprise and the form of employment. In micro enterprises and small enterprises, civil law agreements was a dominate form of employment, while in medium and large enterprises it was a work contracts.

The level of students declared income employed at IT profession indicate that they are a fairly well-paid professionals. Over 60% of students declare to receive net remuneration in the range from PLN 2,500 to PLN 5,500 and another 22% above PLN 5,500 net. The salaries of students employed in IT are also significantly higher than those employed in "non-IT" positions.

Picture 19

The WSCS students professional activity (all students)



Source: Data based on the WSCS Students Professional Situation Survey 2018/2019

When analyzing the data related to students income it should be remembered that these are salaries of people who are still in process of collecting their IT skills.

The vast majority of students (79%) found a job within 2 months. Such a short time of job-seeking proves that students will have no problems changing a job if it's necessary.

Detailed results show that starting from the second year of studies 90% of part-time students combine studying with working. As a conclusion, employers activities toward students should be initiating on early years of study. Offering a student an IT internship may meet his expectations in terms of the job profile, employment flexibility and salary and for the employer may be an opportunity to acquire a talented employee. Students positive internship experience may result in a permanent relation with organization.

The survey was conducted and developed by Mr. Michał Przybysz